PENNSYLVANIA BIRDS



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Cover: Found during the Lancaster CBC 31 December, this Say's Phoebe fed on insect hatches from the warm waters of the Lancaster Water Treatment Plant, *Lancaster*, staying into March (here 7 January); third county record. (*Jonathan Heller*)

It is my great pleasure to introduce to you the first number of Volume 37. I've made a few changes to layout, but overall, the style is the same as under Greg Grove, the previous chief editor. I would like to thank Greg and Deb Grove for their tutelage in transitioning *Pennsylvania Birds* to my editorship and recognize the amazing job they did over the years.

Up front, I would also like to salute the wonderful contributions of the other people who made the production of this issue a success. Of course, we couldn't have done it at all without Publication Manager Frank Haas. Greg Grove worked with Rob Dickerson to select the photos and write their captions, and Greg also wrote the annual summary of the Winter Raptor Survey and coauthored the Northern Harrier article with Grace Oram and Laurie Goodrich from Hawk Mountain. PSO president Dan Brauning has been very welcoming to me and a great source of support; he is the author in this issue of an article on new breeding species in the state. Nick Bolgiano, who is the seasonal editor, did a massive amount of work, supplying articles on West Nile Virus and the Christmas Bird Count as well as the Summary of the Season and Birds of Note.

Nick was one of four people other than me with eyes on the county reports. As you probably know, we regard the *Local Notes* as the core of this journal, and we couldn't do it without the hundreds of birders whose observations are analyzed and summarized by our many county compilers, collected and organized by Wendy Jo Shemansky, then painstakingly copyedited by Carol Light and Sheryl Johnson (who also write county reports). They have done a fabulous job, leaving me to put it all together, which I hope I have done to your satisfaction.

We have many county compilers...but not enough! Some of you are even doing double or triple duty. We need help! At present, I have taken over Blair County, but we still need compilers for Bradford, Lehigh, Luzerne, Perry, Pike, and Union counties. Being a compiler can simply mean trying to make a visit or a few to the county during the season and distilling what has been reported to eBird and other online repositories. The style guidelines are a bit complicated, but once you get the hang of it, compiling a county report that's on the short side shouldn't take you too long. If you're more ambitious, you can use as much space as you like, and even include anecdotes. We may re-organize and reformat what you wrote, but as long as you stick to the noteworthy and unusual, we're unlikely to trim it down.

Why have Local Notes at all when everything's on the Internet? This question was put to me when I accepted the editorship. I replied that the printed word lasts longer and once set and archived is not easily altered. Databases and other online sources of information are incredibly helpful, but are easily tampered with, lost, or taken down. In addition, yes, eBird contains a surfeit of information, but that's just the problem. We need people to make sense of what's important and what's not, in the context of every county, over time. Each of our 67 counties has a story to tell about its birds, but it will be a long time (hopefully never) before algorithms are able replace human storytellers.

I love the idea of geo-birding introduced by fellow geographer Alan MacEachren in the previous issue ('Geobirding: Filling in the Data Gaps,' *Pennsylvania Birds* 36:204-206). I would like to see more highlights of the places that make the birds possible, so to speak. Every county has little-known nooks and crannies—most are now eBird hotspots that would be great to feature in the county reports. If you're more ambitious, you could do a full article looking at hotspots over space and time. One last thing about county reports: if you would like a bit more recognition for your efforts, please send me a brief bio (like the one you might have for eBird) and a photo for placement in an upcoming 'About the Compilers' section.

Speaking of your contributions, we are always on the lookout for photos of the season's birds, and also for original research articles. If you don't have much experience in technical writing about birds and the environments they inhabit but have an article idea you would like to pitch, please reach out to me. If you're a student on their way into (or out of) graduate school, it always helps to have some journal articles under your belt. Perhaps you're a teacher or professor with an ambitious student; please encourage them to contact me. As requested, or needed, I may send articles out for review, something that unfailingly creates a better and more scientific contribution.

I can be reached most easily at markabonta@yahoo.com, even if I'm tramping around Plummer's Hollow. I am currently blogging my 'big year in a small space' at *Bird Mountain* (markbonta. substack.com), and other projects I've written about are available or linked at markbonta. academia.edu.

Finally, I want to congratulate all the organizers, speakers, event leaders, and participants in the PSO's Birding Festival this year in State College. Great food, great vendors, great speakers, and field trips too many to mention: what's to debate? From our perspective here in Plummer's Hollow, it was awesome to show our woods to a capacity field trip group of birders from around the state (and Scotland) who did not bat an eye at the 5 AM arrival time. For next year, look forward to exploring the southwestern corner of our beautiful state as we get a head start on the 3rd Breeding Bird Atlas.

--Mark Bonta Tyrone PA July 2, 2023

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The 2022-2023 Christmas Bird Count in Pennsylvania

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The Christmas Bird Count (CBC) was held for the 123rd time between December 14, 2022 and January 5, 2023. (*References below to a single year signify the one in which Christmas occurred.*)

Eighty-three sites reported, a new high for Pennsylvania and two more than in the previous year. New were Belleville, with its center in Mifflin County and Rob Dickerson compiling, and Southeastern York County, with Chuck Berthoud compiling. That makes 18 new and continuing sites since 2000. Statewide effort of 5,732 party-hours, 1,186 feeder-watch hours, and 341 nocturnal hours were all average values. (*A representative 15 party-hours for Ohiopyle is assumed.*)

The most popular dates were the first Saturday, Dec 17, with 32 counts; Dec 18, with 14 counts; Dec 31, with 9 counts; Jan 1, with eight counts; and Dec 28, with five counts. The weather event that affected some counts was the Dec 22-23 snowstorm, followed by sub-zero Fahrenheit temperatures in many places, with Dec 23-26 being especially cold. Five counts were conducted during this period. Elverson's count on Dec 23 was probably the most affected, as its species total dropped from 87 in 2021 to 65 in 2022.

The statewide total of count-day species was 166, five more than the 10-year average. A good total of uncommon to rare species was found. **Evening Grosbeak** was the only notable irrupting species. Compared to the previous year, there were fewer lingering half-hardy birds. Northern birds driven south by cold, ice, and snow were also comparatively few. The Dec 23-26 cold blast was too late to blame for the lack of lingering birds and too brief to drive many northern birds farther south.

Common Eider at Linesville, **Magnolia Warbler** at Pennypack Valley, **Townsend's Warbler** at Reading, and **Lazuli Bunting** at Pennypack Valley were new species for the Pennsylvania CBC and all except Magnolia Warbler were state rarities.

Six species and one species pair set new statewide high tallies for the Pennsylvania CBC: Cackling Goose, Greater and Lesser Scaup (combined), Lesser Black-backed Gull, Bald Eagle, Merlin, Common Raven, and Orange-crowned Warbler. Except for the waterfowl, these species have all been increasing, either year-round or during the winter period.

Two rarities--King Eider at Erie and Le Conte's Sparrow at Pennypack Valley--were reported during count week. Common Shelduck at Lebanon County was also a count-week species, but it was thought to be an escaped captive bird.

SPECIES NUMBERS

Southern Bucks County was the top site for species number for the third time in the last four years, with 100 species. Southern Lancaster County was second with 97 species and Delaware County was third with 96 (Table 1).

		D 1 1								
	Table 1: Top Sites Ranked by Number of Species*									
1	Southern Bucks County	100	6	Harrisburg	90					
2	Southern Lancaster	97	6	Western Chester	90					
2	County	97	0	County	90					
3	Delaware County	96	8	Bethlehem-Easton	88					
4	Upper Bucks County	94	9	Central Bucks County	83					
5	Lititz	93	9	Newville	83					
			9	Pennypack Valley	83					

*Fig. 1 below shows a map of site species totals

HITS AND MISSES

A "hit" is an unlikely species found in 2022, while a "miss" is an expected species not found ("unlikely" is assessed as being recorded in less than 40% of the previous 25 years, while "expected" is assessed as being recorded in more than 60% of those years). There were 16 hits (slightly above average) and three misses (average).

Table 2: Hits									
Common Eider	Snowy Owl	Cape May Warbler							
Harlequin Duck	Say's Phoebe	Magnolia Warbler							
Eurasian Collared-	Ash-throated Flycatcher	Townsend's							
Dove		Warbler							
Purple Sandpiper	Blue-headed Vireo	Wilson's Warbler							
Least Sandpiper	Nashville Warbler	Lazuli Bunting							
Laughing Gull									

Table 3: Misses

Black-crowned Night-Heron	House Wren	Vesper Sparrow	

SPECIES DETAILS

A total of 156,000 **Snow Geese** were reported from 25 sites, with the highest concentrations in or near the Lehigh Valley and lesser concentrations south of the mountains and east of the Susquehanna River. High values were 47,500 at Bethlehem-Easton, 40,500 at Wild Creek-Little Gap, 19,700 at Lehigh Valley, and 13,600 at Hamburg (Fig 2). This was the 6th highest statewide CBC tally of Snow Geese; all higher ones have occurred in the last 10 years. **Ross's Goose** was at Bethlehem-Easton, Lock Haven-Jersey Shore, and Wild Creek-Little Gap. **Greater White-fronted Goose** was at Lock Haven-Jersey Shore (3) and Pittsburgh.

The 49 **Cackling Geese** from 12 southeastern sites plus Clarion and Lock Haven-Jersey Shore set a new statewide high total and the 20 Cackling Geese at Southern Bucks County was a new individual site high, that site's second consecutive such distinction. The 143,000 **Canada Geese** and the 902 **Tundra Swans** were both average numbers. **Trumpeter Swan** was at Newville and State College.

The 963 **Gadwalls** was that species' second highest total in the Pennsylvania CBC and included 398 at Linesville, 141 at Delaware County, and 103 at Upper Bucks County. The 19,674 **Mallards** and 1,964 **American Black Ducks** were the most for

those two species since 2015. The 728 **Northern Pintails** was the most since 2007, with 682 counted at Delaware County.

Excellent numbers of several diving duck species were observed. The 1,252 **Buffleheads** was again the 3rd highest total in the Pennsylvania CBC, similar to the previous year's count. The 2,171 **Hooded Mergansers** was the 2rd highest statewide total, after the 2,733 the year before, and this included 935 Hooded Mergansers at Linesville. The nearly 16,000 **Great** and **Lesser Scaup**, with most being seen at Erie, was a new statewide high for scaup sp.

Low numbers of some diving duck species were reported, though expected for the scoters. **Canvasbacks** remained scarce, with just 19. The 82 **Common Goldeneyes** were the fewest since 1948. Only four **Long-tailed Ducks** were reported, three at Erie and one at Linesville. The 20 scoters were apportioned between two sites: **Surf Scoter** at Harrisburg; 10 **White-winged Scoters** at Erie; seven **Black Scoters** at Harrisburg and two at Erie. There were two rare diving ducks: **Common Eider** at Linesville was a first for the state CBC, while **Harlequin Duck** at Erie was only the 5th report in the state CBC.

During 1996-2004, about 2/3 of Pennsylvania sites reported Ring-necked Pheasant, but in the last three years, this percentage has halved to about 1/3 of sites. Most or all of the 25 well-scattered locations where it was found in 2022 were probably where the Pennsylvania Game Commission (PGC) released pen-reared birds for hunting (Fig 2). Only 14 Ruffed Grouse were reported from six sites, with four at Mansfield-Wellsboro and three each at Emporium and Pleasantville. This was the lowest statewide total since 1948 and continues the steep decline in grouse numbers, primarily from West Nile Virus (WNV). In comparison, 301 grouse were reported in 1995, 27 years earlier. On the other hand, the 4,226 Wild Turkeys was the highest total for this species since 2016. High turkey densities were found in many locations except in the southeast (Fig 2). This may reflect recent efforts by the PGC to boost turkey populations after they had dropped during several prior years.

Three Eurasian Collared-Doves were reported at Newville and singles were seen at Bernville and Clarion. **Rufous** Hummingbird was missed for the fourth time in the last six years.

The only two **Virginia Rails** were at Upper Bucks County. The 364 **Sandhill Cranes** was the 2nd highest Pennsylvania tally, after the 374 in 2017. There were 278 at Linesville, 72 at Grove City, and 14 at Butler County, the three sites where cranes are reported most commonly.

The 231 **Killdeer** was the highest tally since 2015. **Purple Sandpiper** was at Erie, where it has now been found six times, all during this century. **American Woodcock** was at Curtin.

Bucks County was once again a focus of regional gull activity. A statewide record 1,257 **Lesser Black-backed Gulls** were reported, 377 more than the 880 the previous year, which was a record then. There were 637 Lesser Black-backed Gulls recorded at Southern Bucks County (also a new high for an individual site), 479 at Upper Bucks County, 127 at Central Bucks County, and 14 more at three southeastern sites plus Erie. The Southern Bucks County total also led all North American sites. The 25,000 **Herring Gulls** at Southern Bucks County once again led all North American CBC sites by a large margin.

However, the 425 **Great Black-backed Gulls** at nine sites was a low total, though not as low as during the previous two years.

Among uncommon gulls, **Laughing Gull** was at Southern Bucks County, the first one reported during the statewide CBC since 2012. Of the 16 **Iceland Gulls**, 13 were at Southern Bucks County with singles at Bernville, Lancaster, and Upper Bucks County. The only **Glaucous Gull** was at Southern Bucks County, a low total for both that site and statewide.

The only two **Red-throated Loons** were at Erie. There were only four **Great Cormorants** at the usual three Delaware River sites, the fewest since it was missed in 1988. The tally of 930 **Great Blue Herons** was on par with last year's good tally of 938. **Great Egret** was at Delaware County (3) and Lititz. **Blackcrowned Night-Heron** was missed for the 9th time in the last eleven years after being annually reported during 1949-1993.

There have been ups and downs in recent **Black Vulture** numbers; the 2,000 Black Vultures was on the low side after last year's record 3,215. The 5,344 **Turkey Vultures** was 2nd to last year's 5,563. Four **Ospreys** were reported, at Cowanesque Lake, Gettysburg, Lancaster, and York. It has been a while since the last relatively high Osprey tally, but five were reported in each of 1985, 2000, and 2003. The 12 **Golden Eagles** tied for 2nd highest among statewide tallies after last year's record 17. The 164 **Northern Harriers** was slightly higher than the 10-year average of 145.

Accipiter trends continued. The 206 **Sharp-shinned Hawks** was consistent with a continued decline, though not as low as last year's 172. The 537 **Cooper's Hawks** was the 2nd highest statewide tally, behind only the 576 in 2020. A single **Northern Goshawk** was reported from Wyncote, after being missed last year.

The 1,092 **Bald Eagles** was another statewide CBC high, 40 more than last year's tally. This included 91 at Southern Bucks County, 89 at Southern Lancaster County, and 69 at Linesville. The 439 **Red-shouldered Hawks** was also the highest statewide CBC tally, 89 more than the previous record from 2020. Red-shouldered Hawks concentrated in the southern half of the state and at some western sites, including 28 at Western Chester County, 26 at Delaware County, and 25 at West Chester (Fig 2). The 3,279 **Red-tailed Hawks** was the highest tally since 2016, but fewer than during the peak period of the 2000s. The 12 **Rough-legged Hawks** at 10 sites was one of the lower counts for this species.

Upper Bucks County was the top owling site, followed by Hamburg and Juniata County-Lewistown (see the top 10 list, Table 4, below – many of the sites appear here annually).

Five **Barn Owls** were reported among four sites. **Snowy Owl** was at Gordon Glen Belsano, only the 2nd statewide in the last five years. The 559 **Eastern Screech-Owls**, 297 **Great Horned Owls**, and 32 **Northern Saw-whet Owls** were consistent with totals from recent years. The 92 **Barred Owls** was the 2nd highest statewide total after 103 in 2006; their trend has been increasing. The seven **Long-eared Owls** at three sites and 13 **Short-eared Owls** at eight sites were both low totals.

Yellow-bellied Sapsucker effort-adjusted tallies have increased since the 1940s. There were 703 sapsuckers counted in the recent CBC compared to 963 tallied the year before; such year-to-year variation is common. The 89 **Red-headed** Woodpeckers was the most tallied statewide since 93 were reported in 1996, but this increase is largely due to new southcentral sites being added. The highest concentrations were in the south-central, plus Ohiopyle and Rector toward the southwest. High tallies were 23 at York Springs, 15 at Gettysburg, and seven at Buchanan Trail (Fig 2). The 5,523 **Red-bellied Woodpeckers** tallied in 2022 were fewer than the 6,173 the year before, but these observations were consistent with both a long-term increasing trend and alternating high-low years evident over the last eight years.

The 778 **American Kestrels** was the highest statewide tally since 2012. Concentrations were high in much of the Susquehanna Valley, the south-central, and near the western border. High counts were 49 at Gettysburg, 47 at Juniata County-Lewistown, and 37 at York Springs (Fig 2). The 82 **Merlins** set a new statewide high, nine more than the 73 tallied two years earlier. High Merlin counts were scattered across the state, with high counts of 10 at Delaware County and five each at Audubon, Lehigh Valley, and Pittsburgh (Fig 2). The 40 **Peregrine Falcons** was the 3rd highest statewide tally and included five each at Pittsburgh and Southern Bucks County and four at Bloomsburg.

Two vagrant western flycatchers were found in the southeast. **Say's Phoebe** at Lancaster was the 8th in the Pennsylvania CBC, the last one being found in 2011 at Central Bucks County. The **Ash-throated Flycatcher** at Pennypack Valley was the 5th in the Pennsylvania CBC, the last one being found in 2017 at Upper Bucks County.

Blue-headed Vireo at Juniata County-Lewistown was the 12th in the state CBC. It has become increasingly observed in recent years; half of CBC sightings have occurred during this century.

Northern Shrike was at Benezette, Johnstown, Linesville, and Northern Lycoming County, the 9th consecutive year with four or less Northern Shrikes. High counts were 27 in 1997 and 1999; a distinct downshift occurred in 2014. The 995 **Common Ravens** was a new state record, 216 more than in the previous year and the fourth year in a row with a new high tally. The 77 ravens at Huntingdon was the 3rd highest site total in Pennsylvania CBC history.

Carolina Chickadee and **Tufted Titmouse** numbers continued to recover after reaching lows in 2018 when WNV levels in mosquitoes were high. **Black-capped Chickadee** numbers again see-sawed, this time with higher numbers suggesting a possible influx of northern birds.

The 4,605 **Horned Larks** was a modest count. The 80 **Rough-winged Swallows** tallied at Pennypack Valley was a normal count there, this being the only site to report them.

This season's tally of 816 **Golden-crowned Kinglets** was far fewer than the year before (1,544 in 2021), continuing a tendency for alternating high-low frequencies. Although **Redbreasted Nuthatches** irrupted in the fall, the 435 Red-breasted Nuthatches qualifies as a minor irruption. While **White-breasted Nuthatches** were also on the move in the fall, this wasn't evident in the statewide data, although there have been periods when high-low alternating tallies are evident.

The 444 **Winter Wrens** and 5,719 **Carolina Wrens** were excellent totals, indicating that their wintering populations are near historically high levels. **Marsh Wren** was observed at Bethlehem-Easton, Linesville, and Pittsburgh.

Some frugivores that were plentiful during the previous CBC were scarcer this time: 33 **Gray Catbirds**, many fewer than the 103 the previous year; 20,400 **American Robins** compared to 46,100 the year before, and 1,826 **Cedar Waxwings** compared to 8,322 the year before. While the 420 **Hermit Thrushes** tallied was the 5th highest total in the state CBC, they were many fewer than the 710 counted the year before.

Evening Grosbeak was the highlight of this winter's irruptions, although it was a relatively small irruption by historical standards, with 263 Evening Grosbeaks counted at five sites. These sites were concentrated in the northwest and northcentral and included 149 at Emporium and 46 at both Clarion and Potter County (Fig 2).

Other winter finches were reported at low levels. Although **Purple Finches** were projected to irrupt into our latitude (Hoar 2022) and some moved southward in the fall, the 253 Purple Finches were fewer than the 10-year average of 334. Only one **Common Redpoll** was reported, at Grove City. Single **Red Crossbills** were at Lock Haven-Jersey Shore and Wild Creek-Little Gap. The 22 **Pine Siskins** from 10 sites qualifies as a low year.

The two expected Calcariidae species were present in modest numbers. Sixteen **Lapland Longspurs** were reported from four sites, with 10 at Linesville and four at Grove City. Eighty-nine **Snow Buntings** were reported from seven sites, with 30 at Linesville, 25 at Penns Creek, and 20 at Erie.

Average numbers were observed for most sparrows, with two exceptions. The 505 **White-crowned Sparrows** were the fewest since 1989. The 131 **Eastern Towhees** was a low number; their numbers have also tended toward an alternate year high-low pattern in recent years. The only uncommon sparrow species was a **Lincoln's Sparrow** at Lancaster.

The 82 **Eastern Meadowlarks** were the most since 2012 and included 21 at Southern Lancaster County, 19 at Gettysburg, and 18 at Southeastern York County. There were two **Baltimore Orioles** at Southern Bucks County and one at Pennypack Valley. The 24,000 blackbirds statewide were relatively few.

Ten warbler species was a good showing. The 10 **Orangecrowned Warblers** was a new high for the state CBC, all seen in the southeastern corner: four at Delaware Valley, three at Pennypack Valley, two at Southern Bucks County, and one at Wyncote. The prior Orange-crowned Warbler high was six in the previous year. Four of the highest five tallies have clustered in the last seven years, indicating how high counts have mostly been recent events.

Five warblers were winter rarities: **Nashville Warbler** at Southern Bucks County was the 11th report in the state CBC; **Cape May Warbler** at Culp was the 9th report in the state CBC and the third time in the last five years; **Magnolia Warbler** at Pennypack Valley and **Townsend's Warbler** at Reading were new to the state CBC; and **Wilson's Warbler** at Bernville was the 13th report in the state CBC.

Lazuli Bunting at Pennypack Valley was also a first for the state CBC and the only uncommon member of the Cardinalidae observed.

REFERENCE

Hoar, T. 2022. Winter Finch Forecast 2022-2023. http://www.finchnetwork. org/winter-finch-forecast-2022.

Table 4: Top 10 Sites for Owls

	RANKED SITES	Barn Owl	Eastern Screech- Owl	Great Horned Owl	Barred Owl	Long- eared Owl	Short- eared Owl	N. Saw- whet Owl	TOTAL
1	Upper Bucks Co.	0	54	15	1	0	0	4	74
2	Hamburg	0	43	10	3	0	0	3	59
3	Juniata CoLewistown	1	37	14	1	0	0	0	53
4	West Chester	0	40	6	4	0	0	0	50
5	Central Bucks Co.	0	30	9	1	0	0	0	40
6	Bloomsburg	0	19	18	1	0	0	1	39
7	Delaware Co.	0	30	6	2	0	0	0	38
8	Pittsburgh	0	17	12	1	0	0	0	30
9	Buchanan Trail	0	7	8	9	0	0	4	28
9	New Bloomfield	0	12	12	2	0	0	2	28
9	Western Chester Co.	0	15	5	1	5	1	1	28

Numbers of Species Reported

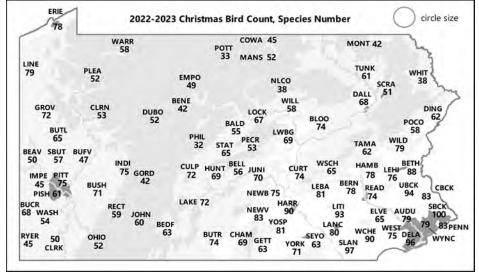


Fig. 1. Pennsylvania CBC sites and species numbers. Background shows selected urban areas (darkest shading) and principal rivers superimposed on elevation zones, shaded from lightest to darkest, as follows: less than 1,000 ft. above sea level; 1,000 to 2,000 ft; greater than 2,000 ft.

			SITE AL	DREVIA			
AUDU	Audubon	DALL	Dallas Area	LWBG	Lewisburg	SCRA	Scranton
BALD	Bald Eagle S.P.	DELA	Delaware County	LINE	Linesville	SBUT	South Butler
BEAV	Beaver	DING	Dingman's Ferry	LITI	Lititz	SEYO	Southeastern York County
BEDF	Bedford County	DUBO	Dubois	LOCK	Lock Haven-Jersey Shore	SBCK	Southern Bucks County
BELL	Belleville	ELVE	Elverson	MANS	Mansfield-Wellsboro	SLAN	Southern Lancaster County
BENE	Benezette	EMPO	Emporium	MONT	Montrose Area	STAT	State College
BERN	Bernville	ERIE	Erie	NEWB	New Bloomfield	TAMA	Tamaqua
BETH	Bethlehem-Easton	GETT	Gettysburg	NEWV	Newville	TUNK	Tunkhannock
BLOO	Bloomsburg	GORD	Gordon Glen Belsano	NLCO	Northern Lycoming	UBCK	Upper Bucks County
					County		
BUTR	Buchanan Trail	GROV	Grove City	OHIO	Ohiopyle	WARR	Warren
BUCR	Buffalo Creek	HAMB	Hamburg	PECR	Penns Creek	WASH	Washington
BUFV	Buffalo Creek Valley	HARR	Harrisburg	PENN	Pennypack Valley	WEST	West Chester
BUSH	Bushy Run S.P.	HUNT	Huntingdon	PHIL	Philipsburg	WCHE	Western Chester County
BUTL	Butler County	IMPE	Imperial	PITT	Pittsburgh	WSCH	Western Schuylkill County
CBCK	Central Bucks County	INDI	Indiana	PISH	Pittsburgh South Hills	WHIT	White Mills
CHAM	Chambersburg	JOHN	Johnstown	PLEA	Pleasantville	WILD	Wild Creek-Little Gap
CLRN	Clarion	JUNI	Juniata County- Lewistown	POCO	Pocono Mountain	WILL	Williamsport
CLRK	Clarksville	LAKE	Lake Raystown	POTT	Potter County	WNYC	Wyncote
COWA	Cowanesque Lake	LANC	Lancaster	READ	Reading	YORK	York
CULP	Culp	LEBA	Lebanon County	RECT	Rector	YOSP	York Springs
CURT	Curtin	LEHI	Lehigh Valley	RYER	Ryerson		
					4		

SITE ABBREVIATIONS

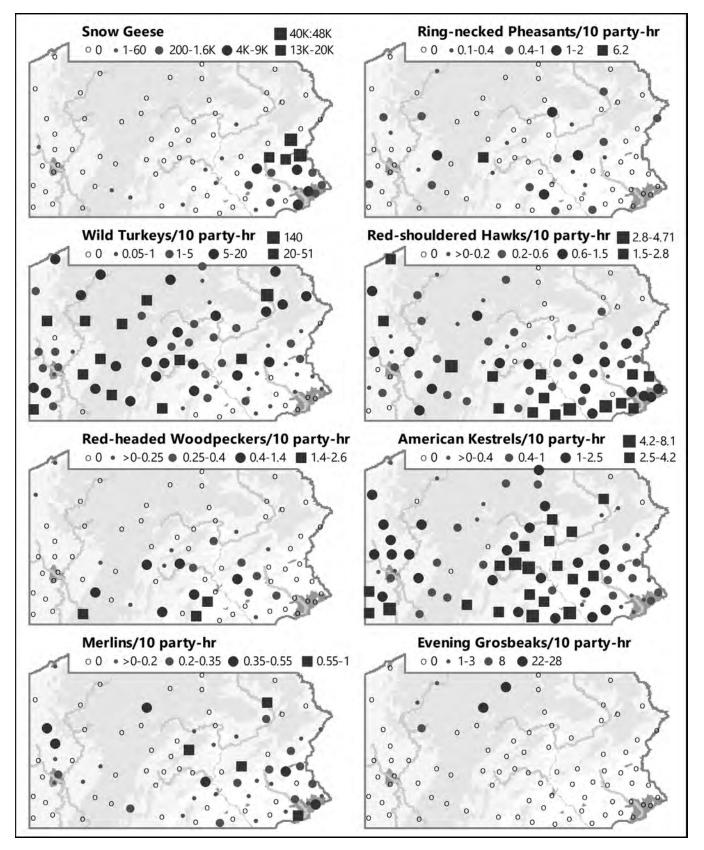


Fig. 2. Distribution maps for eight CBC species, with symbols denoting densities.

Appendix: CBC 2022-2023 Summary

Servers Coores 16100 14337 26 4722 BETH Market Classified of the server o	SPECIES	TOTAL	10-YR AV	SITES	HIGH	HIGH SITE	SPECIES	TOTAL	10-YR AV	SITES	HIGH	HIGH SITE
Grosser Cacheling Goole Cacheling Coole Cacheling Coole			148397			BETH BETH,LOCK	Great Black-backed		5			SBCK
Calabit Goose Canada Goose 49 11 14 20 SBCK Common Loom Creat Algoese 39 71 11 21 ERIE Mule Suman 155 178 31 22 11 12 PENN Loc Turber Swan 02 1111 20 11 Network Canada Goose 170 60 171 60 171 60 171 60 171 60 171 60 171 60 171 60 171 60 171 60 171 60 171 60 11 40 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 21 100 100 21 100 <th< td=""><td></td><td>4</td><td>7</td><td>2</td><td>3</td><td></td><td>-</td><td>2</td><td>2</td><td>1</td><td>2</td><td>ERIE</td></th<>		4	7	2	3		-	2	2	1	2	ERIE
Canada Goose Lise State	*****	49	31	14	20	SBCK	Common Loon	39	71	11	21	ERIE
Commant Commant <t< td=""><td>Canada Goose</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Canada Goose											
Turngelar Swan 2 2 2 1 NEW/S Clear Blue Horm 930 77 69 122 ENIE Wind Sama 100 76 7 2 9 5 21 16 17 2 18 200 248 370 5 25 5 SLAN Northern Shoveler 405 270 13 100 DELA Operational State 10 10 2 EBMO Mendram Shoveler 405 60 827 380 LINE Solden Eagle 12 10 10 2 EBMO Mendram Shoveler 106 116 7 LEA Northern Harrer 144 145 50 12 ENIC Mendram Shoveler 106 102 22 14 102 22 14 12 ENIC Mendram Shoveler 102 22 11 102 22 11 12 ENIC 13 12 ENIC <	Mute Swan	155	178	31	42	SBCK		95	176	17	17	
Turder Swan 902 1111 28 166 CURT Great Egref 4 1 1 2 3 DELA Blue-Minger Taal 65 2 1 5 CLUP Turkey Vulture 5044 370 420 45 249 84.9 Gadwall 963 662 25 388 LINE Goldver Eagle 12 10 10 2 EMPG Mainard 166 17 7 4004 BETH Stamp-shimmer Hawk 253 263 27 PHT American Black Duck 1664 197.7 78 4004 BETH Stamp-shimmer Hawk 237 401 78 20 98 SRCK Cener-winger Taal 52 14 628 DELA Northern Mark 1.4 HAM SRCK 27 PHT Northern Family 78 80 98 SRCK 28 RCK RCK 21 1.4 HAM SRCK 10 SRCK	Trumpeter Swan	2	2	2	1		Great Blue Heron	930	717	69	122	
Wood Duck Blaverwiger Date 106 76 22 14 BEDF Solution Black Villure Date 2000 44 2000 22.4 65 27.0 13 50 DULK Digrey 44 17 44 16 200 22.8 SLAM Bis Average Garkwall 963 662 25 398 LINE Odden Eagle 12 10 10 10 12 BLOO Maind american Wigean 36 116 177 17 4004 BETE Northern Harrier 164 145 50 12 BLNC Morther Mariat 728 155 14 682 DELA Morther Mariat 30 12 CRA 10 102 7.46 80 91 12 CRA 10 102 7.46 80 91 12 CRA 10 10 10 12 10 10 10 10 10 10 10 10 10 10 10 10 <	Tundra Swan	902	1111	26	186			4	1	2	3	DELA
Northern Shoveler 405 270 13 100 DELA Osproy 4 1 4 1 6 1 Demonstrative transform Gadwall 063 662 25 398 LINE Gadwall 10 10 2 EMPON Malard 19674 19127 79 4004 BETH Sharp-shinned Hawk 203 69 12 WVNC American Black Duck 19674 19127 79 4004 BETH Sharp-shinned Hawk 203 69 12 WVNC Genew.night 13 152 14 882 DELA Bad Eagle Hawk 103 14 WNNC Greenward 13 152 5 52 ERK Band 3270 335 68 31 14 HAW Greater Scaup 5/23 145 5 525 ERK Band 5 47 4 2 5167 Greater Scaup 13												
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Malard 19674 19674 19674 2051 56 508 LINE Comparis Hawk 206 233 69 12 WYNC Northern Pritial 522 155 14 682 DELA Northern Genhawk 1 3 1 1 WYNC Green marged Teal 522 214 226 DELA Bald Eagle 1032 760 68 91 SBC/C Ring-necked Duck 736 872 34 110 DUBO Rough-legged Hawk 320 83 114 HAMB Greater Scaup 529 154 5 225 ERIE Barr Orw 5 4 4 2 SIGT Lesser Scaup 529 154 5 225 ERIE Barr Orw 59 4 4 2 SIGT Vall Scoter 1 0 1 1 ERR Short-aard Owl 12 11 8 2 8 7 4 Ba	Gadwall	963	662	25			Golden Eagle	12	10	10	2	,
American Black Duck 1964 2051 66 608 LINE Cooper's Hawk 537 461 78 27 PITT Green-winged Teal 722 214 28 256 DELA Bad Eagle 103 12 21 WORE Badhead 113 122 214 28 256 DELA March Badk 309 12 26 3208 83 111 WRON Badhead Total 113 152 156 12 ERE Badrobinged Hawk 3209 83 114 HARON Lesser Scaup 533 153 15 155 165 116 BLOO Common Eider 1 0 1 1 LINE Snow Odd 12 2 1 1 GORD Back Socter 9 6 2 7 HARR Northern Sawwhet 32 28 17 4 Bacca Winte-winged Scoter 9 6												
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Green-winged Teal 522 214 28 256 DELA Bald Eagle 100 276 60 91 SBCK Rechadd 113 192 15 62 LAKE Rechaulder Hawk 439 192 66 91 SBCK Renthead 113 192 15 62 LAKE Rechaulder Hawk 439 192 66 20 GROV Lesser Scaup 528 154 5 525 ERIE Barter Sorechow 56 4 4 2 STAT Lesser Scaup 5.28 1506 126 Crast Honed Owl 27 315 56 18 BLOC Common Eiler 1 0 1 1 LIRE Snow/ Owl 1 2 1 0 Social 30 WDEK Surf Scoter 9 6 2 7 HARE Social 567 767 76 33 AUDU Black Scoter 9												
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							Ruby-crowned Kinglet					
		1257	600	7	637	SBCK		435	411	67	33	CHAM

Appendix: CBC 2022-2023 Summary (cont'd)

SPECIES	TOTAL	10-YR AV	SITES	HIGH	HIGH SITE	SPECIES	TOTAL	10-YR AV	SITES	HIGH	HIGH SITE
White-breasted Nuthatch	7275	6520	83	277	PITT	Fox Sparrow	87	147	30	15	DELA
Brown Creeper	551	626	74	34	AUDU	Dark-eyed Junco (Slate-colored)	44709	44065	83	1853	HUNT
Winter Wren	444	374	64	23	HARR, WYNC	White-crowned Sparrow	505	1001	48	62	BUCR
Marsh Wren	3	2	3	1	BETH,LINE, PITT	White-throated Sparrow	24030	28949	78	1551	DELA
Carolina Wren	5719	5390	82	325	PITT	Savannah Sparrow	116	159	28	16	BETH
European Starling	153940	161545	82	9520	SBCK	Song Sparrow	8868	10282	82	663	PITT
Gray Catbird	33	51	22	5	DELA	Lincoln's Sparrow	1	2	1	1	LANC
Brown Thrasher	13	12	10	3	DELA	Swamp Sparrow	362	476	58	23	DELA
Northern Mockingbird	2197	1919	70	143	YOSP	Eastern Towhee	131	371	32	16	DELA
Eastern Bluebird	8220	6942	82	316	CBCK	Eastern Meadowlark	82	44	14	21	SLAN
Hermit Thrush	420	357	50	51	HUNT	Baltimore Oriole	3	2	2	2	SBCK
American Robin	20377	25440	79	2506	DELA	Red-winged Blackbird	7453	144518	56	1260	LEHI
Cedar Waxwing	1826	4476	61	207	HUNT	Brown-headed Cowbird	2584	30810	42	609	UBCK
House Sparrow	15109	17594	83	652	PITT	Rusty Blackbird	146	183	14	36	READ
American Pipit	472	582	13	136	BUTR	Common Grackle	12130	138075	38	5123	SLAN
Evening Grosbeak	263	56	5	149	EMPO	Orange-crowned Warbler	10	2	4	4	DELA
House Finch	10546	9549	83	556	HAMB	Nashville Warbler	1	0	1	1	SBCK
Purple Finch	253	334	52	37	HUNT	Common Yellowthroat	4	5	4	1	BUTR,DELA, HARR,WEST
Common Redpoll	1	235	1	1	GROV	Cape May Warbler	1	0	1	1	CULP
Red Crossbill	2	21	2	1	LOCK,WI LD	Magnolia Warbler	1	0	1	1	PENN
Pine Siskin	22	628	10	5	JOHN	Palm Warbler	13	5	5	8	PENN
American Goldfinch	7592	9469	83	396	PITT	Pine Warbler	5	5	2	4	SBCK
Lapland Longspur	16	8	4	10	LINE	Yellow-rumped Warbler (Myrtle)	215	526	35	48	UBCK
Snow Bunting	89	148	7	30	LINE	Townsend's Warbler	1	0	1	1	READ
Chipping Sparrow	82	111	20	30	PENN	Wilson's Warbler	1	0	1	1	BERN
Field Sparrow	487	551	52	37	POCO	Northern Cardinal	16411	14509	83	905	PITT
American Tree	2337	3420	77	333	LINE	Lazuli Bunting	1	0	1	1	PENN
Sparrow						5					
·	Total	10-yr avg)	High	High Site						
						-					
INDIVIDUALS	972269	1357227		67985	BETH						
SPECIES	166	161		100	SBCK						
PARTY HOURS	5732	5748		222	PITT	_					

Cyclical Pattern Detected in Northern Harrier Migration Counts at Some Pennsylvania Hawk Watches

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INTRODUCTION

Since the 1930s, hawk watches have played a critical role in quantifying raptor populations and their trends (Bednarz et al. 1990). Migration counts have documented declines in species such as Bald Eagles (*Haliaeetus leucocephalus*), Peregrine Falcons (*Falco peregrinus*), and American Kestrels (*Falco sparverius*) (Bednarz et al. 1990, Farmer and Smith 2009) and more recently rebounds in Bald Eagles and Peregrine Falcons (Oleyar et al. 2021). Today, scientists utilize hawk watch data and other resources such as Audubon's Christmas Bird Count to understand the continent-wide conservation status of raptors (Oleyar et al. 2021).

One regular migrant past Pennsylvania watch sites is the Northern Harrier (*Circus hudsonis*), a medium-sized grassland raptor that primarily consumes small mammals and birds (Zagorski and Swihart 2020). Despite their generalist diet, their fecundity has been directly linked to cyclical vole populations, with more offspring produced when voles are plentiful, especially at northern latitudes (Hamerstrom 1985). Despite this cyclical offspring boost, Northern Harriers have been declining on eastern migration counts for the past 10 years or longer (Oleyar et al. 2019). Moreover, the Pennsylvania Game Commission has listed the Northern Harrier as threatened due to significant habitat loss throughout the state (Gross 2014).

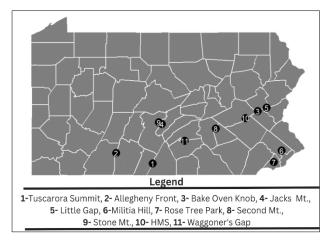


Fig. 1. PA hawk watches selected for study; map created in R version 3.6.0 (R Core Team 2019) using ggplot, maps, ggmap, and mapdata programs (Wickham 2009, Kahle & Wickham 2013, Becker et al. 2018)

Like many raptors, Northern Harriers are partial migrants, meaning that not every individual migrates in the fall. In addition, harriers are broad-front migrants, e.g., they are less likely to be diverted by migration corridors, leading to low counts at inland hawk watches (Bildstein 2006). In the east, harriers typically fly along the Atlantic coast or the Great Lakes before turning south (Bolgiano and Grove 2022). Regardless of lower numbers at many inland sites, recent research suggests that harriers have a four-year cyclic migration pattern that is consistent between five hawk watches from New Jersey to Minnesota, including Hawk Mountain in Pennsylvania (Schimpf et al. 2020). However, there has been minimal investigation of whether this four-year cycle occurs at the other hawk watches in the region, such as the many hawk watches scattered across Pennsylvania.

We predict that if cycles occur across the wider region of eastern states, then four-year cycles should be occurring consistently among sites within a smaller region, e.g., a state or province, as well. To investigate if a cyclical migration pattern occurs across Pennsylvania, we used three data sources: migration count data from 11 Pennsylvanian hawk watches; Christmas bird Count data (CBC); Winter Raptor Survey data (WRS). Because previous research has demonstrated that harrier fecundity has a cyclical pattern, we predict that higher migration counts will be positively correlated with higher counts of immature Northern Harriers.

METHODS

To examine possible cycles in hawk migration counts, we downloaded count data from 11 watch sites across Pennsylvania from HMANA's web database (hawkcount.org) for fall migrations from 1990 to 2021. All sites were in southern counties of Pennsylvania (Fig. 1). We included only hawk watches with over three hundred observer-hours and consistent annual effort from 1990 to 2020 (Table 1). To adjust for effort, we divided all annual counts by hours spent observing. We log-transformed migration counts and then detrended the data through R's pracma package (Borchers 2021). We then ran temporal autocorrelation functions on the adjusted migration count years (birds per hour) for one- to six-year lags (R Core Team, 2022).

To analyze harrier population cycles in Pennsylvania during winter, we compiled PA CBC data from 1993 to 2021 and PA WRS data from 2001 to 2021 (National Audubon Society 2021). These two survey methods differed from each other: observers in the WRS identified harriers by sex and age when possible, whereas CBC observers did not. For the CBC data, we added together Northern Harrier counts from all sites across PA, then divided this by the total hours of effort across the entire state per year. We ran temporal autocorrelation functions for both the CBC and WRS data following the same procedure as the hawk watch data. We compared the percent immature in WRS to the total number of harriers observed using a linear regression. Percent immature was calculated by dividing the number of immature harriers by the total number of adult and immature harriers. We also compared the percent immature to the adjusted harrier migration count from Hawk Mountain Sanctuary (HMS)

using a linear regression. Before running the correlation, the adjusted HMS count was log transformed to ensure normality. All statistical procedures were performed in R 3.6.2 (R Core Team, 2019).

RESULTS

From 1990 to 2021, the average Northern Harrier migration count per site varied from 53 to 242 migrants for the eleven sites (Table 1). The average annual count of all eleven sites combined was 100.5 harriers per year for each site ($\sigma = +55.4$ birds).

Table 1: Average Northern Harrier count and effort per year from 1990 to 2020 at 11 PA hawk watches, ordered by harriers per hour. *The average for all sites* = 100.5 birds = \pm 55.4. *Table created in R version 3.6 (R Core Team 2019) using the gt program (Jannone et al. 2021).*

HAWK WATCH	Average sightings per fall	Avg hrs observed per fall	Avg. sightings/hr
Tuscarora Summit	75	324.5	0.231
Waggoner's Gap	242	1073	0.225
Little Gap	110	551.7	0.199
Bake Oven Knob	119	781.5	0.152
Rose Tree Park	71	487.3	0.146
Second Mountain	122	841.4	0.145
Stone Mountain	60	414.3	0.145
Militia Hill	63	447.3	0.141
Jacks Mountain	53	386.4	0.137
Hawk Mountain	133	1029.8	0.129
Allegheny Front	57	789	0.072

A significant four-year cycle was found for three of the eleven PA fall watch sites (Table 2, Fig. 2). Among the sites, we observed a significant four-year cycle at Hawk Mountain Sanctuary (HMS), Rose Tree Park, and Stone Mountain (Fig. 2, p < 0.05, autocorrelation coefficient = 0.422, 0.227, 0.182, respectively). The higher correlation coefficient at HMS suggests the cycle was stronger at HMS compared to Rose Tree and Stone Mountain. There was also a significant three-year cycle or lag at Jack's Mountain and Tuscarora Summit (Fig. 2, p < 0.05, acf = 0.454, -0.178). None of the other watch sites showed evidence of a significant cycle in harrier numbers. The migration data also show that the cycle of peak years appears to have decreased or dampened in amplitude since 2008 (Fig. 2, Table 2).

Christmas Bird Counts for all PA count circles for the period 1993 to 2021 showed a significant four- and five-year lags (Fig. 3, p < 0.05, autocorrelation coefficient = 0.236, 0.287). However, the data from the Winter Raptor Survey (WRS) from 2001 to 2021 did not show any cyclical pattern at either two-, three-, or four-year periods (p > 0.05).

From 2001 to 2021, the average annual proportion of immature harriers was 22.3 % ($\sigma = \pm 6\%$). There was a significant correlation between percent immature and the total harriers counted each year on WRS (Pearson's correlation test, t = 2.211, df = 19, p = 0.039). However, there wasn't a significant relationship between the proportion of immature harriers annually and total harrier migration counts at HMS (Pearson's correlation, t = 0.67288, df = 19, p = 0.51). Similarly, there was not a significant cycle detected for the proportion of harriers recorded as immature harriers on migration counts at HMS (p<0.05).

DISCUSSION

Five of 11 Pennsylvania autumn hawk watch sites show a significant three or four-year cycle for Northern Harriers as was

reported by Schimpf et al. (2020) for a multi-state region (Fig. 2). Similarly, early-winter Northern Harrier populations in Pennsylvania as sampled by Christmas Bird Counts also demonstrated evidence of cyclical patterns coinciding with migration cycles (Fig. 3). However, mid-winter counts such as Winter Raptor Surveys showed no cyclical pattern in our analysis. Furthermore, our prediction that there would be higher counts of immature Northern Harriers wintering or migrating in peak years was not supported in this study.

We predicted that the four-year cycle would be evident at most PA hawk watches, which was not shown in this study. While some sites showed a cyclical count, as did the Christmas Bird Counts, we suspect that variations in weather and effort or harrier broad-front migration behavior could be influencing detection of cycles in migrant harriers at many migration sites, particularly where harriers occur in low numbers. Hawk watches varied greatly in effort hours across the state as well, which could affect counts of this rare, widely dispersed, and unpredictable migrant (Table 1).

Harriers can be difficult to spot and tend to fly low in migration (Bildstein 2006). They also are often the first or last migrant of the day and will fly on rainy or foggy days which can make them less likely to be detected (Bildstein 2006). Additionally, harriers are less apt to concentrate in migration and could be more likely to be missed than some raptors (Bildstein 2006). Because more harriers collect along coastal migration routes in the eastern US, e.g., Cape May, New Jersey (hawkcount.org), this study should be repeated at hawk watches along the Atlantic coast or in spring sites in the Great Lakes.

The lack of pattern or weak pattern of cycles detected at some watch sites could also be explained by the decreasing numbers of harriers in the East in recent years (Oleyar et al. 2019). Data from 2009-2019 demonstrate that harrier sightings are declining at 51% of eastern hawk watches (Oleyar et al. 2019). The overall population decrease may have decreased the amplitude of any population cycle (Bolgiano and Grove 2022) and may explain the reduction in cycles in recent years.

In comparison to our analysis of hawk watch sites, only one of two metrics of wintering harriers showed a cyclical pattern: the Christmas Bird Count (Fig. 3). This may be due to more observer hours in the Christmas Bird Count and wider geographic coverage than the Winter Raptor Survey. Also, Christmas Bird Counts are conducted early in the winter as compared to Winter Raptor Surveys which occur mid-winter, and so each has a different distribution of raptors across the state. Bolgiano and Grove found a higher number of harriers in the WRS compared to the CBC, especially in the Susquehanna River Valley (Fig. 3, Bolgiano and Grove 2022). Further research into winter harrier movements is needed to understand this phenomenon. Perhaps the CBC counts are influenced more by the population of migrating harriers moving through PA than the later WRS is.

These results may also be impacted by the relatively small population of harriers in our state. Areas with a higher percentage of grassland and marshy habitat, such as Ohio and coastal NJ, tend to have higher percentages of wintering harriers than most of PA (Bolgiano and Grove 2022). The lower overwintering population may explain why we did not find a consistent cyclical trend in winter. A pattern might be more evident if we analyze raptor data from a state with a higher wintering harrier population. With increasing impacts of climate change, some species are wintering at more northern latitudes (e.g., Red-tailed [*Buteo jamaicensis*] and Rough-legged Hawks [*Buteo lagopus*], Paprocki et al. 2014, 2017).

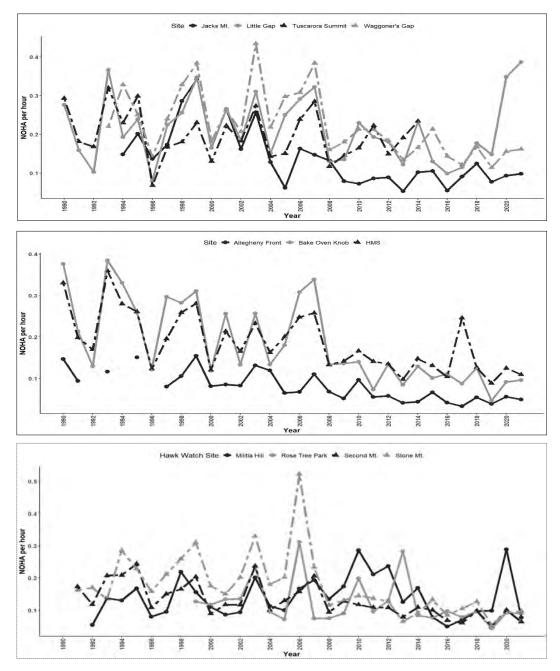


Fig. 2. Total annual harrier sightings at 11 Pennsylvania hawk watches from 1990 to 2020. Data adjusted by effort by dividing total harrier sightings by total observer hours. Figure created in R version 3.6.0 (R Core Team 2019) using ggplot2 and patchwork programs (Wickham 2016, Pedersen 2020).

If harriers are migrating shorter distances, it is possible more recent migration and winter samples in Pennsylvania may not be showing population cycles even though they could be occurring. Further analyses of Christmas Bird Counts or migrating immatures from more northern watch sites, such as in New England or the Great Lakes states, may show a stronger pattern of peaks in immatures at hawk watches and on the CBC.

Our results did not support the prediction that counts of wintering juvenile harriers would be higher in peak years in the WRS. This analysis should be repeated in a state with a larger harrier population to limit the influence of a low sample size.

Northern Harrier productivity and behavior has been linked to meadow vole populations across North America (Hamerstrom et al. 1985, Simmons et al. 1986). However, it is difficult to unequivocally connect productivity and behavior on breeding grounds to the peaks of migrating harriers. However, preydependent cycles are frequently observed in raptors. A preydependent migration cycle occurs in Northern Saw-whet Owls (*Aegolius acadicus*), with irruptions corresponding to higher immature populations in years of high prey populations (Confer et al. 2014). Fluctuations in prey populations also drive irruptions of Snowy Owls (*Bubo scandiacus*) and Boreal Owls (*Aegolius funereus*) (Cheveau et al. 2004, Robillard et al. 2016). More research is needed to determine if increased fecundity in harriers is contributing to the cycle observed at major hawk watches.

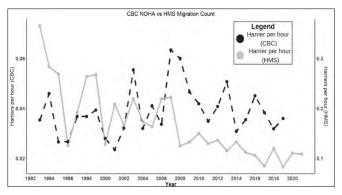


Fig. 3. Total harriers per hour during CBC compared to annual migration count at Hawk Mountain Sanctuary (HMS). Both projects had significant autocorrelations at a four-year lag. CBC count comes from the sum of harriers sighted divided by total observer effort across the state. Annual migration counts were calculated by dividing the total number of harriers observed per year by the total observer effort. Figure created in R version 3.6.0 (R Core Team 2019).

In summary, Northern Harrier migration and early season wintering data suggest there is evidence of four-year population cycles at three PA hawk watches and a three-year cycle at two hawk watches. However, this cycle has decreased since 2008 which may mean population declines or short-stopping is influencing migration patterns observed. These findings emphasize the need for more research as well as conservation steps to protect this iconic grassland raptor and to ensure its continued presence as a migrating and wintering bird of Pennsylvania.

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REFERENCES

- Becker, R.A., and A.R. Wilks. (Original S code) R version by Ray Brownrigg. 2018. mapdata: Extra Map Databases. R package version 2.3.0. https://CRAN.R-project.org/package=mapdata.
- Bednarz, J. C., D. Klem, D., L.J. Goodrich, L. J., and S.E. Senner. 1999. Migration Counts of Raptors at Hawk Mountain, Pennsylvania, as Indicators of Population Trends, 1934-1986. *The Auk* 107:96-109.
- Bildstein, K. 2006. Migrating Raptors of the World: Their Ecology and Conservation. Cornell University Press. Ithaca, New York.
- Bolgiano, N., and G. Grove. 2022. Northern Harrier Fall-Winter Distribution and Trends in Pennsylvania and Regionally. *Pennsylvania Birds* 35:206-213.
- Borchers, H.W. 2021. pracma. Practical Numerical Math Functions. R package version.
- Cheveau, M., P. Drapeau, L. Imbeau, and Y. Bergeron. 2004. Owl Winter Irruptions as an Indicator of Small Mammal Population Cycles in the Boreal Forest of Eastern North America. *Oikos*. 107:190-198.

- Confer, J. L., L.L. Kanda, and I. Li. 2014. Northern Saw-whet Owl: Regional Patterns for Fall Migration and Demographics Revealed by Banding Data. *The Wilson Journal for Ornithology*. 126:305-320.
- Farmer, C. J., and J.P. Smith. 2009. Migration Monitoring Indicates Widespread Declines of American Kestrels in North America. *Journal of Raptor Research* 43:263-273.
- Gross, D. 2014. Northern Harrier Species Profile. *PA Game Commission*. https://www.pgc.pa.gov/Wildlife/ EndangeredandThreatened/Pages/NorthernHarrier.aspx
- Hamerstrom, F., F. N. Hamerstrom, and C. J. Burke. 1985. Effect of Voles on Mating Systems in a Central Wisconsin Population of Harriers. *Wilson Bulletin* 97:332–346.
- Iannone, R., J. Cheng, and B. Schloerke. 2021. gt: Easily Create Presentation Ready Display Tables. R package version 0.3.1 https://CRAN.R-project.org/package=gt.
- Kahle, D., and H. Wickham. 2013. ggmap: Spatial Visualization with ggplot2. The R Journal 5:144-161. URL http://journal.rproject.org/archive/2013-1/kahle-wickham.pdf.
- National Audubon Society. 2021. The Christmas Bird Count Historical Results [Online]. Available http://www. christmasbirdcount.org.
- Oleyar, D., D. Ethier, L. Goodrich, D. Brandes, R. Smith, J. Brown, and J. Sodergren. 2021. *The Raptor Population Index: 2019 Analyses and Assessments*.
- Paprocki, N., J.A. Heath, and S.J. Novak. 2014. Regional Distribution Shifts Help Explain Local Changes in Wintering Raptor Abundance: Implications for Interpreting Population Trends. *PLoS ONE* 9: e86814.
- Pedersen, T.L. 2020. patchwork: The Composer of Plots. R package version 1.1.1 https://CRAN.R-project.org/package=patchwork.
- R Core Team. 2022. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. https://www.R-project.org/.
- Robillard, A., J. F. Therrien, G. Gauthier, K. M., Clarks, and J. Bêty. 2015. Pulsed Resources at Tundra Breeding Sites Affect Winter Irruptions at Temperate Latitudes of a Top Predator, the Snowy Owl. *Oecologia* 181:423–433.
- Schimpf, D. J., L.J. Goodrich, A.R. Kocek, and D.A. LaPuma. 2020. Northern Harriers Have a Geographically Broad Four-Year Migration Cycle. *Journal of Raptor Research* 54:38-46.
- Simmons, R. P. Barnard, B. MacWhirter, and G. L. Hansen. 1986. The Influence of Microtines on Polygyny, Productivity, Age, and Provisioning of Breeding Northern Harriers: a 5-year study. *Canadian Journal of Zoology* 64:2447-2456.
- Stenseth N.C., W. Falck, K.S. Chan, O.N. Bjornstad, M. O'Donoghue, H. Tong, R. Boonstra, S. Boutin, C.J. Krebs, and N.G. Yoccoz. 1998. From Patterns to Processes: Phase and Density Dependencies in the Canadian Lynx Cycle. *Proceedings of the National Academy of Sciences* 95:15430-15435.
- Tyson, R., S. Haines, and K.E. Hodges. 2009. Modelling the Canada lynx and Snowshoe Hare Population Cycle: The Role of Specialist Predators. *Theoretical Ecology* 3:97–111.
- Wickham., H. ggplot2: Elegant Graphics for Data Analysis. Springer-Verlag New York, 2016.
- Zagorski, M. E., and R.K. Swihart. 2020. Are Northern Harriers Facultative Specialists on Arvicoline Rodents in Midwestern Agroecosystems? *The American Midland Naturalist* 184: 188-204.

Results Since Pennsylvania's First Breeding Bird Atlas: State's First Confirmed Breeding Reports

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Besides our fascination with the seasonal cycles of migration, birders and conservationists are intrigued by the ebb and flow of breeding bird populations over time. We all know that bird numbers are changing constantly in response to factors such as changes in habitat, climate, contaminants and pollution, and the redress of those challenges. Our response is to monitor, calculate trends over time, document distributional and population changes, and make lists. We do so with Christmas Bird Counts, Breeding Bird Surveys, and of course, Breeding Bird Atlases. Monitoring is part of our stewardship responsibility to conserve the feathered jewels under our care.

The USGS Breeding Bird Survey, established in Pennsylvania in 1966, and Breeding Bird Atlases, started in 1983, each contribute to our understanding of these populations. The past two bird atlases quantified species' populations in the early stages of colonization or when approaching extirpation, when they are by definition rare. A single pair, or even just a territorial male, is a significant result in an atlas project. Surveying every 10-mi2 block in the state locates rarities, something the broad-scale Breeding Bird Survey (BBS) isn't designed to accomplish. The BBS provides more detailed trends over time for the most common singing birds.

SPECIES EXPANDING IN PENNSYLVANIA

This article draws attention to species expanding their ranges since the first breeding bird atlas in the 1980s (BBA1). These are species that are thriving, or at least that appear to be. Two recent articles in this journal focused on bird population changes, looking at major declines since our first atlas (Grove 2023) and bird responses to West Nile Virus infections (Bolgiano 2023). Reference to the bird atlases follows Grove, as *BBA1* and *BBA2* (2000s). While expanding species may not warrant the same interest as declining birds or even trigger a conservation response, we can learn much from how they have adapted to our human-altered environment, and we can feel satisfied by having contributed to their restoration.

Range expansion isn't a new phenomenon. Indeed, three of the most abundant and widespread birds in North America--Rock Pigeon, European Starling, and House Sparrow--were introduced intentionally many years ago. The mid-20th century saw populations of Wood Duck, Canada Goose, Common Raven, Wild Turkey, and many others recover in response to diverse environmental changes. Improved water quality through regulations of the 1960s and 1970s helped promote the expansion of fish-eating birds such as Common Mergansers and other waterfowl. Several of these species' populations in Pennsylvania continue to grow.

These heartening stories of significant recoveries are related to restoration of ecosystems, which often happens without direct human intervention. In fact, human impact on local habitats and broader climate conditions almost always plays a role in modern changes in a species' range.

In terms of intentional and positive human interventions, notable successes in species reintroduction were underway during the state's two atlases and contributed to dramatic recoveries for a trio of large raptors--Bald Eagle, Osprey, and Peregrine Falcon--that had suffered from persecution as well as DDT contamination. Those stories have been well-documented many times, and aren't addressed further here.

SPECIES REDISCOVERIES

Pennsylvania Breeding Bird Atlas projects encouraged exploration of remote portions of the state that resulted in the rediscovery of species not documented nesting for decades. Such was the case of the Yellow-bellied Flycatcher in remote forested wetlands of northeastern PA, particularly in *Wyoming*. (Significantly, the summer of 2022 was the first since the first atlas in the 1980s that this re-documented species was not found on territory [Gross 2023]). One of the highlights of the BBA1 was "rediscovered" nesting Dickcissels that had been considered extirpated (Gill 1985). While this highlighted the importance of our reclaimed mine lands, it led to the discovery of more stable Dickcissel populations in agricultural areas in the state. Loggerhead Shrikes, King Rails, and others were rare nesting species documented intermittently over the past 40 years.

The rest of this article reviews the histories of 12 species confirmed nesting for the first time in Pennsylvania during and since the BBA1. The details of most of these "firsts" have been written up in detail in *Pennsylvania Birds* articles or atlas species accounts which are cited below. This follows the pattern of Bolgiano and Grove by providing a brief synopsis of the factors contributing to these expansions, anticipating the clarification expected for the status of these colonists by the BBA3 (planned to begin in 2024). Several of these species had short-lived nesting histories in Pennsylvania while others appear to have become established and truly are expanding their breeding ranges. The majority of these "firsts" happened during the 1990s, between the first and second bird atlases.

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SDECIES	Blocks-	Blocks -	First year
SPECIES	BBA 1	BBA 2	reported
Trumpeter Swan	0	1	2018
Eurasian Collared-Dove	0	15	2004
Black-necked Stilt	1	0	1989
Sandhill Crane	0	26	1993
Ring-billed Gull	0	171	1983
Herring Gull	2	60	1994
Great Black-backed Gull	0	10	2006
Double-crested Cormorant	0	111	1996
Merlin	0	13	2006
Evening Grosbeak	0	0	1994
Clay-colored Sparrow	3	29	1999
Blackpoll Warbler	0	3	1994

Table 1: Number of BBA blocks wherespecies detected, and first year reported

Trumpeter Swan

International conservation efforts have been underway since the 1980s to redress market hunting and other pressures that nearly pushed Trumpeter Swans to extinction. After years of releases, the resulting distribution is patchy but growing in neighboring Ohio and Ontario, and in the West (Trumpeterswansociety.org). Wing-tagged birds began appearing in Pennsylvania in Warren in 1989 (Grisez 1989) and pairs were reported, suggesting nesting, during the BBA2, but without confirmed breeding documented (Dunn 2012). The first confirmed breeding event was in Jefferson in 2018, where they had been seen over the previous two summers (Glover 2019). However, the species was not noted there in subsequent years. Several nesting events, including a rare hybridization with Mute Swan in Pike in 2022, have been scattered around the state, including a successful pair in Cumberland that persisted for three years, as of 2022 (Brauning 2023). The expansion of Trumpeter Swans into the state is the indirect result of species restoration efforts, although the historical evidence of their presence here was paleontological (Mitchell 1994). As a result, we have benefited from the efforts of others by gaining a species not previously documented. It seems likely that this species will continue to expand its breeding range and population within the state.

Eurasian Collared-Dove

An enigmatic member of Pennsylvania's recent colonists is the Eurasian Collared-Dove. As its name suggests, it is not native to the Americas and thus is akin to European Starlings and Rock Pigeons. Eurasian Collared-Doves' continental expansion was launched by releases as recently as the 1970s in the Bahamas from which they spread to the Southern states of the US and from there exploded across the South and West, and north to British Columbia, Canada (Wilson 2012). The species was first detected in Pennsylvania in 1996 with breeding first documented in *Franklin* in 2004 (Wilson 2012). Since then, breeding evidence (mostly dependent young) has come from southeastern counties, although to my knowledge nests with eggs or young have not been reported. The breeding population now likely extends along the Cumberland Valley of central and southeastern counties, with

summer sightings in *Cumberland* and *Berks*, but most consistently near the first nesting site in *Franklin*. The perplexing feature of this dramatic expansion is the species' failure to spread across the rest of PA or become established in other northeastern states as it did in the West. As Andy Wilson pondered in the Second Atlas account, some unknown limiting factor may be at play in our region. Still, it seems likely that new breeding sites will be documented during the BBA3.

Black-necked Stilt

A notable discovery during the BBA1 was the state's first confirmed breeding of Black-necked Stilt in the Philadelphia Sewage Treatment pond in 1989. This was particularly remarkable because only five sight records had existed in PA before 1988 (Santner 1992). Stilts persisted in the area until at least 1992 (McWilliams and Brauning 2000), but no further evidence of nesting has been provided since. This appears to have been an opportunistic event.

Sandhill Crane

The eastward expansion of Sandhill Cranes added this species to the lists of breeding birds of New York and Ohio during their second atlas projects. In Pennsylvania, the first documentation of flightless young was made in Lawrence shortly after our BBA1 in 1993 (Wilhelm 1993). The state's first documented nest was found a decade later in Bradford (Wilhelm 2012). The species gradually expanded from those glaciated wetlands in our northwest and northeast. This conspicuous species is now seen year-round within the state and during the summer may be found statewide, including the southeast. Still, nesting on the ground brings hazards partly ameliorated by extensive wetlands, which are not widely available. The extensive wetlands of our northwest remain the core of the breeding population. An extensive and detailed summary of the history and status of this species concluded that "the breeding population of cranes in Pennsylvania continues to grow steadily, and assuming continued breeding success, the population may keep expanding" (Wilhelm 2018).

Ring-billed Gull

Nesting attempts by Ring-billed Gulls were first documented in Pennsylvania on Presque Isle, Erie in 1983, when at least 20 nests were discovered, including three with an egg each (McWilliams 1995). Depredation appeared to terminate those as well as subsequent nesting attempts. The state's first successful Ringbilled Gull nests were in 1999 in a colony that supported 120 chicks in the brick rubble of a vacant lot of the GE Plant in the city of Erie (McWilliams 1999). However, "because of property damage and danger to health and safety, the U.S. Department of Agriculture Wildlife Services was asked to disperse the colony. Nesting attempts and control measures continued until [at least] 2009" (Hess 2012). Nesting activity has not been reported there again or elsewhere in the state, despite the persistent presence of this species in many locations during the summer. Nearby in New York State, a nesting colony has existed on a gravel island in the Chemung River at Elmira, eight miles from the Pennsylvania

border, since at least the early 2000s, as well as in neighboring Ohio. Expanding gull populations in general and better water quality suggest that the prospects are very good that at least nesting attempts will be documented during the BBA3.

Herring Gull

Todd (1940) acknowledged that Herring Gulls probably nested on some of the smaller islands in the western end of Lake Erie, in Ohio, but makes no suggestion of the species' nesting in Pennsylvania. The state's first breeding record of Herring Gulls was in Pittsburgh in 1994 on concrete pilings at an Allegheny River dam (Floyd 1994, Hess 2012). Since then, the population has grown to include similar structures and concrete piers of bridges on the Allegheny and Ohio rivers. This population extended up the Allegheny River into Armstrong, with a nesting pair and three chicks at the Kittaning Lock & Dam #7 during the BBA2, and has the potential of extending down the Ohio River in Beaver. Coincidentally, Herring Gulls first made nesting attempts at Presque Isle, Erie, in 1995 at the Ring-billed Gull colony described above (McWilliams 1995) and accompanied the colony at the Erie industrial site in 1999. The number of Herring Gulls nesting there expanded from just a few until they were also eradicated (Hess 2012). These two gull species are present through the summer, notably along the Delaware River and Lake Erie, suggesting the potential for colonization. The colony in the city of Erie grew quickly, and included nests on locations such as rooftops where they are frequently controlled for health and safety reasons. Expansion of the Herring Gull breeding population is likely in the future, including at new locations.

Great Black-backed Gull

The BBA2 species account explains that the Great Black-backed Gull was not considered a likely or even potential breeder when a nest was found in 2006 on the Delaware River near the Philadelphia International Airport (Malosh 2012). With growing gull populations over the previous decades and persistent summering birds along the Delaware River, this should have been considered. Despite eBird records that reflect a regular, small summer (June) population in that area, that appears to be the only documented nest in Pennsylvania's history--however, no one probably checks regularly for nests! While this gull predominately breeds along the Atlantic Coast, nesting has also been confirmed inland on islands in Lake Ontario and even on the much smaller Oneida Lake during New York's Second Bird Atlas (Richmond 2008). The greatest potential for nesting during the BBA3 will again be in the state's southeastern corner.

Double-crested Cormorant

Double-crested Cormorant were first discovered nesting in 1996 on Wade Island, *Dauphin*, where the population grew to 120 active nests in 2009 (Ross 2012). Notably, during the BBA2, confirmed (although unsuccessful) nesting was also found in *Bucks*, *Northampton*, and *Lancaster* counties. However, like the gulls, cormorant nesting populations have been actively suppressed by the USDA Wildlife Services. Over a period of many years, beginning in 2006, cormorants were aggressively controlled at Wade Island under a 2003 federal depredation order because of perceived threats to fish stocks. The result has been a colony that declined in nest counts to the mid-50s as of 2018 (Barber 2019), although they have persisted (eBird, May 2022). With cormorants showing up during the breeding-season at lakes and rivers statewide, incidental nesting events may occur widely, although those opposed to nest eradication controls might be reluctant to report their findings.

Merlin

Reflecting extraordinary adaptability, the dramatic range expansion of the Merlin southward from Canada has been underway for decades. Expanding into northern Maine in the early 1980s (pers. obs) and documented widely across New York State by their second Atlas (2000s), Merlins were first confirmed nesting in Pennsylvania in 2006 and were subsequently observed in 13 blocks during the BBA2 (Wiltraut 2012). They have since expanded into small towns and parks nearly statewide (Snyder 2019). While resident pairs can be mysteriously discrete at nest sites, birds occupy old crow or squirrel nests, often in mature conifers associated with human habitation. Could we be overlooking pairs in CCC plantations or large white pines away from humans? Recently fledged young are notoriously noisy, although the window for detecting them is narrow. This is a fine example of a species for which a dramatically expanded breeding range can be expected during the BBA3.

Evening Grosbeak

A thorough list of first-time breeding events includes the sole confirmed nesting Evening Grosbeaks in the state. The late Skip Connant found and documented a pair near his cabin in Wyoming, observing them frequently in the summer of 1994, from 3 June onward, with recently fledged young seen being fed on 11 July. The grosbeaks were seen subsequently until 8 August (Connant 1994). Many details were documented, although a nest was never discovered. This event coincided with an eastern spruce budworm (Choristoneura fumiferana) outbreak in the area, which perhaps not coincidentally coincided with the first confirmed Blackpoll Warbler nest nearby. However, Evening Grosbeak sightings have been scarce in the state since that budworm outbreak, with concerns about steep declines in their populations nationally. Despite summer reports before this, and since, this seems to represent an unusual situation that likely will not be repeated.

Clay-colored Sparrow

Territorial Clay-colored Sparrows were first documented in Pennsylvania during the BBA1, with records in 3 blocks. The species account (Ickes 1992) suggested--correctly, it turned outthat it may "someday be found breeding." In 1999, fledged young were discovered in the Piney Tract (*Clarion*) where the first territorial birds had been detected (Fedak 1999). By the BBA2, this sparrow was documented in 13 blocks scattered around 10 counties (Ickes 2012) and was among the species with the largest percentage expansions between atlases. Growth in the

population by the time of the BBA2 suggested this would continue. However, this incursion was bucking the trend of "early-succession" species, most of which were in decline, and its prospects appear to have reversed recently. While they continue at sites first documented in *Clarion*, this sparrow was not reported during the nesting season anywhere else in the state in 2022 outside that area (Brauning 2023) and may well blink out over the next decade.

Blackpoll Warbler

This species was first confirmed breeding here with the discovery of a nest in 1994 in *Wyoming* (Gross 1994). Ten years later, during the BBA2, they persisted in the same location, Coalbed Swamp, with as many as 13 territories and an additional two birds on territory in nearby Tamarack Swamp (Gross 2012). Nesting has not been confirmed anywhere in the state besides those highelevation wetlands. Few birders besides Doug Gross access that remote area during the breeding season, but he has reported territorial birds (at least) almost every year through 2022. This species seems to be hanging on by a thread. Broad-scale impacts, like climate change, would be trending against this and other species that depend on this northern outpost of habitat at the southern edge of their ranges.

POSSIBLE ADDITIONS IN THE BBA3

The above comprise a diverse assemblage of unusual events and range expansions over the 40+ years since the first breeding bird atlas. While some were spurred by atlas projects, six of these events fell between the first and second atlases (Table 1). The Third Breeding Bird Atlas seems well-poised to document additional "first" breeding events in the state. Recent summer sightings of Swainson's Warbler, Chuck-will's Widow, and Mississippi Kite suggest they may be added to the list of confirmed breeding species sometime soon. Of course, other, unexpected discoveries could also be made. But while such discoveries are exciting, updated documentation of the full range of breeding species by a new atlas will contribute great value to the conservation of our breeding birds.

REFERENCES

- Barber, P. 2019. *Colonial waterbirds nesting study*. Wildlife Diversity Annual Research Report. Pennsylvania Game Commission, www.pgc.state.pa.us.
- Bolgiano, N. 2023. Where West Nile Virus has affected Pennsylvania's birds and what this portends for the state's third breeding bird atlas. *Pennsylvania Birds* 37:17-24.
- Brauning, D. 2023. Summary of the season: summer season. *Pennsylvania Birds* 36:157-160.
- Connant, S. 1994. First confirmed Evening Grosbeak nest in Pennsylvania -- Wyoming County. *Pennsylvania Birds* 8:133-135.
- Dunn, J. P. 2012. Trumpeter Swan. Pp 92-93 in Second Atlas of Breeding Birds in Pennsylvania. A. Wilson, et al., eds. Penn State Press.
- Fedak, J. 1999. Documentation of Clay-colored Sparrow breeding at Piney Tract, Clarion County. *Pennsylvania Birds* 13:63.
- Floyd, T. 1994. First breeding colony of Herring Gulls in Pennsylvania, Allegheny County. *Pennsylvania Birds* 8:34.
- Gill, F. B. ed. 1985. Chapter 5 Birds. Pp 299-351 in H.H. Genoways and F.J. Brenner, eds. Species of Special Concern in

Pennsylvania. Carnegie Museum of Natural History, Special Publication No 11. Pittsburgh, PA.

- Glover, T. N. 2019. Trumpeter Swans breeding in Pennsylvania. *Pennsylvania Birds* 32:190-193.
- Grisez, T. 1989. Trumpeter Swans in Warren County. *Pennsylvania Birds* 3:15.
- Gross, D. A. 1994. Discovery of a Blackpoll Warbler (*Dendroica striata*) nest: a first for Pennsylvania Wyoming County. *Pennsylvania Birds* 8:128-132.
- Gross, D. A. 2012. Blackpoll Warbler. Pp 386-387 in *Second Atlas* of *Breeding Birds in Pennsylvania*. A. Wilson, et al., eds. Penn State Press.
- Gross, D. A. 2023. Birds of Note: June July 2022. *Pennsylvania Birds* 36:161-163.
- Grove, G. 2023. Results from Pennsylvania Bird Atlas 1 and 2: Species showing likely declines. *Pennsylvania Birds* 36: 152-155.
- Hess, P. 2012. Herring Gull. Pp 186-187 in Second Atlas of Breeding Birds in Pennsylvania. A. Wilson, et al., eds. Penn State Press.
- Ickes, R. 1992. Clay-colored Sparrow. Pp 376-377 in Atlas of Breeding Birds in Pennsylvania. D.W. Brauning, ed, U. Pittsbugh Press.
- Ickes, R. 2012. Clay-colored Sparrow. Pp 408-409 in *Second Atlas* of *Breeding Birds in Pennsylvania*. A. Wilson, et al., eds. Penn State Press.
- Kellam, J. 2023. Armstrong County. Pennsylvania Birds 38:173.
- Malosh, G. 2012. Great Black-backed Gull. Pp 188-189 in *Second Atlas of Breeding Birds in Pennsylvania*. A. Wilson, et al., editors. Penn State Press.
- McConaughy, M. 1996. First Double-crested Cormorant nesting in Pennsylvania. Pennsylvania Birds 10:151.
- McWilliams, G. M., and D. W. Brauning. 2000. *The Birds of Pennsylvania*. Cornell University Press.
- McWilliams, J. 1995. Attempted nesting of three species of Laridae at Presque Isle State Park, 1995. Erie County. *Pennsylvania Birds* 9:79-80.
- McWilliams, J. 1999. The first successful Ring-billed Gull (*Larus delawarensis*) nesting in Pennsylvania. *Pennsylvania Birds* 13:62.
- Mitchell, C.D. 1994. Trumpeter Swan (*Cygnus buccinator*). In *The Birds of North America*. No 105. A. Poole and F. Gill, eds. The Birds of North America, Inc, Philadelphia.
- Richmond, M. E. 2008. Great Black-backed Gull. Pp 258-259 in *The* Second Atlas of Breeding Birds in New York State. Kevin J. McGowan and Kimberly Corwin, eds. Cornell University Press.
- Ross, R. 2012. Double-crested Cormorant. Pp 118-119 in *Second Atlas of Breeding Birds in Pennsylvania*. A. Wilson, et al., eds. Penn State Press.
- Santner, S. 1992. Black-necked Stilt. Pp 134-135 in D. W. Brauning, ed. Atlas of Breeding Birds in Pennsylvania. U. Pittsburgh Press.
- Snyder, R. 2019. Merlin: Expansion of breeding range into Pennsylvania. Pennsylvania Birds 33:226-229.
- Todd, C.E. 1940. *Birds of Western Pennsylvania*. University of Pittsburgh Press.
- Wilhelm, G. 1993. First breeding record of Sandhill Crane for Pennsylvania, Lawrence/Mercer Counties. *Pennsylvania Birds* 7:91-92.
- Wilhelm. G. 2012. Sandhill Crane. Pp 172-173 in Second Atlas of Breeding Birds in Pennsylvania. A. Wilson, et al., eds. Penn State Press.
- Wilhelm, G. 2018. The Greater Sandhill Crane in Pennsylvania. *Pennsylvania Birds* 32: 3-12
- Wilson, A. 2012. Eurasian Collared-Dove. Pp 194-195 in Second Atlas of Breeding Birds in Pennsylvania. A. Wilson, et al., editors. Penn State Press.
- Wiltraut, R. 2012. Merlin. Pp 158-159 in Second Atlas of Breeding Birds in Pennsylvania. A. Wilson, et al., eds. Penn State Press.

Where West Nile Virus Has Affected Pennsylvania's Birds and What This Portends for the State's Third Breeding Bird Atlas

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Pennsylvania's third Breeding Bird Atlas (BBA 3) is slated to begin in 2024. A breeding bird atlas is intended to document bird distributions, any distribution changes from a previous atlas, and why the observed changes were thought to have occurred. BBA 2 (2004-2009) confirmed the effects of several landscape-scale changes since BBA 1 (1983-1989): forest regeneration favored many species, but the loss of early successional habitat disfavored others; modern farming practices became generally less hospitable to open-country breeding birds; and housing development, particularly in the state's southeast, was inhospitable to other breeding species. BBA 3 will likely reaffirm these BBA 2 conclusions.

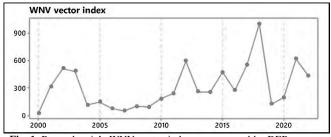
Additional landscape-scale issues have increasingly weighed upon Pennsylvania's birds: West Nile Virus (WNV); Hemlock Wooly Adelgid (*Adelges tsugae*) and its effect upon Eastern Hemlock (*Tsuga canadensis*) and hemlock-associated birds; Emerald Ash Borer (*Agrilus planipennis*) and its killing of most of our ash trees (*Fraxinus* spp.); and the withdrawal of boreal birds from higher elevations, possibly due to a changing climate. Their effects have increased since BBA 2, and BBA 3 is an opportunity for learning more.

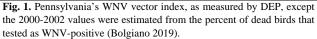
This article concentrates on WNV: 1) where in Pennsylvania apparent WNV-related declines have occurred in Christmas Bird Count (CBC) data for eight species, which portends where analogous between-atlas declines might be found in the upcoming atlas; 2) updates of cited literature and recent WNVrelated trends in Pennsylvania; 3) advocacy for a BBA 3 design to best document the effects of WNV and other landscape-scale changes (see Discussion).

WNV IN PENNSYLVANIA

West Nile Virus (WNV) was detected in North America in 1999, in New York City, spreading to Pennsylvania and neighboring states in 2000 and throughout much of the continent by 2004 (McLean 2006; Kilpatrick et al. 2007). Phylogenetic studies indicate that WNV was likely present in many places a year before it was detected (Hadfield et al. 2019). It is primarily transmitted by a mosquito-bird cycle, whereby infected mosquitoes bite and infect healthy birds, and infected birds fly to new locations and infect different biting mosquitoes. Much attention was given to the early WNV epidemic because of the risks to humans, horses, and birds.

Since 2003, Pennsylvania's Department of Environmental Protection (DEP) has measured WNV levels in mosquitoes in most counties. (The WNV level in mosquitoes during 2000-2002 was estimated from the percentage of collected dead birds that were WNV-positive.) WNV levels in mosquitoes were high in 2001-2003, fell to low levels in 2004-2009, but re-amplified, reaching high levels in 2012 and eventually attained their highest recorded level in 2018, when much of Pennsylvania experienced record rainfall (Bolgiano 2019). Subsequently, WNV levels in mosquitoes fell dramatically during 2019-2020, but re-amplified again in 2021-2022 (Figure 1).





While individuals of several hundred native bird species have been found dead and WNV-positive in the United States (CDC ArboNET 2019), there is large variation among bird species vis-a-vis their susceptibility and population response to WNV. Two decades of observations have shown that a relatively small number of North American bird species have been highly affected by WNV, although we still don't know the extent to which waterbirds and raptors have been affected (Kilpatrick and Wheeler 2019). This is also what we have seen in Pennsylvania (Bolgiano 2019).

At the end of the BBA 2, the Great Horned Owl (*Bubo virginianus*) was the one avian species for which there appeared to be evidence of a WNV effect in Pennsylvania (Bolgiano 2012). But after two full cycles of high WNV levels in mosquitoes and a third in progress, there is now strong evidence that at least six bird species have declined in Pennsylvania due to WNV, with possible evidence for WNV-caused declines for additional species. The species that are highly susceptible to WNV typically experienced a steep decline when WNV levels in mosquitoes attained high levels, but it took several years for their numbers to rebound after WNV levels appreciably declined. None of the species with strong evidence of a WNV effect have rebounded to pre-WNV levels in Pennsylvania (Bolgiano 2019).

Eight species are the focus here: American Crow (*Corvus brachyrhynchos*), Great Horned Owl, Ruffed Grouse (*Bonasa umbellus*), Carolina Chickadee (*Poecile carolinensis*), Black-capped Chickadee (*Poecile atricapillus*), Tufted Titmouse (*Baeolophus bicolor*), House Finch (*Haemorhous mexicanus*)

and Northern Mockingbird (*Mimus polyglottos*). These species share evidence for WNV-related declines, sufficient data to view distribution changes, and with several partial exceptions, tend either not to migrate at all or to not migrate very far. Here, data from the CBC are used because of its large sample sizes for most species and its previous demonstration of WNV-induced declines (Bolgiano 2019).

METHODS

CBC count per unit effort data are graphically displayed, with each graph having four components: A) a map of site means for the 10 years before WNV arrived; (B) a map of site means for the last 10 years; (C) a trend plot of the statewide annual mean across sites; and (D) a map of the percent change between the two periods. For House Finch, the first time period was 1984-1994, its period of peak abundance. (The CBC year is considered as the one in which Christmas occurred.)

Because the focus is on trends at individual sites, the counts for Carolina Chickadees, Black-capped Chickadee, and chickadee sp. were combined. At sites within the hybrid zone between the two chickadee species, observers commonly refrain from identifying chickadees to the species level, as many of the chickadees could have been hybrids. This complicates discerning individual chickadee species trends.

Counts were adjusted for effort by computing the count/10 party hours for the seven non-owl species and the count/10 owling hours for Great Horned Owl. Omitted were counts with less than one nocturnal hour for owls or 20 party hours for non-owls or sites having less than four years of those effort minimums.

When calculating averages of count per unit effort values, sites were equally weighted when calculating trend values and years were equally weighted when calculating site means. For American Crow, means were calculated after first taking a natural log transformation of the count per 10 party hours plus one, then back-transforming before display. For Ruffed Grouse, sites that did not record any grouse were omitted when calculating the statewide annual trend.

Also noted are any relevant trends from the Breeding Bird Survey (BBS) and eBird (Sauer et al. 2019; Fink et al. 2022).

RESULTS

American Crow

American Crow is highly susceptible to WNV and a species for which WNV-related population declines have been noted frequently. During the early years of the WNV epidemic, it was called the "sentinel species" because WNV was often first detected in a community after the finding of dead crows (McLean 2006). A challenge study, deliberately infecting birds to see how disease progressed, found 100% mortality from WNV, with all eight infected birds dying (Komar et al. 2003). Among individually marked wild crows, an estimated 68% died in Champaign/Urbana, IL, during 2002 and 72% died in Stillwater, OK, during 2003 (Yaremych et al. 2004; Caffrey et al. 2005). In California, American Crow was found to have the highest risk to WNV among bird species, as computed from the WNV levels in free-ranging birds, the percent of WNV-positives in dead birds, susceptibility in challenge studies, and results from BBS trend analysis (Wheeler et al. 2009). Declines have been observed in FeederWatch and CBC data (Bonter and Hochachka (2003), in CBC data from the Northeast (Caffrey and Peterson 2003); in BBS data from the Northeast (LaDeau et al. 2007), and in BBS data from 10 states (Foppa et al. 2011). In Pennsylvania, the majority of dead birds that DEP found to be WNV-positive have been American Crows (Bolgiano 2019).

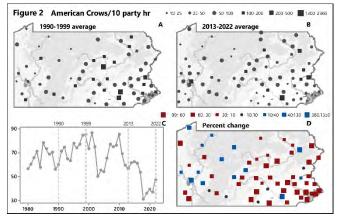


Fig. 2. American Crow CBC effort-adjusted data: (A) a map of site means for the 10 years before WNV arrived; (B) a map of site means for the last 10 years; (C) a trend plot of the statewide annual mean across sites; and (D) a map of the percent change between the two periods.

Many American Crows found on the Pennsylvania CBC are likely to have congregated from elsewhere. However, CBC trends were found to be similar across much of eastern North America (Bolgiano 2022) and thus CBC densities are likely to be informative about Pennsylvania's breeding population.

Like Carolina Chickadee and Tufted Titmouse, the American Crow's Pennsylvania trend after WNV arrival aligned closely with the trend for WNV levels in mosquitoes. It declined sharply when WNV spiked and took several years to even partially recover after WNV levels in mosquitoes declined appreciably (Figure 2).

Declines in CBC effort-adjusted counts were concentrated in the southeast and the central valleys. The recent Pennsylvania CBC mean counts of American Crows were 33.5% lower than before WNV arrival (Table 1). However, as with Carolina Chickadee and Tufted Titmouse, this estimate may not fully reflect the steep decline observed since 2018. That American Crow abundance remains lower now than before WNV arrival is consistent with findings in New York, Maryland, Virginia, and Illinois (Kilpatrick and Wheeler 2019).

 Table 1: CBC means during the 10 years before WNV arrived, during the last 10 years, and the percent change between periods

5	1	U	1
SPECIES	1990- 1999	2013- 2022	Percent
	Mean	Mean	Change
American Crow	73.2	48.7	-33.5
Great Horned Owl	20.3	10.7	-47.2
Ruffed Grouse	0.67	0.12	-81.5
All Chickadees	45.3	28.3	-37.5
Tufted Titmouse	21.2	16.2	-23.6
House Finch *	83.3	15.9	-80.9
Northern Mockingbird	4.62	2.99	-35.2

*for House Finch, the first mean is for 1986-1994 (9 years), before both conjunctivitis and WNV arrived.

The largest Pennsylvania congregations of American Crows found in the CBC also declined in size. During 1990-1999 and before WNV arrived, the largest American Crow congregations in the CBC were at Lewisburg and Lititz, each averaging 30,000-38,000 crows. During 2013-2022, the most recent period, the largest American Crow congregations in the CBC were at Lancaster and Pittsburgh, each averaging 16,000-17,000 crows (Figure 2).

The BBS trend for American Crow in Pennsylvania closely resembles the CBC trend (Sauer et al. 2019). The eBird trend map shows large declines for American Crow throughout most of its range, May 17-Jun 21 (Fink et al. 2022; the date span was chosen by eBird for their trend estimation).

Great Horned Owl

This species is one of the North American raptors most susceptible to WNV. Many have been found dead from WNV: 258 Great Horned Owls in the US during 1999-2004, the second highest among raptors after Red-tailed Hawk (*Buteo jamaicensis*) (Nemeth et al. 2006), and 35 in Pennsylvania during 2001-2018, also second among raptors to Red-tailed Hawk (Bolgiano 2019). Among raptors admitted to rehabilitation centers, Great Horned Owls showed some of the highest infection rates and the highest level of neurological symptoms (Nemeth et al. 2006). In an Ontario necropsy study of raptors (1991-2014), WNV caused 8% of 237 Great Horned Owl deaths, the fourth highest among the raptors studied (Smith et al. 2018). Statistical analysis of CBC data from the Northeast showed apparent WNVrelated declines in Great Horned Owls (Caffrey and Peterson 2003).

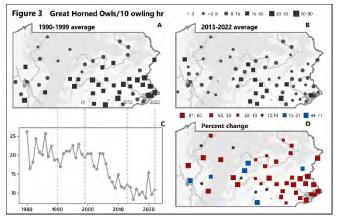


Fig. 3. Great Horned Owl CBC effort-adjusted data: (A) a map of site means for the 10 years before WNV arrived; (B) a map of site means for the last 10 years; (C) a trend plot of the statewide annual mean across sites; and (D) a map of the percent change between the two periods.

In Pennsylvania, a steep decline in the CBC numbers of Great Horned Owls was apparent by 2007-2009. Before WNV arrival, the highest Great Horned Owl counts were observed in the southeast and the central valleys and at some southwestern sites. Most sites experienced losses between the two periods, especially in the east. At the 16 southeastern CBC sites east of the Susquehanna River and south of the mountains, the average number of Great Horned Owls/10 nocturnal-hrs in the 10 years before WNV arrived was 28.8 vs. 11.6 in the most recent 10 years, for an average loss of 57.0% (Figure 3). The recent

Pennsylvania CBC mean counts were 47.2% lower than before WNV arrival (Table 1).

Ruffed Grouse

Ruffed Grouse is highly susceptible to WNV. A challenge study indicated that Ruffed Grouse mortality from WNV infection may be as high as 90% (Nemeth et al. 2017). Statistical analysis of Pennsylvania data, including changes in block occupancy between BBA 1 and BBA 2, indicated that both changes in early successional habitat and the WNV levels in tested mosquitoes appeared to explain a decline in Pennsylvania Ruffed Grouse numbers (Stauffer et al. 2017).

CBC data showed steep losses in Pennsylvania, New York, and New England, while in Minnesota, Wisconsin, Michigan, and Ontario, previously observed cycles of low-high abundance in Ruffed Grouse largely disappeared (Bolgiano 2022). The trend in the Pennsylvania CBC since WNV arrival has been steadily downward. However, grouse flush data collected by the Pennsylvania Game Commission show a response to WNV levels in mosquitoes like those of American Crow, Carolina Chickadee, and Tufted Titmouse (Lisa Williams, pers. comm.).

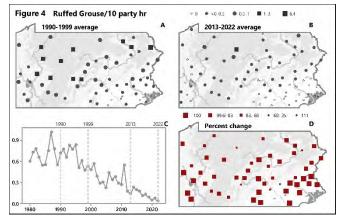


Fig. 4. Ruffed Grouse CBC effort-adjusted data: (A) a map of site means for the 10 years before WNV arrived; (B) a map of site means for the last 10 years; (C) a trend plot of the statewide annual mean across sites; and (D) a map of the percent change between the two periods.

Before WNV arrival, the highest Ruffed Grouse densities were at higher elevation sites on the Allegheny Plateau, as well as at several central valley sites. Ruffed Grouse was present at all the state's CBC sites except those near Philadelphia and Lancaster and York.

After WNV arrival, declines were observed at all sites except one (Lebanon County, with an incidental increase from one to two birds between the two respective periods). Emporium, a north-central site with a relatively high Ruffed Grouse density, experienced a less severe loss than most sites. Numerous sites along the western and southern edges of the Ruffed Grouse's range, where densities were low before WNV arrival, have not reported any Ruffed Grouse in the recent 10-year period, indicating a trend toward local extirpation (Figure 4). The recent Pennsylvania CBC mean counts were 81.5% lower than before WNV arrival, the highest among the eight species discussed here (Table 1).

The BBS trend for Ruffed Grouse in Pennsylvania shows a steady decline (Sauer et al. 2019). The eBird trend map shows

year-round declines for Ruffed Grouse throughout most of its Appalachian Mountain range (Fink et al. 2022).

Carolina and Black-capped Chickadees

Both chickadee species appear to be very susceptible to WNV. Declines in Carolina and Black-capped Chickadees were observed in FeederWatch and CBC data (Bonter and Hochachka (2003) and in 2000-2006 BBS data from the Northeast (LaDeau et al. 2007). Declines in Black-capped Chickadees were observed in 2003-2017 CBC data from northcentral states (Brenner and Jorgensen 2020). That the Carolina Chickadee trend after WNV arrival closely tracked the trend for WNV levels in mosquitoes, like two very susceptible species, American Crow and Tufted Titmouse, indicates a similar susceptibility (Bolgiano 2019).

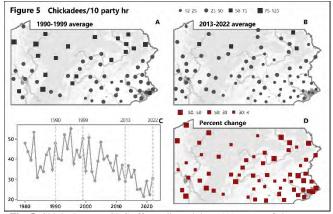


Fig. 5. Chickadee spp. CBC effort-adjusted data: (A) a map of site means for the 10 years before WNV arrived; (B) a map of site means for the last 10 years; (C) a trend plot of the statewide annual mean across sites; and (D) a map of the percent change between the two periods.

Declines in chickadee numbers were observed at all CBC sites, with many declines being large (Figure 5). The recent Pennsylvania CBC mean counts of chickadees were 37.5% lower than before WNV arrival (Table 1). The magnitude of the steady decline in the trend may have been masked by periodic influxes of irrupting Black-capped Chickadees, as suggested by periodic spikes in the trend (Figure 5).

The BBS trend in Pennsylvania for Carolina Chickadee showed an increase until WNV arrived, then a leveling off, then a decline in recent years. The BBS trend in Pennsylvania for Black-capped Chickadee reversed from increasing to decreasing after WNV arrived (Sauer et al. 2019). The eBird trend map shows large year-round declines for Carolina Chickadee throughout most of its range and for Black-capped Chickadee throughout most of its Eastern range (Fink et al. 2022). (Sauer et al. 2019).

Tufted Titmouse

Tufted Titmouse is very susceptible to WNV. A challenge study found 100% mortality in 11 infected birds (Kilpatrick et al. 2013). Declines have been observed in FeederWatch and CBC data (Bonter and Hochachka 2003) and in BBS data (LaDeau et al. 2007), as well as lower annual survival in MAPS (Monitoring Avian Productivity and Survivorship) data (George et al. 2015).

Like American Crow and Carolina Chickadee, the Tufted Titmouse's Pennsylvania trend after WNV arrival is closely related to the trend for WNV levels in mosquitoes: sharp declines when WNV spiked and partial recoveries after the WNV levels in mosquitoes appreciably declined (Figure 6).

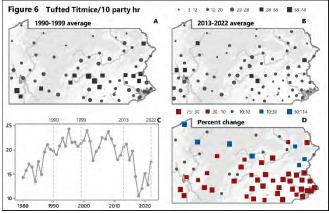


Fig. 6. Tufted Titmouse CBC effort-adjusted data: (A) a map of site means for the 10 years before WNV arrived; (B) a map of site means for the last 10 years; (C) a trend plot of the statewide annual mean across sites; and (D) a map of the percent change between the two periods.

Pre-WNV densities of Tufted Titmouse tended to be highest in the southwest, central valleys, and Lehigh Valley, where woodland and open areas mix, and lowest at northern sites. After WNV arrival, losses were concentrated in the southern two-thirds of the state where the Tufted Titmouse was more common. Conversely, increases were observed at some more northern sites, where the Tufted Titmouse has been expanding its range (Figure 6). The recent Pennsylvania CBC mean counts were 23.6% lower than before WNV arrival, the smallest percent decline among the eight species discussed here (Table 1). However, as with American Crow and Carolina Chickadee, this estimate may not fully reflect the steep decline observed since 2018.

The BBS trend in Pennsylvania for Tufted Titmouse is similar to Carolina Chickadee, showing an increase until WNV arrived, then leveling off, and a decline in recent years (Sauer et al. 2019). The eBird trend map shows large year-round declines for Tufted Titmouse throughout most of its Eastern range but increases in northern New England and much of the Midwest (Fink et al. 2022).

House Finch

The House Finch has experienced an extreme roller coaster trend during its approximately 60 years as a Pennsylvania breeding bird (Figure 7). It is not native to Pennsylvania but spread throughout the state in the 1960s-1970s after its release in the New York City area in 1940. During BBA 1 and BBA 2, House Finch was most common throughout the more settled parts of Pennsylvania, being found in 79% and 81% of blocks, respectively (Master 1992; Grove 2012).

In California, House Finch is very susceptible to WNV, and it is likely that eastern House Finches respond similarly. A California challenge study found 67% mortality, with 24 of 36 infected House Finches dying. House Finch ranked second in risk to WNV, as computed from the WNV levels in free-ranging birds, the percent of WNV-positives in dead birds, susceptibility in challenge studies, and trend analysis from BBS data (Wheeler et al. 2009). That infected House Finches sufficiently amplify the WNV virus so as to cause uninfected biting mosquitoes to become infected (*i.e.*, "competent" hosts) was thought to be important in sustaining WNV epidemics along the west coast (Reisen et al. 2005; Wheeler et al. 2009). House Finch annual survival also declined in California after WNV arrived (Pelligrini et al. 2011).

The conjunctivitis epidemic that began about seven years before WNV arrival has overlapped with the WNV epidemic, making it quite difficult to differentiate the effect of one epidemic from the other. Conjunctivitis arrived in Pennsylvania within two years after arriving in the Washington, D.C. area in 1993. It spread quickly throughout the East and House Finch numbers declined sharply (Hochachka and Dhodt 2000). By BBA 2, its Pennsylvania numbers were thought to have declined by roughly 40% (Grove 2012).

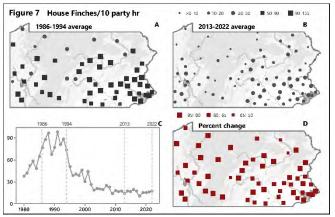


Fig. 7. House Finch CBC effort-adjusted data: (A) a map of site means for 1986 to 1994; (B) a map of site means for the last 10 years; (C) a trend plot of the statewide annual mean across sites; and (D) a map of the percent change between the two periods.

The two epidemics have caused large declines in House Finches at all Pennsylvania CBC sites. The steepest part of the House Finch decline occurred before BBA 2 began and before WNV arrived and thus is attributable to conjunctivitis. The conjunctivitis effect may have been leveling off at the time of WNV arrival, but adding WNV to the mix apparently deepened the House Finch's downturn (Figure 7). The recent Pennsylvania CBC mean counts are 80.9% lower than before conjunctivitis and WNV arrived, the second-highest decline among the eight species (Table 1). This reflects both how abundant the House Finch was before conjunctivitis and WNV arrived and how steep its subsequent decline has been. The period 1986-1994 used to calculate the first CBC mean was during the peak years of its Pennsylvania tenure.

The BBS trend for House Finch resembles the CBC trend (Sauer et al. 2019). The eBird trend map shows large year-round declines for House Finch in parts of the West and Southwest, especially in California (Fink et al. 2022).

Northern Mockingbird

This species has been observed to die from WNV (Tolsá et al. 2018). In California, it was assessed as having moderate risk from WNV with a seemingly related population decline in BBS data (Wheeler et al. 2009). However, the Northern Mockingbird's pattern of decline in Pennsylvania differed from the other WNV-affected species, as it only became apparent during the 2010s (Figure 8).

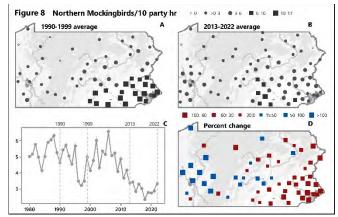


Fig. 8. Northern Mockingbird CBC effort-adjusted data: (A) a map of site means for the 10 years before WNV arrived; (B) a map of site means for the last 10 years; (C) a trend plot of the statewide annual mean across sites; and (D) a map of the percent change between the two periods.

In the 10 years before WNV arrived, Northern Mockingbirds were present at all Pennsylvania CBC sites except for three in the northwest, with the highest densities in the southeast and the lowest densities in the west and north. Between-period losses were highest in the southeast and at several northern sites. At the 17 southeastern sites east of the Susquehanna River and south of the mountains, the average number of Northern Mockingbirds/10 party-hrs in the 10 years before WNV arrived was 9.7 vs. 3.8 in the most recent 10 years, for an average loss of 58.1%. Between-period increases were observed at most western sites and at Juniata Valley sites. At the nine western sites with the largest increases, the average number of Mockingbirds/10 party-hrs in the 10 years before WNV arrived was 0.3 vs. 1.7 in the most recent 10 years, all with increases of at least 200% (Figure 8). Statewide, the recent Northern Mockingbird counts averaged 35.2% lower than before WNV arrived (Table 1).

The BBS trend for Northern Mockingbird resembles the CBC trend (Sauer et al. 2019). The eBird trend map shows large declines for Northern Mockingbird throughout most of its Eastern range, but increases in its Western range, Jun 14-Jul 27 (Fink et al. 2022). All these data sources indicate a wide-ranging decline; WNV is a likely cause.

DISCUSSION

Pennsylvania has an extraordinary opportunity to document the effects of WNV and other landscape-scale changes that have occurred since BBA 2, both because that atlas's effort included statewide point counts for estimating bird densities and because DEP has monitored WNV levels in mosquitoes for the last 20 years. If BBA 3 adopts a similar point-count design to BBA 2, then Pennsylvania could supply one of the biggest needs in understanding WNV: examining population trends at a relatively fine landscape scale and using a quantitative measure of WNV transmission as a predictor (Kilpatrick and Wheeler 2019). Similar analyses could also be used to investigate the effects of other landscape-scale changes.

WNV-related declines in CBC data among the eight selected species differed regionally. For American Crow, Great Horned Owl, and Northern Mockingbird, the largest declines were in the east. For Tufted Titmouse, declines were concentrated in the southern two-thirds of the state. Ruffed Grouse, Carolina and

Black-capped Chickadees, and House Finches declined rangewide, although most of the House Finch decline occurred during the conjunctivitis phase of the back-to-back epidemics. Ruffed Grouse tended to retract along the southern and western peripheries of its Pennsylvania range. The biggest take-away for BBA 3 planning is that WNV dynamics have occurred statewide.

WNV levels in mosquitoes also tended to vary across Pennsylvania. Mosquito testing and climate modeling show that southeastern Pennsylvania frequently has the highest WNV risk statewide (PA WNV Control Program 2023; Harrigan et al. 2014). The CBC responses seemed to reflect this.

Atlas data, with their large volume and fine sampling scale, may be the best sources for drawing conclusions about landscape-scale avian responses to WNV. Breeding bird data are commonly less variable than wintering data; migration into Pennsylvania may have affected the American Crow and Blackcapped Chickadee results in this analysis. Because BBA 2 started after the first WNV cycle ended, a BBA 2 vs. BBA 3 comparison would evaluate how later WNV cycles have taken a large subsequent toll.

WNV Persistence and Cycles

WNV in Pennsylvania has been both persistent and cyclical, similar to what has been observed in California (Snyder et al. 2020). DEP's WNV index has recorded some of its highest values in recent years, indicating the virus's persistence. There have been three peaks, although the second peak in 2018 was preceded by a gradual rise. The 2021-2022 peak occurred after just two years of low WNV index values, which was insufficient time for any of the affected bird species to rebound. WNV amplifications typically occur during years with warm spring temperatures and periodic spring-summer rainfall (McLean 2006; Little et al. 2016). Mosquito density in late summer appeared to drive WNV infection in Iowa (Adelman et al. 2020). The highest-observed WNV levels of 2018 seem to deliver an extra hard punch, especially for American Crow, Carolina Chickadee, and Tufted Titmouse.

BBA 3 Design

An innovation for BBA 2 was roadside point counts carried out by a small cadre of experienced birders following a distinct protocol. Point counts were completed in every full-size Pennsylvania block, of which there were 4,735. For the first time, statewide breeding bird densities were estimated for the more common breeding species using the point count data. The second atlas includes such density maps for 102 species, including 86 passerine species (Wilson et al. 2012).

In the past, changes in block occupancy were the primary means for breeding bird atlases to detect distribution changes. That was done for the Ruffed Grouse statistical analysis (Stauffer et al. 2017). An analysis to detect distribution changes would be far more powerful if the observations were instead density estimates derived from point-count data. For WNV, the goal of statistical modeling would be to relate the changes in point-count densities to DEP's WNV vector index values, similar to what the Ruffed Grouse analysis did with block occupancies. This is achievable if the BBA 3 point-count design is the same or similar to what was employed for BBA 2. An up-to-date evaluation of WNV effects upon North American birds is greatly needed and a statewide point-count design, similar to BBA 2, would allow this. This would reward the foresight shown by those researchers who designed and collected the BBA 2 point-count data and the 20 years of WNV vector index data.

Other Likely Candidate Species for WNV-Related Declines

Several species with diminishing numbers in Pennsylvania and regionally are likely candidates for their declines to be determined as WNV-related.

Northern Goshawk (*Accipiter gentilis*) is thought to be very susceptible to WNV, as it has frequently been found dead from the virus (Wünschmann et al. 2005; Smith et al. 2018; Feyer et al. 2020) and is considered an indicator species for recent spread of WNV in Europe (Feyer et al. 2020), similar to the role of American Crow in North America. Northern Goshawk is doubly affected by the loss of Ruffed Grouse, one of its favorite prey species, to WNV. Hawk watch and CBC data show steep declines in Northern Goshawk counts (Bolgiano 2022). eBird data show nearly range-wide declines during Dec 21-Jan 18 (Fink et al. 2022). WNV is likely a main cause for the decline of Northern Goshawks in Pennsylvania.

Mallard (*Anas platyrhynchos*) has been steadily declining in the Pennsylvania CBC since 2000. Waterfowl have been noted as dying from WNV, particularly juveniles and including Mallards (Austin et al. 2004; Himsworth et al. 2009; Cox et al. 2015; Meece et al. 2016). However, wildlife biologists have suspected that it is the continued loss of high-quality wetlands and hunting over-harvest that have contributed to the Mallard declines (Kosack 2019). eBird shows nearly range-wide declines for Mallard during Jun 7-Jul 27 (Fink et al. 2022).

Killdeer (*Charadrius vociferus*) is a competent host for WNV (Komar et al. 2003). eBird shows nearly range-wide declines for Killdeer during May 10-Jun 14 (Fink et al. 2022). The BBS trend in Pennsylvania has been downward since WNV arrived.

American Robin (*Turdus migratorius*) is also a competent host for WNV (Komar et al. 2003; Wheeler et al. 2009) and is sufficiently abundant to play an important role in sustaining the WNV epidemic in eastern North America (LaDeau et al. 2008). BBS data show evidence for a decline in American Robin numbers after WNV arrival (LaDeau et al. 2007) and that the species has been declining across much of its eastern range during Jan 4-Feb 1 (Fink et al. 2022).

House Sparrow (*Passer domesticus*) is susceptible to WNV with 50% mortality from a challenge study (three of six infected birds died) and it ranked high in competence for WNV (Komar et al. 2003). House Sparrow was thought to be important in sustaining the initial WNV epidemic in New York City (Fonseca et al. 2018). It was given a moderate WNV risk score in California (Wheeler et al. 2009).

Blue Jay (*Cyanocitta cristata*) is susceptible to WNV with 75% mortality from a challenge study (three of four infected birds died) and it ranked high in competence for WNV (Komar et al. 2003). Blue Jay was frequently found dead from WNV in the early years of the epidemic; in Pennsylvania, this frequency ranked second to American Crow (Bolgiano 2019). BBS data from the Northeast showed evidence for a decline in Blue Jay numbers after WNV arrival (LaDeau et al. 2007), but not in BBS

data from 10 states (Foppa et al. 2011). eBird shows declines in much of eastern North America's Piedmont during Jun 14-Jul 13, including in southeastern Pennsylvania, but not to the north or west of Pennsylvania (Fink et al. 2022). Pennsylvania CBC data showed Blue Jay declines at several southeastern Pennsylvania sites, similar to the eBird data. It could also be that a severe initial response and subsequent population recovery are common to Blue Jays in eastern North America (LaDeau et al. 2007; Smith et al. 2013).

Because most bird species have fairly rapid reproduction cycles, the hope is that they will eventually gain immunity to WNV.

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REFERENCES

- Adelman, J.S., R.E. Tokarz, A.E. Euken, E.N. Field, M.C. Russell, and R.C. Smith. 2022 Relative influence of land use, mosquito abundance, and bird communities in defining West Nile Virus infection rates in *Culex* mosquito populations. *Insects* 13:758-770.
- Austin, R.J., T.L. Whiting, R.A. Anderson, and M.A. Drebot. 2004. An outbreak of West Nile virus-associated disease in domestic geese (*Anser anser domesticus*) upon initial introduction to a geographic region with evidence of bird to bird transmission. *Canadian Veterinary Journal* 45:117-123.
- Bolgiano, N.C. 2012. Great Horned Owl (*Bubo virginianus*). Pages 206-207 in *Second atlas of breeding birds in Pennsylvania* (A.M. Wilson, D.W. Brauning, and R.S. Mulvihill, eds). The Pennsylvania State University Press, University Park, Pennsylvania.
- Bolgiano, N. 2019. Evidence for West Nile Virus-Related Avian Declines in Pennsylvania. *Pennsylvania Birds* 33:2-11.
- Bolgiano, N. 2022. Is West Nile Virus Causing Population Declines of Some North American Raptor Species? *Hawk Migration Studies* 47:17-26.
- Bonter, D. and W. M. Hochachka. 2003. Combined data of Project FeederWatch and the Christmas Bird Count indicate declines of chickadees and corvids: Possible impacts of West Nile virus. *American Birds* 57:22-25.
- Brenner, S.J., and J.G. Jorgensen. 2020. Declines of Black-billed Magpie (*Pica hudsonia*) and Black-capped Chickadee (*Poecile atricapillus*) in the north-central United States following the invasion of West Nile Virus. Western North American Naturalist 80(2):204-214.

Caffrey, C., and C.C. Peterson. 2003. West Nile Virus may not be a conservation issue in northeastern United States. *American Birds* 57:14-21.

Caffrey, C., S.C.R. Smith, and T.J. Weston. 2005. West Nile Virus devastates an American Crow population. *Condor* 107:128-132.

- CDC ArboNET. 2019. Centers for Disease Control and Prevention ArboNET Surveillance Program. https://www.cdc.gov/ westnile/dead-birds/index.html.
- Cox, S.L., G.D. Campbell, and N.M. Nemeth. 2015. Outbreaks of West Nile Virus in captive waterfowl in Ontario, Canada. Avian Pathology 44:135-141.
- Feyer, S., F. Bartenschlager, C.A. Bertram, U. Ziegler, C. Fast, R. Klopfleisch, and K. Müller. 2020. Clinical, pathological and virological aspects of fatal West Nile virus infections in ten freeranging goshawks (*Accipiter gentilis*) in Germany. *Transboundary Emerging Diseases* 2021: 907-919.

- Fink, D., T. Auer, A. Johnston, M. Strimas-Mackey, S. Ligocki, O. Robinson, W. Hochachka, L. Jaromczyk, A. Rodewald, C. Wood, I. Davies, and A. Spencer. 2022. eBird Status and Trends, Data Version: 2021; Released: 2022. Cornell Lab of Ornithology, Ithaca, New York.
- Fonseca, G., L. Zhou, and W. Bajwa. 2018. West Nile virus infection and other causes of bird mortality in New York City. *The Kingbird* 68:174-178.
- Foppa, I.M., R.H. Beard, and I.H. Mendenhall. 2011. The impact of West Nile virus on the abundance of selected North American birds. *BMC Veterinary Research* 7:43-51.
- George, T.L., R.J. Harrigan, J.A. LaManna, D.F. DeSante, J.F. Saracco, and T.B. Smith. 2015. Persistent impacts of West Nile virus on North American bird populations. *Proceedings of the National Academy of Sciences* 112:14290-14294.
- Grove, G. 2012. House Finch (*Carpodacus mexicanus*). Pages 460-461 in *Second atlas of breeding birds in Pennsylvania* (A.M. Wilson, D.W. Brauning, and R.S. Mulvihill, eds). The Pennsylvania State University Press, University Park, Pennsylvania.
- Hadfield, J., A.F. Brito, D.M. Swetnam, C.B.F. Vogels, R.E. Tokarz, K.G. Andersen, R.C. Smith, T. Bedford, and N.D. Grubaugh. 2019. Twenty years of West Nile virus spread and evolution in the Americas visualized by Nextstrain. *PLOS Pathologens* 15:e1008042.
- Harrigan, R.J., H.A. Thomassen, W. Buermann, T.B. Smith. 2014. A continental risk assessment of West Nile Virus under climate change. *Global Change Biology* 20:2417-2425.
- Himsworth, C.G., K.E.B. Gurney, A.S. Niemanis, G.A. Wobesar, and F.A. Leighton. 2009. An outbreak of West Nile Virus Infection in captive Lesser Scaup (*Athya affinis*) ducklings. *Avian Diseases* 53:129-134.
- Hochachka, W.M., and A.A. Dhodt. 2000.Density-dependent decline of host abundance resulting from a new infectious disease. *Proceedings of the National Academy of Sciences (USA)* 97:5303-5306.
- Kilpatrick, A. M., S.L. LaDeau, and P.P. Marra. 2007. Ecology of West Nile virus transmission and its impact on birds in the western hemisphere. *The Auk* 124:1121-1136.
- Kilpatrick, A. M., R. J. Peters, A. P. Dupuis II, M. J. Jones, P. Daszak, P. P. Marra and L. D. Kramer. 2013. Predicted and observed mortality from vector-borne disease in wildlife: West Nile virus and small songbirds. *Biological Conservation* 165:79-85.
- Kilpatrick, A.M., and S.S. Wheeler. 2019. Impact of West Nile Virus on bird populations: limited lasting effects, evidence for recovery, and gaps in our understanding of impacts on ecosystems. *Journal of Medical Entomology* 56:1491-1497.
- Komar, N., S. Langevin, S. Hinten, N. Nemeth, E. Edwards, D. Hettler, B. Davis, R. Bowen, and M. Bunning. 2003. Experimental infection of North American birds with the New York 1999 strain of West Nile virus. *Emerging Infectious Diseases* 9:311–322.
- Kosack, J. 2019. Mallard Malaise, Decline & Response. *Pennsylvania Game News* 90:10-17.
- LaDeau, S.L., A.M. Kilpatrick, and P.P. Marra. 2007. West Nile Virus emergence and large-scale declines of North American bird populations. *Nature* 447:710-713.
- LaDeau, S.L., P.P. Marra, A.M. Kilpatrick, and C.A. Calder. 2008. West Nile Virus revisited: Consequences for North American ecology. *BioScience* 58:937-946.
- Little, E., S.R. Campbell, and J. Shaman. 2016. Development and validation of a climate-based ensemble prediction model for West Nile Virus infection rates in *Culex* mosquitoes, Suffolk County, New York. *Parasites & Vectors* 9:443.

- Master, T.L. 1992. House Finch (*Carpodacus mexicanus*). Pages 414-415 in *Atlas of breeding birds of Pennsylvania* (D.W. Brauning, ed.). University of Pittsburgh Press, Pittsburgh, Pennsylvania.
- McLean, R.G. 2006. West Nile Virus in North American Birds. Ornithological Monographs 60: 44-64.
- Meece, J.K., T.A. Kronenwetter-Koepel, M.F. Vandermause, and K.D. Reed. 2016. West Nile Virus infection in commercial waterfowl operation, Wisconsin. *Emerging Infectious Diseases* 12:1451-1453.
- Nemeth, N., D. Gould, R. Bowen, and N. Komar. 2006. Natural and experimental West Nile virus infection in five raptor species. *Journal of Wildlife Diseases* 42:1–13.
- Nemeth, N.M., A.M. Bosco-Lauth, L.M. Williams, R.A. Bowen, and J.D. Brown. 2017. West Nile Virus infection in Ruffed Grouse (*Bonasa umbellus*): Experimental infection and protective effects of vaccination. *Veterinary Pathology* 54:901-911.
- PA WNV Control Program. 2023. http://www.depgis.state.pa.us/ WNV/index.html
- Pellegrini, A.R., S. Wright, W.K. Reisen, B. Treiterer, and H.B. Ernest. 2011. Annual survival of House Finches in relation to West Nile Virus. *Condor* 113:233-238.
- Reisen, W.K., Y. Fang, and V.M. Martinez. 2005. Avian host and mosquito (Diptera: Culicidae) vector competence determine the efficiency of West Nile and St. Louis encephalitis virus transmission. *Journal of Medical Entomology* 42:367–375.
- Sauer, J. R., D.K. Niven, J. E. Hines, D.J. Ziolkowski, Jr, K.L. Pardieck, J.E. Fallon, and W.A. Link. 2019. The North American Breeding Bird Survey, Results and Analysis 1966 - 2019. Version 2.07.2019. USGS Patuxent Wildlife Research Center, Laurel, MD.
- Smith, K.G., K.A. Tarvin, and G.E. Woolfenden. 2013. Blue Jay (*Cyanocitta cristata*), version 3.0. In *The Birds of North America*

(A.F. Poole, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. http://doi.org/10.2173/bna.469.

- Smith, K.A., G.D. Campbell, D.L. Pearl, C.M. Jardine, F. Salgado-Bierman, and N.M. Nemeth. 2018. A retrospective summary of raptor mortality in Ontario, Canada (1991-2014), including the effects of West Nile Virus. *Journal of Wildlife Diseases* 54(2):261-271.
- Snyder, R.E., T. Feiszli, L. Foss, S. Messenger, Y. Fang, C.M. Barker, W.K. Reisen, D.J. Vugia, K.A. Padgett, and V.L. Kramer. 2020. West Nile virus in California, 2003-2018: A persistent threat. PLOS Neglected Tropical Diseases 14:e0008841.
- Stauffer, G., D. Miller, L. Williams, J. Brown. 2017. Ruffed Grouse population declines after introduction of West Nile Virus. *Journal* of Wildlife Management and Wildlife Monographs 82(1):165– 172.
- Tolsá, M., G.E. García-Peña, O. Rico-Chávez, B. Roche, and G. Suzán. 2018. Macroecology of birds potentially susceptible to West Nile virus. *Proceedings of the Royal Society B: Biological Sciences* 285(1893):1-10.
- Wheeler, S.S., C.M. Barker, Y. Fang, M.V. Armijos, B.D. Carroll, S. Husted, W.O. Johnson, and W.K. Reisen. 2009. Differential impact of West Nile virus on California birds. *Condor* 111:1–20.
- Wilson, A.M, D.W. Brauning, and R.S. Mulvihill (eds). 2012. *Second atlas of breeding birds in Pennsylvania*. The Pennsylvania State University Press, University Park, Pennsylvania.
- Wünschmann, A., J. Shivers, J. Bender, L. Carroll, S. Fuller, M. Saggese, A. van Wettere, and P. Redig. 2005. Pathologic and immunohistochemical findings in Goshawks (*Accipiter gentilis*) and Great Horned Owls (*Bubo virginianus*) naturally infected with West Nile virus. *Avian Diseases* 49:252-259.
- Yaremych, S.A., R.H. Warner, P.C. Mankin, J.D. Brawn, A. Raim, and R. Novak. 2004. West Nile virus and high death rate in American Crows. *Emerging Infectious Diseases* 10: 709-711.

MYSTERY EMPID



Can you identify fall Empids by sight only? We mean to *species*, not just "*Empidonax* sp."! The photo on the left ran in Vol. 36, Issue 4 (Fall 2022) and was identified as a Least Flycatcher. An ornithologist sent a note suggesting it was an Acadian Flycatcher. However, a second ornithologist believes the original ID of Least Flycatcher may be correct. **What do you think?** Least, Acadian, or something else? Please send your opinion to Greg Grove (gwg2@psu.edu) and we will tabulate the results for the next issue of *Pennsylvania Birds*. If you want your reasoning to be anonymous, we will, quite understandably, keep it so.

The 2023 Winter Raptor Survey in Pennsylvania

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The 23rd Pennsylvania Winter Raptor Survey (WRS) was conducted from 13 January through mid-February 2023 with at least one route in each of the state's 67 counties. WRS is a roadside survey for which all raptors and vultures are recorded. For some species, data are collected on sex/age/color form. A map showing details of most routes is on the Pennsylvania Society for Ornithology website (pabirds.org).

METHODS

Routes are established by volunteers, with each individual route contained within a single county. Volunteers have created routes of 20 to 100 miles in length, emphasizing open country to facilitate detection of raptors, and avoiding interstates and other busy highways as well as roads not maintained in winter. Within each county, volunteers are asked to coordinate among themselves to avoid overlap of routes. Routes are run once each winter, between approx. 12 January and 8 February. However, runs through 20 February are accepted when weather or other problems prevent running during prescribed time frame. Routes are run between mid-morning and mid-afternoon. Volunteers are instructed to avoid days with significant precipitation, fog, or high wind. Time spent surveying, mileage, temperature, cloud cover, wind, and average snow depth are recorded for each run. Depending on species, age and/or sex of each raptor is recorded if possible. Data analysis is primarily based on calculation of birds per hour to allow comparisons among individual counties and statewide for comparison over years.

RESULTS

Summary: Mild conditions presumably played a role in high counts of **Red-tailed Hawk**, **American Kestrel**, and **Turkey Vulture**, the latter two setting all-time highs for number observed, with Red-tails just missing the record high. **Red-shouldered Hawks** and **Bald Eagles** continued their upward trend, although both came up short of the record high totals of 2022 (Table 1). By contrast, **Rough-legged Hawks** saw the lowest seasonal count ever, when adjusted for hours of coverage. Presumably, the mild weather allowed many to stay north of Pennsylvania; the trend has been downward for over a decade.

Effort and Weather

Over 245 routes were run, comprising 903.5 hours and 13,585 miles of observation. The hours total was the second highest ever and miles were the highest ever. *Westmoreland, Clarion,* and *Lancaster* were tops in coverage, each logging over 30 hours (Table 2). This was probably the most uniformly mild WRS season in its history. January and February were 5-10 degrees F above normal overall, and often the temperatures were well over 10 degrees above normal. Significant snowstorms were absent and much of the state was nearly snow-free through most of the winter, with no snow cover whatsoever for the great majority of counts. Even northern counties saw limited snow cover.

Table 1: Pennsylvania WRS 2023 Species Counts and All-Time High Counts

Species	2023 Total	High Count	HC Yr
Bald Eagle	599	701	2022
Northern Harrier	108	133	2008
Sharp-Shinned Hawk	38	62	2017
Cooper's Hawk	127	157	2022
Northern Goshawk	0	5	2004
Red-shouldered Hawk	217	236	2022
Red-tailed Hawk	3578	3584	2016
Rough-legged Hawk	25	341	2004
Golden Eagle	5	10	2015
American Kestrel	792	792	2023
Merlin	21	21	2023
Peregrine Falcon	11	22	2022
Black Vulture	769	1689	2020
Turkey Vulture	4084	4084	2023
Northern Shrike	4	10	2012
Hours	903.5	909.5	2022
Miles	13,585	13,585	2023

Red-tailed Hawk

The count of 3578 Red-tailed Hawks was the second highest ever, just six short of the record high of 3584 in 2016. The hourly rate of 3.96 was the highest since 2016 (Fig. 1). Presumably the high numbers were a result of the mild conditions which encouraged more birds to stay north and/or led to a higher survival rate.

As usual, Red-tails were widely distributed, except for expected low numbers in the north-central woodlands (Fig. 2). Highest rates occurred in the Ridge-and-Valley counties and some far western counties. *Westmoreland* led the way again this year, totaling 220 Red-tails, the highest-ever one-year total in a single county. *Indiana* and *Lawrence* were a distant second and third with 139 and 135, respectively (Table 2). Among counties with at least seven hours of coverage *Adams, Indiana, Lawrence, Northumberland,* and *Schuylkill* averaged over 6.5 Red-tails/hour.

American Kestrel

Almost certainly the warm winter and limited snow cover led to the record high count of American Kestrels. The total of 792 was 11% higher than the previous record of 711 in 2017. The hourly rate of 0.88 was the highest since 2013 (Fig. 1).

Table 2: Top Species and Hours	Totals by County, 2023
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	RANK									
	1st	2nd	3rd							
Bald Eagle	Lancaster (112)	Bucks (40)	Crawford (28)							
Northern Harrier	Lycoming (9)	Columbia (6)	Northumberland (6)							
Sharp-shinned Hawk	Adams (3)	Armstrong (3)	Jefferson/Lebanon 3							
Cooper's Hawk	Centre/Cumberland (7)	Northampton (7)	Lancaster/Westmoreland (7)							
Northern Goshawk		None								
Red-shouldered Hawk	Adams (28)	Mercer (19)	Chester (17)							
Red-tailed Hawk	Westmoreland (220)	Indiana (139)	Lawrence (135)							
Rough-legged Hawk	Clarion (7)	Crawford (3)	Jefferson (3)							
Golden Eagle	Bedford (1)	Jefferson/Perry (1)	Pike/Tioga (1)							
American Kestrel	Franklin (66)	Huntingdon (38)	Westmoreland (35)							
Merlin	Cumberland (2)	Lancaster/Lycoming (2)	Northampton (2)							
Peregrine Falcon	Bucks (3)	Lancaster (2)	Lebanon (2)							
Turkey Vulture	Lancaster (721)	Cumberland (517)	Chester (461)							
Black Vulture	Lancaster (217)	Chester (104)	Cumberland (85)							
Northern Shrike	Clearfield (1)	Columbia (1)	Fulton/Lawrence (1)							
Hours	Westmoreland (35)	Clarion (34)	Lancaster (31)							

As usual, most Kestrels were in the central and lower Susquehanna and Juniata River valleys, but with good numbers also in several southwestern counties (Fig. 2). As has become the norm, *Franklin* was again way out in front with a total of 66 kestrels, followed by neighboring *Huntingdon* at 38 and by *Westmoreland* in the southwest with 35 (Table 2). The impressive *Franklin* kestrel count results from a combination of favorable factors: location in the mild south-central tier, an abundance of open country, and extensive coverage. The importance of the less intensively developed Ridge-and-Valley for wintering kestrels is dramatic and contrasts sharply with the low numbers in the far southeast, despite even milder weather there.

In counties with at least seven hours of effort, *Adams Columbia, Franklin, Fulton, Juniata, Mifflin, Northumberland* and *Snyder* had rates of at least 1.8/hr; all of these clustered in the Susquehanna/Juniata drainage.

Of 637 Kestrels sexed, 399 (63%) were males, consistent with previous years (range: 59-66%).

Rough-legged Hawk

The count of 25 Rough-legged Hawks was the second lowest ever; only 2002 (21 Rough-legs) was lower, when coverage hours were only one-third of the level in recent years. The hourly detection rate of 0.028 was the lowest ever (Fig. 1). This continues the long-term trend of a decline in the numbers of Rough-legs that visit Pennsylvania in winter, presumably reflecting the extreme mild conditions in eastern North America leading to relatively fewer Rough-legs to move south as far Pennsylvania.

Rough-legs were found in only 13 counties, compared to an average of 21 over the past three years. Most were in northern and northwestern counties; only two were south of I-80, in

Mifflin and *Westmoreland* (Fig. 2). Excepting in *Susquehanna* on the northern tier, no Rough-legs were found on WRS routes in the east. By county, *Clarion* was tops with seven Rough-legs, followed by *Crawford* and *Jefferson* with three each (Fig. 2). Of the 25 Rough-legs recorded, 15 (60%) were light morph (2001-22 range = 60-78%).

Northern Harrier

The 2023 count of 108 Northern Harriers was close to the average of the last decade, down from the near-record 130 of 2022. The 2023 rate of 0.12/hr was right at the average of the last decade (Fig. 1). Harrier numbers have tended to fluctuate more widely than Red-tailed Hawks and American Kestrels (Fig. 1), with winter numbers likely resulting from a complex mixture of factors related to prey abundance, grass cover in fields, acreage in row crops the previous summer, snow cover, and the apparent four-year cycle in harrier numbers (Wilson et al. 2010, Schimpf et al. 2020, McClure et al. 2020, Oram et al. 2023).

As usual, harriers were widely scattered; as seen in Fig. 2, there was a concentration in the northeast, farther north than the usual higher numbers in the middle Susquehanna Valley region. Perhaps mild conditions with little to no snow cover influenced harriers to stay farther north. *Lycoming* led with nine harriers and *Columbia and Northumberland* had six each (Table 2).

The portion of immature birds was 18%, which matches the long-term average. The total of 108 harriers broke down as follows:

Male	Female	Imm.	Fem/Imm.	N.D.
35	35	19	5	14

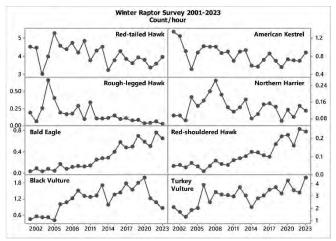


Fig. 1. Pennsylvania WRS trends, 2001-2023. Data from all counties were combined and expressed as birds/hour.

Vultures

The stories of our two vulture species diverged dramatically in 2023. With the mild conditions, we might have predicted that numbers of both vultures would be high. That was indeed true for **Turkey Vulture**, which set a record with 4084 tallied; the previous high was 3634 in 2020. The hourly rate of 4.52/hr was also a record, topping the 4.28/hr in 2020 (Fig 1).

In sharp contrast, the **Black Vulture** count of 769 was lowest since the 727 in 2011, when coverage hours were less than two-thirds of the level in 2023. This is the third straight year with a significant drop – falling from the record high of 1689 in 2020, to 1084 in 2021, to 978 in 2022, and finally to under 800 this year (Fig. 1). The culprit is apparently avian influenza, the same bug that has led to the loss of tens of millions of poultry birds (see, for example, Foreback 2023).

As always, most vultures were in the southeast (Fig. 2). Also, as usual, *Lancaster* saw the most Turkey Vultures with 721, followed by *Cumberland* with 517 and *Chester* at 461. *Lancaster* also led in Black Vultures, recording 217, followed by *Chester* at 104 (Table 2).

Turkey and Black Vultures were found in 37 and 35 counties, respectively. For Turkey Vulture, that was the third highest WRS county-tally. The 35 counties reporting Black Vulture was the highest ever, in apparent contradiction to their overall low numbers this year. It may be that Black Vultures pushing the limits of their usual range outside the southeast are more sparsely scattered and therefore less likely to encounter birds carrying the highly contagious virus.

Among outliers, where not often found in winter, Turkey Vultures were recorded in *Bradford*, *Clarion*, and *Jefferson*, and Black Vultures in *Clearfield*, *Tioga*, and *Washington*. Although numbers are tiny compared to southeastern counties, a few Turkey Vultures are recorded each WRS season in the southwestern corner of the state and Black Vultures may be expanding there as well.

Bald Eagle

The Bald Eagle count in 2023 was 599, third highest ever, following the record count of 701 in 2022 and 600 in 2019. The rate of 0.66/hr was also third highest ever, after 2022 (0.77/hr) and 2019 (0.71/hr) (Fig. 1).

Bald Eagles were recorded in a record high 62 of the 67 counties in Pennsylvania (Fig. 2), compared to 56, 52, and 60 in 2020, 2021, and 2022, respectively. The highest counts, as usual, were in the Susquehanna and Delaware River drainages, with

good numbers also from northwestern counties (Fig. 2). The highest county by far was *Lancaster* with 112, followed by *Bucks* and *Crawford* with 40 and 28, respectively. Nineteen counties reached double digit Bald Eagles.

Of the 599 total Bald Eagles, 35% (207) were listed as immature, similar to recent years.

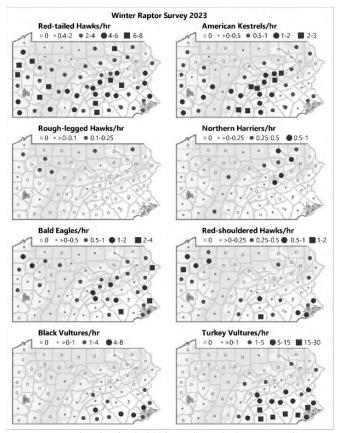


Fig. 2. Pennsylvania Fig. 2. 2023 WRS results by county. Count and effort data from all routes in a given county were combined and results expressed as birds/hour.

Red-shouldered Hawk

Red-shouldered Hawk WRS numbers have been increasing steadily over the last decade. That trend continued in 2023, with a near record 217 birds, just short of the 236 counted in 2022 (Fig. 1). The hourly rate of 0.24 was also second best. As usual, they were concentrated in southeastern and south-central counties and in the northwest (Fig. 2). The top county, again, was *Adams*, which had 28 Red-shoulders; *Mercer* tallied 19 Red-shoulders and *Chester* 17 (Table 2).

Of 217 Red-shoulders, 25 (11.5%) were listed as immature, most of which were in southeastern counties. Eight counties in the far northwest area of Red-shoulder concentration and nesting tallied 54 of the 217 Red-shoulders counted (25%) but only 3 immatures (12%) hinting that young birds are more likely to winter further south, with northwestern adults staying on their territories through the winter, as is the case with adult Red-tailed Hawks in Pennsylvania.

Other Raptors

The counts of **Cooper's Hawk** and **Sharp-shinned Hawk** were 126 and 38, respectively; close to counts of recent years. For the second consecutive year, no Northern Goshawks were reported;

over the past 14 years, only eight have been listed on WRS routes.

Merlin set a record with 21 counted. The 11 Peregrine Falcons were a bit below average (Table 1, 2). Five Golden Eagles were found, right on the recent average – in *Bedford, Jefferson, Perry, Pike,* and *Tioga.* Four Northern Shrikes, also about average, were found - in *Clearfield, Columbia, Fulton,* and *Lawrence* (Table 1, 2).

Acknowledgements: I thank Nick Bolgiano for creation of the figures. Thanks to Frank Haas for generating the map showing WRS routes in each county (PSO website). And of course, thanks to the well over 100 birders and companions who gathered the data across the state.

REFERENCES

Foreback, C. 2023. Concerns grow for Avian Flu after vultures found dead in Harford County. WJZ-CBS News (Baltimore, MD).

Online at https://www.cbsnews.com/baltimore/ news/concernsgrow-for-avian-flu-after-dozens-of-vultures-found-dead-inharford-county/. Last accessed June 17, 2023.

- McClure, J.W., B.W. Rolek, G.W. Grove, and T.E. Katzner (2020). Yearly Temperature Fluctuations and Survey Speed Influence Road Counts of Wintering Raptors. *Ibis* 163:593-606.
- Oram, G., G. Grove, and L. Goodrich (2023). Cyclical Pattern Detected in Northern Harrier Migration Counts at Some Pennsylvania Hawk Watches. *Pennsylvania Birds*. 37:9-12.
- Schimpf, D.J., L.J. Goodrich, A.R. Koeck, and D.A. LaPuma (2020). Northern Harriers Have a Geographically Broad Four-year Migration. J. Raptor Research 54:38-46.
- Wilson, A., M. Brittingham, and G. Grove (2010). Association of Wintering Raptors with Conservation Reserve Enhancement Program Grasslands in Pennsylvania. J. Field Ornithol. 81: 361-372.

PHOTOGRAPHS FROM THE 2023 WINTER RAPTOR SURVEY



Bald Eagle on nest on the Bradford WRS 2 February. (Rick Gaeta)



Black Vulture on the southern Chester WRS 13 February. Despite mild conditions that led to a record high Turkey Vulture total, Black Vultures were lowest since 2011, likely due to effects of avian flu. (*Scott Stollery*)



American Kestrel on the western Delaware WRS 4 February. Kestrels set a record high this winter, with 792 tallied, presumably due to the mild conditions that prevailed most of the season. (David Eberly)



The western Delaware WRS produced 10 **Red-shouldered Hawks** 4 February. Continuing the strong upward trend, 217 Red-shoulders were recorded for the 2023 WRS. *(David Eberly)*

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APPENDIX: 2023 Pennsylvania Winter Raptor Survey Species Numbers for All Counties

Summary of the Season: Winter – 2022/2023

Nick Bolgiano

that tends to be most responsive to a changing tend to fruit in alternating years and last be in Pennsylvania in the future. Tundra climate, the winter of 2022-2023 was one of summer and fall seemed to be seasons with **Swan** numbers in the CBC were average. The the warmest winters that we have less available fruit and seeds. This appeared high winter period count was 2,000 at Middle experienced. Yet, there was one terrific cold to affect some forest birds, finches, and Creek WMA, Lancaster, Feb 1. blast in Dec that seemingly didn't fit this sparrows. trend. Birds responded to the weather and a total of 213 bird species were reported in Grosbeaks, although small by historical winter reports in the U.S. are few. However, Pennsylvania during this winter period. The standards. A Black-capped Chickadee evidence points to it being an escaped bird number of rarities was at or slightly above irruption was larger, but it was more difficult from a private collection. normal. Erie and Philadelphia, at opposite to assess its size. corners of the state, were the big winners in rarity detections. December was warmer than Virus (WNV) levels in mosquitoes has been Plant, Philadelphia and 145 at Green Lane average on most days. There was a moderate at a relatively high level during the last two Park, Montgomery. Gadwall numbers at snowfall on Dec 14-15, accompanied by years. Bird population recoveries following some northwestern and southeastern sites freezing rain in places. Another moderate the high WNV-related mortality of 2017snowfall occurred on Dec 22-23, followed by 2018 continued to be slow (see WNV article Linesville CBC, 12/18, and 143 at Green below-zero F temperatures and a cold blast in this issue). on Dec 23-26 that accompanied a polar vortex movement southward into our region. Goose, Greater White-fronted Goose, and counts in the CBC were the highest since cold caused The snap temperatures to end up being near average and that continued this winter. overall, with near average precipitation.

warm, with many sites being top 10 warmest. northward movement was earlier than usual. Lycoming, where most unexpected, plus January ranked in the top 1/3 for precipitation Snow Geese were highly concentrated Philadelphia. Eurasian Wigeon was in in this month, but most of it was in the form around the Lehigh Valley during the first half of rain. February was one of its warmest on of the winter (see CBC Fig 2). An estimated record, being 4-10F warmer than average for 15,000 Snow Geese was a new high count for for several diving ducks: the Bufflehead total various sites with very little snow. The Montgomery. Migration staging at Middle winter's second cold snap was Feb 3-4, with lows near zero in many places, but it didn't last long. Many lakes remained unfrozen or were only briefly frozen over. Presque Isle late Jan and Feb, about a month earlier than most seen at Erie, was a new high for scaup. Bay was frozen for only a little more than a often occurs. The high count was 100,000 at weekand Lake Erie remained unfrozen. With Middle Creek WMA, Lancaster, Feb 12. abundant open water, it was a good season for viewing waterfowl and other water birds, counties, fewer than the 12 of the previous although some species, such as Common year, but more widespread than in the Mergansers Feb 3. Elsewhere, some high Goldeneve and Red-necked Grebe, were less commonly seen for this reason.

Non-water birds that overwintered in higher-than-normal numbers Lehigh, and Northampton in the east. because of the warmth included Turkey Vulture, Golden Eagle, Red-shouldered reported from 17 counties, more than usual Hawk, American Kestrel, Baltimore and widely scattered across the state. Pink-Oriole, and warblers as a group.

many birds to stay farther north or made it Barnacle Goose was in Northampton. difficult to see field birds against brown earth colors. These include Rough-legged Hawk, average numbers, according to the CBC. for several weeks. King Eider was in Erie. Short-eared Owl, Northern Horned Lark, Lapland Longspur, Snow counties, more than in the previous four Crawford, 12/18-21, and seen on the Bunting, and American Tree Sparrow. The winters. Most were in the southeast, but one Linesville CBC for a Pennsylvania CBC first. brutal Dec spell may have pushed many half- in *Clarion* was a possible first county record After a brief stay, it was shot by a hunter. hardy birds farther south, but it was and 18 in a flock at Edinboro Lake, Erie, was Both eiders have been recorded in limited seemingly insufficient to send many others noteworthy. farther south to our latitude.

In recent winters, Snow Goose, Ross's

Snow Goose dynamics were similar to January east of Pittsburgh was very those observed in recent years, although Creek WMA and to a lesser extent in the Susquehanna Valley counties of Montour, Northumberland, and Lycoming happened in

> previous three winters. It was in Erie and Jefferson in the west, Clinton and Franklin in probably the central, and Berks, Chester, Lancaster,

The lack of snow and bitter cold caused of **Brant** was a single bird in *Erie* Dec 3. the 82 in the CBC was exceptionally low.

Shrike, Cackling Goose was reported from 33 Common Eider was at Pymatuning SP,

Trumpeter Swan was reported from 13 in *Erie* and seen on three dates. Food supplies, including fruit, seeds, counties, including a first county record in and insects, seemed to be relatively low in Washington, continuing their population Dauphin, and Northumberland. Whitequantity. The summer drought of 2022 expansion. There are so many winter reports winged Scoter was in ten counties. The

While winter has generally been the season probably played a role. Some plant species in Ohio that it seems natural that more might

Common Shelduck, native to western A noted irruption was of **Evening** Europe, was a sensation in *Lebanon*, as

High counts for Northern Shoveler Despite the summer dryness, West Nile included 470 at Southwest Water Treatment were very good. There were 398 tallied on the Lane Park, Montgomery, on 12/21.

Mallard and American Black Duck December Trumpeter Swan have been on the increase 2015, with 508 American Black Ducks counted on the Linesville CBC. Both have been showing declines.

> Blue-winged Teal was in Elk and Berks, Chester, and Indiana.

> The CBC produced excellent numbers was the third highest ever; the Hooded Merganser total was the second highest and included 935 on the Linesville CBC; and the 16,000 Greater and Lesser Scaup, with

Some high estimates of diving ducks at Presque Isle, *Erie*, included 1,000 Ross's Goose was reported from nine Canvasback Feb 14; 500 Long-tailed Ducks Jan 15; and 5,000 Red-breasted counts included 200 Redheads at Conneaut Lake, Crawford, Jan 2; 81 Canvasbacks on the Delaware R., Bucks, Feb 19; 200 Ringnecked Ducks on Keystone Lake, Greater White-fronted Goose was Armstrong, Feb 24; and 2,000 Common Mergansers at Peace Valley Park, Bucks.

Common Goldeneye numbers tend to footed Goose was in *Bucks*. The only report be low when Lake Erie remains unfrozen and

Tufted Duck, rare here, was on the Canada Goose numbers continued in Susquehanna R. near Harrisburg, Dauphin, numbers here. Two Harlequin Ducks were

Surf Scoter was in Allegheny, Erie,

"whopping" 185 White-winged Scoters was remarked on by many county compilers. tallied by Jerry McWilliams from Sunset Barrow's Goldeneve was at Erie.

was the lowest total since 1948 and less than from Upper Bucks County, which had tallied Dauphin, and York, consistent with a more half of the 33 the year before, presumably 542 the year before. A high of 751 was regular winter presence. evidence for their continuing decline from recorded at their Nockamixon SP hotspot, WNV. However, the number of counties Bucks, on 1/14. An estimated 300 were at the three more than the winter before. For the where found (31) was a slight increase from Grand Central Landfill, Northampton, 2/22. the winter before (27). Wild Turkey Lesser Black-backed Gull was found in 17 numbers were robust in the CBC, possibly counties, most of these being usual locations at the Bald Eagle Mt hawk watch, Centre, reflecting an increased population size after in the southeast plus *Erie*, but some hunting restrictions were imposed. Flock unexpected: sizes of 226 and 215 turkeys were observed Northumberland, in Westmoreland.

Red-necked Grebe was found in only three counties, Bedford, Carbon, and Erie, during the Southern Bucks County CBC winter here or wander north as spring reflecting the lack of ice cover to the north. again led all CBC sites by a large margin. The migration approached. Eared Grebe was also in *Erie*, where most decreasing presence of Great Black-backed expected.

Eurasian Collared-Dove continues to expand at a slow pace. The usual Berks and that was either Short-billed Gull of western nine interacting harriers in Franklin 1/31, as Franklin locations host gradually more and more while the "traditional" Cumberland location may be on the verge of becoming similar. A Eurasian Collared-Dove was also were taken by Larry Spilde, but experts were in Clarion. White-winged Dove was in unsure of the bird's identity. There are Montgomery.

Rufous Hummingbird was in Franklin, cold blast.

sightings concentrated in Dec and Feb. The recorded and a second county eBird record, previous high, while the WRS detection rate highest numbers were at traditional locations plus Erie. in Crawford, Mercer, Lawrence, and Butler. The excellent CBC tally of 364 cranes were counties, Berks, Bucks, Butler, Carbon, reported 54 Red-shouldered Hawks, while all from the three northwestern CBC sites, Linesville (with 248), Grove City, and Butler reports were from December. This is the Red-shouldered Hawks, all new highs. County. There were also many sightings in norm for Pennsylvania. southeastern counties, possibly related to a small but gradually increasing winter locations along the lower Delaware R. in years, but lower than during the peak years of presence in nearby New Jersey, Delaware, Bucks, and Maryland. Flocks of 108 in Berks and 80 in Lancaster were both sighted on 12/28.

Sandpiper encounters were mostly typical for the winter period. Atypical was that **Purple Sandpiper** was present late Dec to Feb 24, where an interesting story, throughout the period at Presque Isle, Erie, usually singles but occasionally two or three. Purple Sandpiper was also reported from the Erie CBC for the 6th time, all during the ware, Lancaster, Lebanon, Philadelphia, and Dauphin, Franklin, Huntingdon, Juniata, current century. Least Sandpiper was in York, a few more counties than usual. Green Lancaster, and Wayne, a robust showing and Berks and Chester. Greater Yellowlegs was Heron was in Delaware and Schuylkill. an indication that people are watching out for at John Heinz NWR, Delaware, in mid-Jan. Black-crowned Night-Heron was in them. Great Horned Owl numbers continue The early peenting of American Woodcock Allegheny.

Point at Presque Isle SP, Erie, Dec 6, was a Lesser Black-backed Gulls were observed Washington, and Westmoreland and in north new Pennsylvania high count. Black Scoter this winter. A record 1,257 Lesser Black- at Tioga and Wyoming. The propensity of was reported only from *Erie* and *Dauphin*. backed Gulls were recorded in the CBC, with **Turkey Vultures** to return north earlier than 637 at Southern Bucks County being a new The CBC total of 14 Ruffed Grouse individual site high, reclaiming the crown Bedford, Crawford, Tioga. and Wavne. evidence that watchers are on the lookout.

> The 25,000 Herring Gulls recorded Gull during the CBC continued.

North America or **Common Gull** of Eurasia many as eight in one area of Juniata 1/8-2/19, (both recently split from Mew Gull) at Blue Marsh Lake, Berks, Dec 16. Sharp photos Northumberland 1/26. In the CBC, Sharpseveral prior records of Mew Gull here.

Other uncommon gulls Indiana, and Snyder, all leaving by the Dec Laughing Gull along the lower Delaware R. Cumberland, Perry (Waggoner's Gap hawk in Bucks, Delaware, and Philadelphia, where watch), and Schuylkill in eBird and Wyncote Virginia Rail has been most reliably it is most commonly found. California Gull in the CBC. detected during recent winters at three was at Moraine SP, Butler, in early Dec, five locations: ChesLen Preserve and Great years to the day after it was first found there. numbers continued to be high. The 1,092 Marsh, Chester, and Woods Edge Park, Iceland Gull was in 10 southeastern counties Bald Eagles in the CBC was a new statewide Lancaster, and these were the only locations plus Erie. Glaucous Gull was in Berks, high, while the WRS detection rate ranked where Virginia Rail was reported this winter. Bucks, Chester, and Lebanon in the third among years. The 439 Red-shouldered Sandhill Crane was in 24 counties, with southeast, Lackawanna where seldom Hawks in the CBC was 89 higher than the

Delaware, and However, only four Great Cormorants were recorded in the CBC, presumably because Dec was so warm.

American Bittern was in *Franklin* from for it was a surprise finding during the Great Backyard Bird Count - see the Franklin report. Great Egret was in Chester, Dela-

Black Vulture expansion continued to More impressive numbers of wintering be noted in the west at *Beaver*, *Fayette*, in previous years accelerated this winter.

Osprey was in Adams, Allegheny,

Golden Eagle was found in 36 counties. second consecutive year, there was a decidedly late Dec flight, with 107 recorded and 94 at the Allegheny Front hawk watch, Bedford/Somerset. Twelve were recorded in the CBC, the 2nd highest total. This winter's warm temperatures and lack of snow cover probably led many Golden Eagles to over-

Northern Harrier numbers were about average in both CBC and WRS. Several The rarest gull of the period was a bird clusters of Northern Harriers were noted: and a high count of 21 harriers in shinned Hawks continued their 15-year decline, while Cooper's Hawk remained at historically high levels. Northern include Goshawks remained scarce, reported from

Bald Eagle and Red-shouldered Hawk was just below the high from the previous **Red-throated Loon** was in eight winter. The three Bucks County CBC counts Chester, Crawford, Erie, and Perry, and most the Delaware County CBC count reported 26

Red-tailed Hawk numbers in both CBC Great Cormorant was at usual and WRS were higher than in some recent Philadelphia. the 2000s, presumably because fewer are migrating as far south as previously. Roughlegged Hawk was found in 25 counties, mostly northern, with Lancaster the only location south of the mountains. Only a few Rough-legged Hawks were reported south of Pennsylvania. CBC and WRS tallies were quite low.

> Barn Owl was reported from Adams, to be low. The 42 Eastern Screech-Owls

tallied in Wissahickon Valley Park, where irrupting Black-cappeds are easiest to of the mountains. Philadelphia, on Dec 5 by Christopher find (Bolgiano 2004). I suspect that many

eBird maps to protect their roosts from between species, where they wouldn't were relatively few. Typically, strong disturbance. The seven Long-eared Owls in necessarily stand out from local birds. irruptions of many finches tend to occur two the CBC were a low total. Short-eared Owl Increases in Carolina Chickadees and/or years apart, but there was relatively little food was reported from 23 counties, which is on **Tufted Titmice** after decimation by West for them to eat in Pennsylvania's forests and the low end of normal. The 13 Short-eared Nile Virus was noted in *Berks* and *Bucks*. Owls in the CBC was also low.

have shown large year-to-year variation as with this not being a particularly good winter concentrated in the well-forested northwest the wintering population has increased. This to see large flocks. However, a flock of 1,100 (see CBC Figure 2). There was a high of 219 year's CBC effort-adjusted count was down was seen in Berks on Jan 25 by Jason Horn, at the Yeany residence, Forest, on Jan 29. about 25% from the previous year, which was and the 100-120 larks in Montgomery was Ten birds were color banded there and the all-time high. **Red-headed Woodpecker** thought to be the highest concentration since transmitters deployed on five birds. was reported from 29 counties, but largely the 1980s. avoided far southeastern counties, being surprisingly missed in Bucks. In Franklin, first discovered wintering here in 2005, was fall flight didn't translate into noteworthy many were observed near traditional nesting found throughout the period at the NE Water winter stayover. It was noted from 25 areas. The CBC total of 89 Red-headed Treatment Plant, Philadelphia, with a high of locations in Montgomery. -Woodpeckers was the highest since 1996, but 80. Single numbers were observed at three the recently added sites in their south-central stronghold contributed to this tally. Redbellied Woodpecker continues historically high levels, but as their Tree Swallow were with the Rough-winged there were decent numbers around Lake population increases, some have tended to Swallows at the NE Water Treatment Plant, Ontario and in New England. migrate every other winter and this was such *Philadelphia*, in Jan. a winter. Pileated Woodpeckers in the CBC remained near their all-time high.

somewhat higher numbers, according to both similar to the level of two winters ago. Ruby- The high count was 26 at Nottingham County CBC and WRS, with a continued stronghold crowned Kinglet numbers were higher than Park, Chester, Feb 26. White-winged in the Susquehanna Valley (see CBC and normal, though only half as high as in the Crossbill was reported only from Hawk WRS figures). A total of 75 kestrels were previous year. Ruby-crowned was noted as Mountain Sanctuary, Schuylkill, on two Dec reported on the Gettysburg and York Springs present in Armstrong, where rare in winter. CBC counts, centered in Adams. Merlin continued to increase its winter presence and characterized by Rudy Keller, Berks, as "a CBC total was only 22. the 82 in the CBC was a new statewide high. lively fall movement... [that] ended early." Peregrine Falcon numbers appeared to be The 435 Red-breasted Nuthatches in the CBC presence of the two Calcariidae species, healthy, with 40 in the CBC.

visited eastern counties. Hammond's Flycatcher was briefly seen in Schuylkill. was an abundant white pine seed crop that Say's Phoebe was at the Washington Boro held them here, but seed crops were low this Water Treatment Plant, Lancaster, for much winter. of the winter. Ash-throated Flycatcher was the NE Water Treatment Plant, in Bucks. at Philadelphia, for nearly the entire period.

number of winter sightings.

Northern Shrikes were relatively scarce, reported from 15 counties and only Lakes.

Beaver. Common Ravens continued to expand statewide, according to the CBC.

Black-capped Chickadee influxes were noted in Adams, Berks, Bucks, Chester, Lancaster, Montgomery, Philadelphia, and 472 was near the 10-year average, with the

Hinkle was a new Pennsylvania high count. more irrupting Black-cappeds winter farther during the winter of 2020-2021, winter finch Long-eared Owl is no longer shown on north in Pennsylvania, above the contact line appearances during the winter of 2022-2023

Horned Larks appeared in average Yellow-bellied Sapsucker CBC counts numbers in the CBC, which was consistent 22

> other Philadelphia locations; along the eBird only from four counties: Clearfield, Schuylkill R., Montgomery; and in Bedford, Dauphin, Lackawanna, and Schuylkill, plus a at where rare in winter, and Bucks. Up to four single bird on the Grove City CBC. However,

the warm winter. Golden-crowned Kinglets Red Crossbill was primarily found close to American Kestrel over-wintered in appeared in about half their normal numbers, the Coast and in the southern Appalachians.

qualified as a minor irruption. During the Lapland Longspur and Snow Bunting. Three western flycatchers, all rare here, previous irruption, two years ago, of Redbreasted Nuthatches into Pennsylvania, there there were many more to the west in Ohio.

Blue-headed Vireo was in Clinton, Montgomery. Sedge Wren was at Valley However, Clay-colored Sparrow was well Juniata, and Philadelphia, a now customary Forge NHP, Montgomery. Marsh Wren was represented with four individuals in Berks, at Allegheny and the ChesLen Preserve, Carbon, and Cumberland (2). A single Chester.

Frugivores were low in number due to a LeConte's four were reported in the CBC. Much higher low fruit crop; the CBC tallied lower Montgomery and Philadelphia, both being densities were observed around the Great numbers of Gray Catbirds, American first winter records. As they were found in Robins, and Cedar Waxwings. However, non-overlapping periods, it is plausible that Fish Crow expansion was noted in there were a good number of Eastern they could have been the same bird. A Bluebirds. A high count of 112 Eastern Gambel's White-crowned Sparrow spent Bluebirds was made at SGL 230, the season at an Allegheny feeder, and one Cumberland, Jan 22 by Ian Gardner.

The American Pipit total in the CBC of second consecutive winter.

After the excellent Fringillidae showing more food elsewhere.

Evening Grosbeak was reported from counties, but they were highly

Purple Finch was anticipated to irrupt Northern Rough-winged Swallow, into our latitude (Hoar 2022), but the decent

Common Redpoll was reported in

Red Crossbill was reported from 10 Kinglet numbers in the CBC reflected counties, mostly in the southeast. In the East, days. Pine Siskin was reported from many Red-breasted Nuthatch was aptly places, but nearly always in single digits. The

> The lack of snow minimized the Lapland Longspur was found in 14 counties; Snow Bunting was found in 22 counties; many stayed farther north near Lake Ontario.

For the most part, sparrows were not a Blue-gray Gnatcatcher was only found highlight this winter. CBC numbers were average for most species and low for White-House Wren was in Berks, Indiana, and crowned Sparrow and Eastern Towhee. Vesper Sparrow was Dauphin. in Sparrow was in both wintered in Greason, Cumberland, for a

Yellow-breasted Chat, the only York, in the traditional southeastern zone vast majority found at usual locations south member of the Icteriidae family, was in Chester.

There were several reports of blackbird flocks exceeding 500,000 in size in Chester and Lancaster. Yellow-headed Blackbird was found in these flocks in both counties; it *Philadelphia* in early Dec, an urban setting low numbers, after a one-year spike the was also seen in Erie.

CBC were the most in 10 years, concentrated at John Heinz NWR, Philadelphia, in early was in Lancaster. Wilson's Warbler in the southeast. There were decent counts Dec. Tennessee Warbler was at Pennypack continued in Berks until mid-Jan. elsewhere: 12 in Germany Vallev. Huntingdon, on Jan 16; seven in Washington dates in Juniata was thought to be infrequent. they need to survive.

Orchard Oriole, rare here in winter, Oriole was reported from 7 counties, Bucks, Cape May Warbler was at Blair on Dec 17, 2016-2017, a seven-year run, did not return Centre, Chester, Delaware, Montgomery, making it the third consecutive winter for this winter. Northampton, and Philadelphia. This is the both Tennessee and Cape May Warblers, third consecutive winter with more frequent both being spruce budworm warblers and REFERENCES winter occurrences of Baltimore Oriole in usually rare in winter. Northern Parula was Pennsylvania, primarily in the far southeast.

race, was a very good tally, but this was 17 and a first for the state CBC. actually fewer than during the previous two winters (15 warbler species in 2021-2022 and Townsend's Warbler was in Berks Dec 18-16 in 2020-2021). Thus, warbler diversity has 21, also a first for the state CBC, and the been a feature of these last several warmer Hermit Warbler that was a first state record

winters. Detections were highly concentrated continued in *Delaware* until Dec 7. in the southeast, to the enjoyment of the many birders seeking them there.

where they are sometimes found in winter. previous winter. Audubon's Warbler, the The 82 Eastern Meadowlarks in the Northern Waterthrush, rare in winter, was western race of Yellow-rumped Warbler, on the Delaware, *Philadelphia*, 1/1.

> Orange-crowned Warbler at nearly 20 Philadelphia locations.

Nashville Warbler was in Bucks. at Lebanon, Dec 13-21. Magnolia Warbler, The 14 species of warblers, plus one also rare in winter, was in *Philadelphia*, Dec

Two rare western warblers appeared:

Yellow-rumped Warbler was noted as mostly absent in Armstrong, Berks, Bucks, Ovenbird was at Center City, and Westmoreland. The CBC also showed

Four uncommon Cardinalidae species again was a decent showing. Western Tanager at on Feb 5 and 10 on Feb 26; and eight in clustered in the far southeast, consistent with Lancaster and Rose-breasted Grosbeak at Westmoreland on Dec 1. Singles on only two their congregating near rivers or coasts. It Clarion are among the more common winter was present in Berks, Bucks, Delaware, visitors. Less common were Lazuli Bunting At least some meadowlarks are finding what Lancaster, Montgomery, Northampton, and at Philadelphia and also a first for the state CBC and **Painted Bunting** at *Philadelphia*. The Bowmansville, Lancaster, Painted was at FDR Park, Philadelphia. Baltimore Cumberland, Delaware, and Philadelphia. Bunting, seen annually since the winter of

- Bolgiano, N.C. 2004. Black-capped Chickadee Irruptions in Pennsylvania. Pennsylvania Birds 17:174-178.
- Hoar, T. 2022. Winter Finch Forecast 2022-2023. http://www.finchnetwork.org/ winter-finch-forecast-2022.

25 Years Ago in Pennsylvania Birds

PENNSYLVANIA Volume 11 No. 1 (1997) BIRDS



Paul Hess discussed the "Hawk Mountain Petrel."

In Pennsylvania Birdlists, Barb Haas had the top Pennsylvania Life List with 352 species with Frank Haas at 351.

Rare birds reported included the first state record of Pink-footed Goose, Black-throated Gray Warbler, Barnacle Goose, and Gyrfalcon, and there were four Snowy Owl reports.

This issue can be read at *pabirds.org*.

This report summarizes unexpected species reported in Pennsylvania for this period. As a rule, birds must have been recorded in five or fewer counties to qualify for inclusion here, but rare species recorded more frequently, or irregular species exhibiting an unusual seasonal occurrence, are also included. "Listserv" indicates records deemed credible that were gleaned from the PABIRDS listserv for counties with no reporting compiler. "eBird" indicates valid records deemed credible that were entered into the eBird database for counties with no reporting compiler.

An * denotes species on the Pennsylvania Ornithological Records Committee (PORC) Review List. Details or descriptions that are submitted for species on the PORC Review List will be reviewed by the committee. The terms "no doc" and "doc submitted" indicate whether documentation has been submitted on reports of Review List species listed herein; "no doc" indicates that no documentation was known to have been submitted as of the time of writing. The PORC Review List can be found at the PSO web site http://www.pabirds.org>.

Birds in *Italic* typeface are uncommon or rare but occur during this time period in most years.

Birds in $\underline{\mathbf{Underlined}}$ typeface occur at least 4 to 7 out of 10 years during this time period.

Birds in *Italic and Underlined* typeface occur fewer than 4 to 7 out of 10 years during this time period.

Birds in Normal typeface are noteworthy for rarity, but are recorded annually, usually in more than one county.

<u>*Pink-footed Goose*</u>* – *Bucks*: one at a private farm reserve in Upper Makefield Twp and then nearby Maple Knoll Farms 1/4-2/18 (Richard Smith, m.ob., *doc submitted*).

- *Barnacle Goose** *Northampton*: one at Albert Rd. Ponds 12/11-22 (Megan Davis, m.ob., *doc submitted*).
- *Brant Erie*: one at Sunset Point, 12/3 (Jerry McWilliams) and one at Gull Point 12/4 (Carl Engstrom).

Eurasian Wigeon – Berks: one at Lake Ontelaunee 2/5 through period (Matt Wlasniewski, m.ob.); *Chester*: one at Struble Lake 2/17-20 (Frank Haas, m.ob.); *Indiana*: one at White's Woods 2/23 (Henry Rummel) and then nearby Yellow Creek SP 2/25-28 (Greg Tomb, m.ob.).

<u>Tufted Duck</u>* – Dauphin: one on Susquehanna R. near Harrisburg City Island 12/29-1/24 (m.ob., doc submitted).

<u>King Eider</u>* – Erie: one at Sunset Point 12/12 and probably a different bird there on 12/20 (Jerry McWilliams, *doc status unknown*).

<u>Common Eider</u>* – Crawford: one at Pymatuning SP 12/18-21 (Robert Hass, Brian Miller, Tomas Nonnenmacher, Ken Pinnow, m.ob., *doc submitted*), seen during the Linesville CBC, later shot by a hunter.

<u>Harlequin Duck</u>* – *Erie*: at least two at Sunset Point 12/3 and possibly the same birds were seen until 12/17 and again on 1/9 (Jerry McWilliams, m.ob., *doc submitted*).

Barrow's Goldeneye* – Erie: a probable female at Presque Isle 2/11 (Ross Gallardy, *doc submitted*).

Red-necked Grebe – *Bedford*: one at Shawnee SP 12/1 (Jeff Gilbreath); *Carbon*: one at Beltzville SP 12/9 (Brian Stamper); *Erie*: singles at Presque Isle 12/2-2/9 (Jerry McWilliams).

*Eared Grebe** – *Erie*: one offshore from Cranch Park east of Erie 2/15 (Jason Bojczyk, *doc submitted*) and again the next day off the north pier (Jerry McWilliams).

<u>White-winged Dove</u>* – Montgomery: one at Elkins Park 12/27 (Paul Driver, *doc submitted*), a new county record.

Rufous Hummingbird – Franklin: a continuing female previously banded was last seen on 12/7 (Tim Smith); Indiana: a continuing bird previously banded was last seen 12/21 (Greg Tomb), and Snyder: a continuing bird previously banded was last seen on the cold weekend of 12/23.

<u>**Purple Sandpiper**</u> – *Erie*: up to three at Presque Isle throughout period (m.ob.), a first record of over-wintering.

Least Sandpiper – Berks: two continuing at Bernharts Dam until 1/22 (Russell Hoffman); *Chester*: up to four at Glenville Farm Pond 1/27-2/22 (Ross Gallardy, m.ob).

Greater Yellowlegs – Delaware: one at John Heinz NWR 1/17 (Russell Rogers).

- <u>Short-billed/Common Gull (formerly Mew Gull)</u>* Berks: one at Blue Marsh Lake 12/16 (Jo Spilde, Larry Spilde, photos).
- <u>California Gull</u>* Butler: one at the South Shore of Lake Moraine 12/3 (Dave Wilton, Shannon Thompson, m.ob., *doc submitted*), a second county record, the first being five years earlier at the same place and day.

<u>American Bittern</u> – *Franklin*: one at a residence near St. Thomas 12/27 or 12/28 to 2/24 (Pat Walls, Fred Walls, m.ob.).

<u>Green Heron</u> – *Erie*: one at Leo's Landing 12/6 (Jamie Hill), a record late by about a month.

- <u>Black-crowned Night-Heron</u> *Allegheny*: an immature at Brunots Island 2/14 (Nathaniel Bowler).
- **Osprey** *Adams*: one found on the Gettysburg CBC 12/17; *Allegheny*: one at Wingfield Pines 2/26 (Ed Hogan, Elizabeth Pagel-Hogan); *Dauphin*: one at Wildwood Park 1/18 (Joan Reith, Karen Atwood); and *York*: one in York 12/1 (Bob Reiter) and re-sighted over a week and one at Indian Rock Dam Gamelands 12/17 (Chuck Berthoud) and seen on the York CBC.
- <u>Hammond's Flycatcher</u>* Schuylkill: one at Tuscarora SP 12/4 (Tom Buehl Jr, *doc status unknown*).
- <u>Sav's Phoebe</u>* Lancaster: one at the Washington Boro Water Treatment Plant 12/31 and seen on the Lancaster CBC through remainder of period (m.ob., *doc submitted*).

<u>Ash-throated Flycatcher</u>* – Philadelphia: one at the NE Water Treatment Plant 12/4-2/26 (Christopher Hinkle, Oliver James, m.ob., *doc submitted*).

- **Blue-headed Vireo** *Clinton*: one at Upper Creek Park 12/3 (Brian Schmoke); *Juniata*: one seen on the Juniata County-Lewistown CBC 12/17, a first for that count; *Philadelphia*: one at NE Water Treatment Plant 12/7-11 (Carl Engstrom, m.ob.)
- **Blue-gray Gnatcatcher** *Bucks*: one at Penn-Warner Tract 12/11 (Dawn Denner).

House Wren – *Berks*: one at Big Boy Farm 2/13 (Caroline Fegley); *Indiana*: one at Yellow Creek SP 12/26 (Trent Millum); *Montgomery*: one at Wissahickon Waterfowl Preserve 12/2 through period (Andrew Albright, m.ob.).

- <u>Sedge Wren</u> *Montgomery*: one at Valley Forge NHP 12/8 (Paul Driver, m.ob.), a first winter county record.
- **Marsh Wren** *Chester*: observations during Jan-Feb consistent with a year-round presence.
- <u>Swainson's Thrush</u> Bucks: one in a Newtown Borough yard 12/4 (Bob Shaffer), a first county winter record.

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White-winged Crossbill – *Schuylkill*: two sightings at Hawk Mountain Sanctuary, 4 birds on 12/2 (David Barber) and 3 birds on 12/10 (Bracken Brown).

<u>Grasshopper Sparrow</u> – *Cumberland*: one at WH 1/4-10 (Alison Matlock, Nicholas Minnich); *Montgomery*: one at Valley Forge NHP 12/4 (Randy Richard).

<u>Clay-colored Sparrow</u> – *Berks*: one at Blue Marsh Lake 1/9-2/19 (Russ Hoffman, m.ob.); *Carbon*: one at Beltsville SP 1/8 (Rich Rehrig); *Cumberland*: one continued through 12/21 at Cumberland Valley Rail Trail in Greason (Karena Johnson, Tim Johnson, Debby Hook) and one at Winding Hills Nature Trail 12/21 through period (Allison Matlock, m.ob.).

Vesper Sparrow – *Dauphin*: one at SGL 290 – Haldeman Island 2/19 (Stephanie Bills, Scott Bills).

<u>LeConte's Sparrow</u>* – Montgomery: one at Pennypack Ecological Restoration Area 2/25-28 (Paul Driver, m.ob., doc submitted), a first winter county record; *Philadelphia*: one at Pennypack on the Delaware 12/18-2/22 (Ashley Rathman, m.ob., doc submitted), a first winter county record. Date-wise, it is conceivable that these were the same bird.

<u>Yellow-breasted Chat</u> – Chester: one at yard near Thorndale 1/25-2/18 (Mary Kelly).

Yellow-headed Blackbird* – Chester: at least two within a huge blackbird flock north of Atglen 2/2-3 (Larry Bernhardt, m.ob., doc submitted); Erie: one at ranger station feeder 12/9 (Don Snyder, doc status unknown); Lancaster: at least one in a blackbird flock near Quarryville 1/30 (Warren Wolf, Nina Wolf, doc status unknown) and both males and females in a large mixed flock near Gap and White Horse 2/2-6 (Larry Bernhardt, Ross Gallardy, m.ob., doc submitted). The Chester and Lancaster locations for the large blackbird flocks are close to each other.

<u>Orchard Oriole</u> – Philadelphia: a male at FDR Park 12/8-9 (Robert Karchnyak, Holger Pflicke) 12/18-2/22, a first state winter record in eBird.

Ovenbird – *Philadelphia*: one in Center City 12/3-7 (Laura Herschel, Christopher Hinkle).

<u>Northern Waterthrush</u> – *Philadelphia*: one at John Heinz NWR 12/4 (Joshua Gant), a second county winter record.

<u>Tennessee Warbler</u> – Philadelphia: one at Pennypack on the Delaware 1/1 (m.ob.), a first county winter record.

<u>Nashville Warbler</u> – *Bucks*: one on the Southern Bucks County CBC; *Cumberland*: one with an injured wing at West Fairview Boat Launch 1/7 (John Fritchey), a first county winter record; *Delaware*: one at Commodore Barry riverfront 1/12-22 (Al Guarente et al.); *Philadelphia*: one at Bartram's Garden 12/9 (Ben Filreis).

<u>Cape May Warbler</u> – Blair: one at Fort Roberdeau 12/17 during the Culp CBC (m.ob.).

<u>Northern Parula</u> – *Lebanon*: one at Memorial Lake SP, 12/13-21 (Daniel Hinnebusch).

<u>Magnolia Warbler</u> – *Philadelphia*: one northeast of Pennypack on the Delaware 12/17 (William Buzzard).

<u>Yellow-rumped Warbler (Audubon's race)</u> – Lancaster: one at the water treatment plant in Washington Boro 1/4 (m.ob.).

<u>Townsend's Warbler</u>* – Berks: one in a yard near the Reading Airport 12/18-21 (Jo Spilde, Larry Spilde, m.ob., doc submitted).

<u>Hermit Warbler</u>* – Delaware: one in Ashton continued until 12/7 (m.ob., *doc submitted*).

<u>Wilson's Warbler</u> – *Berks*: one continuing at a feeder near Bernville until 1/14 (Betty Blackburn).

<u>Western Tanager</u>*– *Lancaster*: a female at a yard in Columbia 121/23-30 (Dennis Weaver, m.ob., *doc submitted*).

- <u>Rose-breasted Grosbeak</u> *Clarion*: a female at a feeder near Curllsville 12/4-7 (Carole Winslow).
- <u>Lazuli Bunting</u>* Philadelphia: a female at Pennypack on the Delaware 12/17-19 (Patrick McGill, Tanya Burnett, Martin Dellwo, m.ob., *doc submitted*).

<u>Painted Bunting</u>* – Philadelphia: a likely female at Bartram's Garden 1/13-2/5 (Ben Filreis, m.ob., *doc submitted*); York: a male at a New Freedom feeder 1/19 (Abbey Sinclair, *doc status unknown*).

Photographic Highlights



Snow Goose at Wood's Edge Park, *Lancaster* 19 February. (*Kathleen Harrison*)

Color printing

Sponsored by the Bird Screen Company

(More photos inside back cover)



Ross's Goose found during Lock Haven/Jersey Shore CBC 17 December on West Branch of Susquehanna R, *Clinton*; presumably the same bird was seen at various river locations until at least late January. (*Bob Snyder*)



Likely an early migrant in Lancaster, this **Wood Duck** posed nicely 27 February. *(Bill Libhart)*



This **Greater White-fronted Goose** at Whitestown Rd., Butler 17 February provided the fifth or sixth record for the county. *(Glenn Koppel)*



The **Common Shelduck** found during the Lebanon CBC at Lebanon Waste Management Landfill, *Lebanon* drew many birders from 17 December (here 2 January) - 4 February. (*Pamela Fisher*)



Among a handful of putative records of **Common Eider** in Pennsylvania, some from hunters, this eider at Pymatuning Res., *Crawford* 18 (here 20) - 21 December is one of 3 or fewer live birds recorded; unfortunately, it was also shot by a hunter. (*Dave DeReamus*)



Female Bufflehead at Insurance Pond, York 1 December. (Bob Reiter)



Common Merganser in Lancaster 27 February. (Bill Libhart)



Rare in central Pennsylvania in mid-winter, this **Ruddy Duck** at East Waterford, *Juniata* 29 January was the second county eBird report for winter, the first occurring earlier this same season. (*Chad Kauffman*)



Wild Turkeys at Seneca, Venango 4 December. (Meg Kolodick)



Continuing from the fall and a first for *Snyder*, this **Rufous Hummingbird** at Port Treverton, seen here 2 December, was last seen at the onset of severe cold 23 December. (*Jessica Sauder*)



American Coot at Wingfield Pines, *Allegheny* 28 December. (*Dean Newhouse*)



Sandhill Crane at Pine Run Reservoir, *Bucks* 2 January; two or three cranes have wintered at this location each year since 2017-18. (*August Mirabella*)



Wilson's Snipe on Metz Rd., Juniata 27 December. (Chad Kauffman)



California Gull (on the left) at Moraine SP, *Butler* 3-10 (here 3) December, the second county record; all other Pennsylvania records are from Lake Erie or southeastern counties. (*Glenn Koppel*)



Iceland Gull is an annual winter visitor to *Northampton*, where the high count this year was four birds; this gull was in Plainfield Twp. 8 February. (*Dave DeReamus*)



Found more often in southern areas of *Bucks*, this **Glaucous Gull** was further north, at Nockamixon SP 14-15 (here 14) January. (*August Mirabella*)



This immature **Cooper's Hawk** was found during the Slickville Winter Raptor Survey, Westmoreland 15 January, having just dined. (*Tom Kueh*l)



Venango is within the core of Pennsylvania's best breeding and wintering population of **Red-shouldered Hawks;** this adult was at Seneca 4 February. (*Meg Kolodick*)



Yellow-bellied Sapsucker at Tamanend Park, *Bucks* 12 January. (*Kerry Loux*)



Northern Flicker at Walker Lake, Snyder 9 January. (Jessica Sauder)



American Kestrel on Ridge Crest Rd. near Howard, *Centre* 13 January. (*Bob Snyder*)



Merlin continues to increase in numbers and locations in the state; this bird was in Upper Georges Valley, *Centre* 17 December. (*Debra Rittelmann*)



Peregrine Falcon found prior to a WRS outing at Montrose, Susquehanna 20 January. (Nancy VanCott)



About the ninth or tenth state record and second for *Philadelphia*, this **Ash-throated Flycatcher** at the Northeast Philadelphia Water Treatment Plant 4 December (here 8) – 26 February was one of 4 in northeastern states this winter. (*Kerry Loux*)



Will the warming climate result in more winter **Gray Catbirds** in central Pennsylvania? – this catbird at Colyer Lake, *Centre* 17 December was one of at least six in the county for the winter (*Debra Rittelmann*)



Eastern Bluebird contemplating sumac at East Great Bend Swamp, Susquehanna 27 February. (Barb Stone)



Build it – they will come: Two **Evening Grosbeaks** visited a platform feeder built with the specific hope of attracting this species; after five weeks, the builder was rewarded by a male and a female 2-3 December at Best Station, *Lehigh. (John Good*)



This **Clay-colored Sparrow** wintered with a mixed sparrow flock at Blue Marsh Lake, *Berks*, seen here 9 January. (*Russ Hoffman*)

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American Tree Sparrow in the protective interior of multiflora rose at New Milford, *Susquehanna* 23 January. (*Nancy VanCott*)



Fox Sparrow in Palmer Twp., Northampton 11 December. (Dave DeReamus)



An **Orchard Oriole** in winter is a true rarity; this oriole at Franklin Delano Roosevelt Park, *Philadelphia* 8-9 (here 9) December is the first in eBird report in winter for Pennsylvania and only the third in New England and the mid-Atlantic. (*Holger Pflicke*)



Orange-crowned Warbler found at Blue Marsh Lake, *Berks*, 9 January at the same location as a Clay-colored Sparrow; numbers in the southeast were high, including nearly 20 in *Philadelphia*. (*Russ Hoffman*)

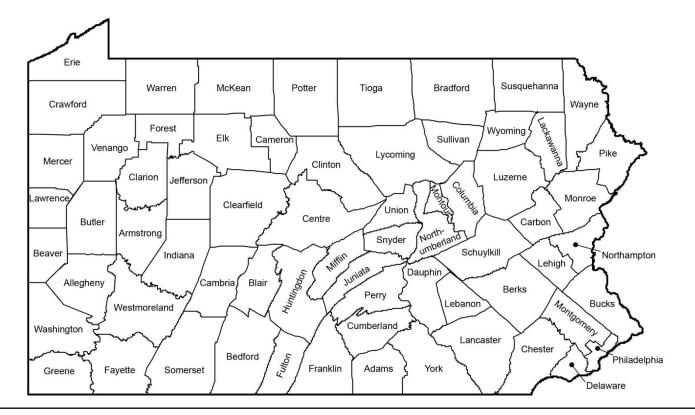


This **Townsend's Warbler** near the Reading Airport, *Berks* 18 (here 21) – 21 December moved on just before onset of cold, stormy weather; first county record and one of less than ten in Pennsylvania. (*Russ Hoffman*)



Lazuli Bunting photographed at Pennypack on the Delaware, *Philadelphia* during the Pennypack Valley CBC 17 December, staying two more days; about the fifth or sixth state record, first for *Philadelphia*, and first-ever for the CBC in Pennsylvania. (*Patrick McGill*)

Local Notes - December 2022 through February 2023



ABBREVIATIONS

BBS	Breeding Bird Survey	max	maximum	RBA	Rare Bird Alert
C.A.	Conservation Area	min	minimum	Res.	Reservoir
CBC	Christmas Bird Count	m.ob.	many observers	Rte.	Route
C.P.	County Park	Mt. (Mts.)	Mount/Mountain/Mountains	SF	State Forest
Cr.	Creek	NA	Nature Area or Natural Area	SGL	State Game Land
et al.	and others	NF	National Forest	SP	State Park
Ft.	Fort	NM	National Monument	S.T.P.	Sewage Treatment Plant
G.C.	Golf Course	NP	National Park	subad(s).	subadult(s)
G.P.	Game Preserve	NWR	National Wildlife Refuge	Twp.	Township
Hwy.	Highway	PAMC	Pennsylvania Migration Count	vr.	voice recording
imm(s).	immature(s)	ph.	Photographed	vt.	videotape
Jct.	Junction	Pt.	Point	WA	Wildlife Area
juv(s).	juvenal [plumage]; juvenile(s)	R.	River	WMA	Wildlife Management Area
Ĺ.	Lake	RA	Recreational Area	WRS	Winter Raptor Survey

Data for county reports incorporate observations derived from eBird [ebird. 2021. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available: http://www.ebird.org. (Accessed June 19, 2023)].

No reports were submitted for Bradford, Lehigh, Luzerne, Perry, Pike, or Union counties*

Adams County

Locations: Bigham Road (BGR), Gettysburg Christmas Bird Count (GCBC), Gettysburg National Military Park (GNMP), Long Pine Run Reservoir (LPRR), Pumping Station Road (PSR), York Springs (YS).

South-central Pennsylvania experienced a "winter that wasn't." Dec was seasonal with an average temp 1.5F below normal. However, that gave way to remarkable Jan & Feb average temps of 9F and 7.5F above average, respectively. Snowfall total was 6" versus a historical norm of 25". Species count of 112 and a hybrid matched the previous winter high. The 12/17 GCBC produced a lower-than-normal 64 species while the 12/28 YS CBC produced 73 species in the *Adams* portion, within normal range.

As is typical, there were isolated reports of single **Snow Geese** this period, so a flock of 90 flying over YS 2/22 (TA) was an unusually high count. Single **Cackling Geese** were detected at L. Kay 12/1-2/6 (m.ob.) and at Gettysburg College 1/16 (TC, PH). **Northern Shoveler** reports

were 12/8-28 including YS CBC (TA, CF), with a high count of 5. A great find was an American Wigeon x Mallard at Gettysburg College 12/3 and 2/10 (both TA). This was one of about eight sightings east of Chicago, Illinois, this winter. American Black Duck reporting (m.ob.) was relatively widespread with 10 sites holding birds with a high count of 14. Up to a pair of Northern Pintails were at LPRR 1/4-2/21 (m.ob.), L. Kay held a single 1/23 (TA), and the YS CBC produced a pair. All expected species of the Aythya genus - Canvasback, Redhead, Ringnecked Duck, Lesser Scaup, and Greater Scaup - were found, but reporting sites and numbers were low. A Long-tailed Duck was at LPRR 12/26-2/14 (m.ob.). LPRR also held a Common Goldeneve 12/21-27 (TA, EB, BK) and Long Arm Res. produced a single 1/4-20 (DR, MS). There were three reports of Ring-necked Pheasant 12/28-2/8 (JK, LR), including YS CBC, which is on the high side. Eleven Wild Turkey reporting sites were paced by a 67-count in Freedom Twp 1/28 (TA). BGR held a pair of Sandhill Cranes 1/28 (PA). A pair of American

Woodcocks were on Mountain Rd 2/20 (R&DS), and single Wilson's Snipes were found on the YS CBC and at GNMP 2/27 (EB, CW). Likely a Dec first for the county, an Osprey was found on the

Likely a Dec first for the county, an **Osprey** was found on the GCBC. Interestingly, the same day produced one in *York*, about 20 miles between sightings. A juv **Golden Eagle** was seen over Gladhill Rd 12/19

(DH). The Adams portion of the YS CBC picked up the Bald Eagle winter roost in the L. Meade area, driving a noteworthy 29-count for the county's portion. The county's position as a Red-shouldered Hawk stronghold was evident with a 29-count between the two CBCs. The Virginia Mills area continued to provide the occasional Barn Owl report 1/4 (TA). An Eastern Screech-Owl was peering out of a wood duck house in the Fairfield area 12/30 (CJ). GNMP again hosted Short-eared Owls 12/22-2/28 (m.ob.) as did BGR; high count was 5 at BGR 1/24 (BK). Not often reported in the county, a Northern Saw-whet Owl was along Plank Rd 2/17 (DB). An impressive 44-count for Yellow-bellied Sapsuckers was recorded on the GCBC while the combined CBCs produced 28 Redheaded Woodpeckers. A combined 75-count on the CBCs for American Kestrels was something above remarkable, perhaps stunning, even jaw-dropping. Single Merlins were found in the Fairfield area 12/3 (TA), and four reports came from GNMP 1/5-21 (m.ob.). A Peregrine Falcon was along PSR 1/28 (CW, CsW).

A 40-count along Hostetter Rd 12/28 (MD) paced the eight reports for Horned Lark. As mentioned in the Fall report, Adams and York had a notable trend for experienced birders reporting Black-capped Chickadee. That continued in the Winter period with at least eight credible reports at all elevations. Maybe it wasn't a full-scale irruption, but the data suggest it was at least a fairly strong influx starting in Fall and carrying through Winter. Red-breasted Nuthatches were found at 10 sites throughout the period. Typically considered a "half-hardy" species, five reports of Ruby-crowned Kinglet covering all months attest to the winter mildness. A Gray Catbird was at a Bugle Call Path residence 1/4 (Anon.). The YS CBC produced the sole American Pipit report with 25 birds. An Evening Grosbeak vocalization detection at L. Kay 1/2 (TA) was the sole grosbeak report. There were 11 reports of Purple Finch with a YS residence hosting up to 10 birds 12/3-2/26 (D&JG). Three reports of Pine Siskin in a very condensed time frame of 12/7-13 (TA, AK) were limited to a max of 4 birds. Single Chipping Sparrows were found on the YS CBC and at GNMP 12/29 (MD). American Tree Sparrows enjoyed increased reporting over recent winters with seven sites producing reports. The only Fox Sparrows were up to 3 along PSR 2/2-23 (EB, CW, CsW). Savannah Sparrows were found at three sites 12/20-2/28 (m.ob.) with a max of 4. Swamp Sparrow was found at seven sites, and Dec and Feb produced Eastern Towhee reports. Eastern Meadowlark observations were limited to the Gettysburg area with high counts of 14 on the GCBC and 15 along PSR 2/18 (TM). Singles of Rusty Blackbird were found at Sachs Covered Bridge 2/16 (EB), Virginia Mills 2/22 (TA), and Turkey Pit Rd 2/23 (LM). Two different sites on the YS CBC produced singles of Palm Warbler.

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Allegheny County

Locations: Allegheny River (ALR), Brunots Island (BRU), Dashields Dam (DASH), Duck Hollow (DH), Fox Chapel (FOX), Frick Park (FP), North Park (NP), Ohio River (OHR), Pittsburgh (PIT), Wingfield Pines (WP).

It was a mild winter season with very little snow and cold. There was a very brief cold snap in December; lakes and rivers remained open the entire season. Waterfowl were in short supply with open water to the north, so few birds were pushed south into the county.

Snow Goose is an uncommon but regular visitor in recent years. One was discovered at NP 2/10 (*fide* MV). It moved to a pond on private property just outside the park through the end of the season (m.ob.). Another was found at the Waterfront shopping complex in Homestead 2/23 (CM) where it fed on an open lawn with **Canada Geese** regularly in the afternoon through the season (m.ob.). A **Greater White-fronted Goose** was the highlight of the PIT CBC 12/31. An immature bird was with a flock of Canada Geese at Calvary Cemetery in the Greenfield section of PIT (MKu). The bird provided the sixth county record and, I believe, the first juv reported in the county. It didn't stay more than two hours before flying off, never to be relocated. Another was at the PennDot Wetlands at Boyce-Mayview Park in Upper St. Clair 2/20-23 (RB, et al.), providing the seventh county record.

Tundra Swans were in the area in late Dec, perhaps late migrants. A flock of 120 flew over Gibsonia 12/26 (KP), 13 flew over DASH 12/27 (DBo, TB), 25 flew over West Deer Twp. 12/27 (LC), and 24 flew over Lock and Dam #4 on the ALR at Natrona Heights 12/27 (TR). Six birds were on the ALR at Blawnox 12/28 (AH, PM), 4 flew over Plum Borough 12/29 (AH, PM), and a flock flew over Verona after dark 2/28 (SK).

A Northern Shoveler was in Harmar Twp. 12/25 (AH, PM). Two Gadwall were at Imperial nearly the entire month of Dec (MV). Two were at WP 12/21 (DNe, m.ob.), one was at Lock and Dam #3 in Harmar Twp. 12/26 (AH, PM), 8 were on the ALR near Oakmont 12/27 (AH, PM), one was on the OHR at BRU 1/7-25 (DNe, m.ob.), several were present at a small wetland in Harmar Twp.1/19-2/16 (LK, m.ob.) with a high count of 10 on 2/10, 2 were at Emsworth 2/5 (AK) and two were at WP 2/13 (m.ob.). American Wigeon has been an uncommon migrant and winter visitor, but there were quite a few reports this season. One was at Findlay Twp. 12/26 (MV), one on the OHR at BRU 1/1 (DBe), one at Boyce-Mayview Park 1/5 (JF, JS), one nearby at WP 1/16 (JF), 4 on the ALR at Sharpsburg 2/21 (RB), 6 at nearby Aspinwall 2/24 (JK) and 2 nearby at Chapel Harbor 2/25 (JV).

Northern Pintail has been rare in winter and not a common migrant, so any reports are notable. Single birds were at DASH 2/3 (MV), WP 2/5 (JF, m.ob.), FOX 2/6 (JK) and at the Highland Park Bridge on the ALR 2/7 (NB). Five Surf Scoters were on the ALR in Aspinwall 1/9 (NB, m.ob.). Two Long-tailed Ducks were on the OHR near DASH 2/24 (OL, MF). Common Mergansers were found in large rafts including 65 at Lock and Dam #3 in Harmar Twp. 12/25 (AH, PM), and 59 were at Chapel Harbor 2/5 (AF). A Red-breasted Merganser was at Chapel Harbor on the ALR 2/28 (DM). Ruddy Ducks were reported most of the season. One was at DASH on the OHR 12/26 (MV), and 2 were there 12/27 (DBo, TB), 7 were upriver at the Emsworth Dam 12/30-1/1 (JF, LF, m.ob.), 2 were at BRU 12/29-1/9 (SN, m.ob.), one was at DH 2/7 (JC), and 4 were at BRU 2/5-25 (LG, m.ob.).

Horned Grebe has been irregular in winter. Eight were at BRU 12/22 (DBe) and a single bird was there 2/9-10 (TC); one was at DASH 12/26 (MV, m.ob.) and 1/3 (m.ob.), and one was at DH 12/28 (JV).

Large numbers of **Mourning Doves** were at the feeders at the Nature Center at FP. High counts included 104 on 12/20 (ON), 165 on 12/31 (SB), and 120 on 1/8 (KSJ, CK). **Killdeer** lingered in a flock at South Park in Dec. Counts included 22 on 12/9, 19 on 12/12, and 16 on 12/14 (JF). This has become a regular gathering site for Killdeer late in fall and early winter. Two **American Woodcocks** were at Peter's Cr. 2/16 (JP, JF) which is early by a few weeks.

A third winter **Lesser Black-backed Gull** was at Point SP in PIT 12/26 (BC) during a brief period of cold weather that brings uncommon gulls to the area. This was the only report of an unusual species for us due to the mild winter. Single **Common Loons** were on the OHR at DASH (TB, DBo) and on the Monongahela R. at DH (JC), both 12/27.

An immature **Black-crowned Night-Heron** was photographed at BRU 2/14 (NB). **Black Vultures** were reported through the season. Up to 3 were in the FOX area the month of Feb (DM, m.ob.). Two were in Richland Twp. 1/18 (TC), and 5 flew over Verona 2/23 (MD). An **Osprey** was sighted at WP 2/26 (EHo, EP).

Northern Saw-whet Owls continued to be banded at Sewickley Heights Park. Two captured 2/22 were recaptures from the fall (TB). One was heard in Franklin Park 2/25 (OM). A **Red-headed Woodpecker** was spotted flying over Rte. 28 in Blawnox 2/19 (BS).

Merlins were reported from at least a dozen locations during the season. They were still at the traditional location at Schenley Park where

a roost was first noted in the 1990s, but they have become an expected and widespread winter resident in the county.

The **American Crow** roost was located in the Hill District part of PIT this winter. Counts included 5000 on 12/15, 2000 on 12/18 (KSJ) and 2000 on 1/6 (EH). **Fish Crow** high counts included 100 in Squirrel Hill 12/9 (MKu), 21 at DH 1/11 (TC), and 26 in Verona 2/22 (SK).

Horned Larks hav only been found in the Imperial area regularly. Single birds were at Janoski's Farm 2/9 (AF) and at the Imperial Grasslands 2/16-18 (MV).

Ruby-crowned Kinglets have been rare in winter here but this season there were several reports, perhaps due to the milder-thannormal weather. One was photographed at Carnegie Mellon University 12/4 and seen again 2/16 (JFR), one was at Hartwood Acres 12/30 (JK), one was photographed at a feeder in Bethel Park 12/30 where it remained to 2/2 (JP), one was in Sewickley 1/5 (AK), one in FOX 1/16 (LK), one at The Waterfront in Homestead 2/6 (RB), one at WP 2/12 (MKu), and one at NP 2/28 (EPH). This species has not been reported annually in winter, so this was unusual.

The **Marsh Wren** reported in the fall at Hartwood Acres continued through the season (m.ob.). An out-of-season **Gray Catbird** was a nice find at Emmerling Park in Indiana Twp. 12/31 during the PIT CBC; it was seen again 1/14 (both AH, PM). **Hermit Thrushes** were reported through the season at several locations including South Park, NP, Hartwood Acres, FP, Boyce Park, and Imperial. An **American Pipit** at WP 2/10 (TC) was the only report for the season.

Surprisingly, there was a small push of **Evening Grosbeaks** in mid-Dec. A female was in West Deer Twp. 12/17-19 (LC), and a male visited a feeder in Gibsonia 12/18-26 (KP). **Purple Finch** has always been a nice find here. Nine were at Harrison Hills Park 12/11 (AH, PM), one was at NP 12/14 (AF), 5 were at Indiana Twp. 12/24 (DY), single birds were at WP 1/16-20 (m.ob.), and up to 3 were at Beechwood Farms in Feb (DM, m.ob.). A **Pine Siskin** visited a feeder in Hampton Twp. 12/10 (DN).

Out-of-season sparrow reports were numerous this winter. Rare in winter, 4 Chipping Sparrows visited a feeder in Hampton Twp. 1/15, and 5 were there 1/16 (DN). Field Sparrows have sometimes been found in winter, but in small numbers and very localized. There were quite a few reports including 2 at South Taylor Environmental Center in West Mifflin 1/15-23 (JF), 3 at Harrison Hills Park 1/18, 7 there 2/5 (AH, PM) and 4 there 2/20 (DG). Two were at Hartwood Acres 2/20 (AF), and 4 were at Hays Woods 2/26 (MK). Some late Fox Sparrows lingered into Dec. One was at NP the entire month (JJ, TC, SD), Boyce Park 12/7 (EH) and South Fayette Twp. 12/25 (DNe). Two were at FP 1/15 (ON), one at DH 2/12 (MT), one at South Park 2/16 (JF), and one continued at NP 2/26 (SD). Fox Sparrows typically don't winter in the county. A Gambel's White-crowned Sparrow spent the season at a feeder in West Deer Twp. (LC). This is only the second record of this western subspecies in the county of which I'm aware. This one and the previous were both documented with photographs.

Out of season, a female **Brown-headed Cowbird** visited a feeder in Pine Twp. 12/20 and 12/30-31 (PL, SL). One at Beechwood Farms 2/1-7 (DM, et al.) could have been an early migrant. A female was photographed at the feeders at FP 12/29; 2 were in Plum Borough 12/31 (AH, PM), and one was in Oakmont 1/5 followed by 2 on 2/28 (RB). There wereother reports in eBird for the season. An early, wandering, or overwintering **Rusty Blackbird** was at FP 2/7 (AF).

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Armstrong County

Locations: Armstrong Trail North of Dam 8 (AT8), Allegheny River along Seybertown Road (SEYB).

Most would say this winter's weather was strange. It barely snowed. As of the last day in February, Pittsburgh was more than 20 inches below the normal snowfall for the season. January and February temperatures were more than 8 °F above normal. We also saw a lot of warm weather in December, but it included a cold snap with lows below zero during the third week. Despite the strange weather, there were not many phenological patterns that were different between this year and previous ones. The species total was 93, higher than the average of 86 for the previous five years.

Several uncommon to rare geese and swans were reported during the winter period. A single **Snow Goose** was found at SEYB 12/26 (TA). At least one **Cackling Goose** showed up at AT8 from 2/17-2/19 (TR, MD, AH), accompanying a flock of 46 **Canada Geese**. There was an excellent photo of the Cackling Goose next to a couple Canada Geese, highlighting its differences in bill size and shape, body size, and the white collar at the base of the Cackling Goose's neck (MD). **Tundra Swans** were well represented in the county. They were seen at six different locations (m.ob.) from 12/1-1/1 (none after 1/1).

A standard assemblage of ducks was observed. The only sightings of note were record high counts for two species. A huge flock of 200 **Ring-necked Ducks** was seen at Keystone L. 2/24, and the observers indicated that their estimate was conservative. While another eight species of waterfowl were observed, the flock of Ring-necked Ducks was nearly monospecific (MS, JT). The record number of **Common Mergansers** observed at Crooked Creek L. in late Nov persisted through mid-Dec. Multiple observers on different dates estimated the flock to be 300 to 340 birds.

Eighteen **Sandhill Cranes** provided a Christmas gift in the middle of Seminole 12/25 (PL). They flew over the neighborhood in a Vformation around noon, giving their constant honking vocalizations. Not only did this trigger a Rare Bird Alert from eBird, but it also registered as a record high count for this species. This is the first eBird record for *Armstrong*.

American Woodcocks got an early start with their displays this year. A group of 3 or 4 were carrying out their courtship flight with peent calls at SGL 247 at dusk 2/19 (DB). A few days later 2 others were displaying on Stone House Rd. 2/25 (AB). These two sightings in 2023 and two others in 2022 represent the only American Woodcock sightings on eBird in the month of Feb since records were kept. Perhaps earlier starts of the woodcock displays can be used to measure our warming climate.

Rough-legged Hawks were sighted on two occasions: The first was along Manifest Rd. south of Olivet 1/23 (M&RH); the second, also around Olivet, was about one mile north from the Manifest Rd. location 1/27 (ABs, ph.). There were five locations where **Eastern Screech-Owls** were detected, and some were repeat offenders, having been seen or heard on multiple days throughout the period. One or more owls were calling on multiple days at SEYB 12/3-1/31 (TA). Another good find was a single red-phase owl that occupied the same roost in a hollow, dead snag without bark along the AT8. It was photographed there 12/29 and 2/19 and spotted peeking out from the same cavity entrance three times (TR, AH, MD).

Two **Yellow-bellied Sapsuckers** were spotted at Clinton Dam on the Allegheny R. 12/17 (TR). This total was a high count for the county.

Last spring, I was concerned that the **Peregrine Falcon** that had been seen reliably along the Allegheny R. in Kittanning had disappeared. It was found again in fall 2022, and now multiple sightings of the bird on a high-voltage electric tower on the Armstrong Trail near Manorville have been reported, including 2 falcons on the tower 2/19 (TR).

It was fantastic to learn of a **Northern Shrike** visiting the area of Rearicks Road from Polka Hollow Road to Garrett's Run Road 1/11 (MVT). This is only the fifth sighting in the county since 1987, according to eBird. Interestingly, all five sightings have been in the same general area, not more than six miles from one another, and the sighting in 2023 was only three miles from where a shrike was found in Feb 2022.

At least one **Ruby-crowned Kinglet** persisted along the AT8, with reports from 12/21 (TR) and 2/19 (MD). This sighting is considered rare, as Ruby-crowned Kinglets usually migrate farther south and east during winter. **Winter Wrens** were a little more numerous than normal this year. We had four locations that reported wrens, and two of these featured at least 2 wrens together, tying for an all-time high count. These two locations were Mill Street outside of Freeport 1/19 (S&SW), and AT8 on 1/7 and again 2/12. On the latter date, a hike along the trail netted two sightings and one identification by ear (and the Merlin app), each about a half-mile apart (TR). Not since 2018 have there been wrens reported at more than three locations within the county during the winter. Like the wren, there was a record high count of 2 **Hermit Thrushes**. The two were heard exchanging calls at SGL 247 on 12/17 (TR).

In contrast to some of the species mentioned above that were more common this year, there was a species that usually winters in small numbers in *Armstrong* but was largely absent: the **Yellow-rumped Warbler**. Only one was recorded in the county this winter, along the AT8 on 2/23 (TR). While only a handful are seen each year during winter, this was the lowest total recorded in the last 10 years.

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Beaver County

Locations: Ambridge Reservoir (AR), Independence Marsh (IND), Raccoon Creek State Park (RCSP), Rochester – Beaver River mouth (RCH).

It was a slow season overall in Beaver, but several notable rarities were found, nevertheless. A Snow Goose was a surprise flyover at RCSP 12/20 (JM), the first for the county since 2011. There was a decent push of early dabbling ducks in Feb. Quite unusual for Jan was a Northern Shoveler at a small farm pond in Independence Twp. 1/9-22 (JM, MV), a male that was possibly injured. Another was at RCH 2/25 (MV). Last Gadwall of the fall were 2 at New Brighton 12/24 (MV) and the first to return were 2 more at Big Beaver Wetlands 2/25 (MV). Six American Wigeon at RCSP 2/25 (JM) was a nice Feb record for the park. Four Canvasback, 2 Redhead, 40 Lesser Scaup, and 2 Horned Grebes graced RCH on Christmas Day (DZ). A small sampling of bay ducks were back at RCH by early Feb; among these were 2 Greater Scaup 2/9-23 (MV). Four Ring-necked Ducks at AR 1/30-2/11 (JM) were also somewhat early. Best count of Bufflehead was 10 at AR 2/11 (MV). AR was the site of other notable finds: 4 Common Goldeneye 1/30 (JM), up to 18 Hooded Mergansers 1/23-2/11 (JM, MV), and 40 Common Mergansers 1/30 (JM). A tarrying Common Goldeneye was also at RCH 12/12 (DZ). RCSP had a max of 32 Common Mergansers 1/19-2/23. Red-breasted Merganser was noted on six dates at RCH 12/4-2/26 (DZ, et al.).

Three American Woodcocks peenting at Rocky Bend Nature Preserve 2/25 (DZ) provided an unusual Feb record for the county. Bonaparte's Gulls at RCH included one 12/29 (DZ), 3 on 2/4 (MV), and 11 on 2/19 (DZ). The max count of Ring-billed Gulls at RCH was 300 on 1/29 (DZ). A Black Vulture at Patterson Heights 1/16 (SG fide TJ) extended this species' impressive run in *Beaver* in the past few years. First returning Turkey Vulture was at Aliquippa 1/28 (DZ). A Longeared Owl at RCSP 2/17 (JM) was *Beaver's* first since 2015, which was also at RCSP but in a different location than this year's bird. Three sightings of **Merlin** included one at RCSP 12/31 (MV), one at the Grace Lutheran Church in Rochester 1/21 (MV), where they have been found periodically in past winters, and one at Hanover Twp. 2/9 (JM).

A well-described **Fish Crow** at RCSP 1/4 (JM) was the fourth for *Beaver* and first since 2013. We can probably expect this species to become more common or even regular in the county, given its expansion into urban areas in western Pennsylvania and eastern Ohio in recent years. **Red-breasted Nuthatch** was not found this season until 2/15 but was at three total locations by season's end (m.ob.). A **Hermit Thrush** was noted in a Hanover Twp. yard 1/7 and 2/23 (JM). An early **Chipping Sparrow** was at IND 1/24 (JM) and 5 **Rusty Blackbirds** were there 2/23 (AZ).

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Bedford County

Locations: Bedford (BD), Canal Ponds (CP), Foor Farm (FF), Shawnee State Park (SP), Rural Home Site (RS), Whitetail Wetlands (WW).

The lack of wind and snow made for a successful 34th Bedford CBC – even though many lakes and ponds were frozen. A total of 66 species were tallied, with 6,429 individual birds – slightly fewer birds than last year. The species count of 66 was a high count only achieved in two other years, 2012 and 1997. Record-breaking numbers for this count were 22 Snow Geese, 14 Wood Ducks, 7 Cooper's Hawks, 4 Eastern Screech-Owls, 3 Barred Owls, 72 Red-bellied Woodpeckers, 23 Northern Flickers (Yellow-shafted), 18 Red-breasted Nuthatches, 126 White-breasted Nuthatches, 9 Winter Wrens, and 253 Common Grackles. New species records for the Bedford CBC were one Merlin and one Gray Catbird.

Waterfowl diversity was lower, at 20 species, than the 22 species reported last year. A high of 35 **Tundra Swans** were seen at SP 2/19 (JW). Six **American Black Ducks** were seen at CP 2/25 (AB). A high of 26 **Northern Pintails** were seen at SP 2/23 (AB), and 5 **Green-winged Teal** were seen at SP 2/23 (m.ob.). Multiple sightings of **Ring-necked Ducks** were reported, with a high of 63 at SP 2/25 (EB). Three **Common Goldeneyes** were at SP 2/26 (m.ob.). A high of 38 **Hooded Mergansers** were at SP 2/25 (EB). **Ruddy Ducks** were reported from SP for a few weeks with a high of 5 on 2/21 (TM).

Killdeer were reported at scattered locations, with a high of 2 at WW 2/19 (m.ob.), the same location where 2 **American Woodcocks** were seen 2/19 (m.ob.). **Ring-billed Gulls** were numerous and frequent visitors at SP throughout Feb with a high of 500 on 2/19 (AB). One **Lesser Black-backed Gull** was reported at SP 2/19 (TM).

Black Vultures were seen infrequently, with a high of 3 at Black Valley Farm 1/31 (M&LJ). **Turkey Vultures** were reported often in Feb with a high of 55 at Arnold Development Loop 2/15 (AB). There were just 3 sightings of **Northern Harriers**, with the last one reported on E Mattie Rd 2/20 (EB), along with numerous sightings of **Bald Eagles** in the county, with a high of 9 at SP 2/26 (m.ob.). Two **Red-shouldered Hawks** were regular visitors to a nest site used the last four years, observed at FF 12/30-2/26 (EB).

One **Short-eared Owl** was reported at 155 Tr513 2/1 (m.ob.). The only sighting of a **Yellow-bellied Sapsucker** was at FF 12/8 (EB). There were 2 reports of **Red-headed Woodpeckers**: one near Sloans Hollow Road 12/31 (MB) and one at Wayde Road 2/3 (TJK). There was a definite uptick in **American Kestrel** sightings, with a high of 3 at SP (CH) and frequent sightings at Union Memorial Church 12/17- 2/26 (EB). The only **Merlin** sightings were one at CP 12/31 (AB) and one at Bedford Valley Road 1/23 (DS). There were scattered **Common Raven** sightings in the county (m.ob.), with consistent sightings of a pair at a nest site in BD (M&LJ).

The only Horned Larks were reported at Woodbury Reservoir with

a high of 135 on 2/18 (EB). A rare winter sighting of a **Northern Roughwinged Swallow** was reported at SP 2/18 (AM). A high of 8 **Goldencrowned Kinglets** was reported at SP 12/31 (CH). Just six sites reported **Brown Creepers**, but one was reported regularly at FF 12/9-2/14 (EB). There were 4 reports of **Winter Wrens** with 2 at BD Elementary 12/31 (m.ob.).

A **Gray Catbird** might have overwintered in the county as one was reported in BD 12/31 and then at SP 1/16-2/25 (m.ob.). **Hermit Thrushes** were seen in three locations, with a high of 2 at SP 12/31 (CH) and 1/16 (m.ob.). Sightings of **Purple Finches** were numerous, but two observers reported frequent sightings: at FF 12/9-2/27 with a high of 12 on 2/17 (EB), and at RS 12/8-2/28 with a high of 12 on 2/10 (J&BC).

There were sightings of single **Field Sparrows** from just two locations in the county (m.ob.). A high of 5 **American Tree Sparrows** was seen at WW 2/25 (m.ob.). Reports of **White-crowned Sparrows** were scarce, but two observers reported a high of 3: at Birch Lane 12/31 (JD) and at RS 1/10 (J&BC). A high of 3 **Swamp Sparrows** were seen at WW 1/2 (EB). Just one **Eastern Towhee** was seen, at WW 2/18 (EB).

Eastern Meadowlarks were seen in just three locations, with a high of 3 at Sollenberger Rd. 2/18 (EB). **Red-winged Blackbirds** were seen in scattered locations starting in Feb, with the most frequent reports from RS 2/12-2/18 (J&BC). **Brown-headed Cowbirds** were reported from two locations, with a high of 25 at Everett 12/29 (LF). Just 3 **Rusty Blackbirds** were seen at SP 2/15 (AB). A high of 5 **Yellow-rumped Warblers** was seen at SP 2/12 (ST).

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Berks County

Locations: Blue Marsh Lake (BML), Christmas Bird Counts: Hamburg (HCBC), Reading (RCBC); E. J. Breneman Quarry (BQ), French Creek State Park (FCSP), Hawk Mountain Sanctuary (HMS), Lake Ontelaunee (LO).

This winter ranked as one of the five warmest and had the lowest amount of snowfall in weather-reporting history. Lakes and streams were mostly open, and the ground was only superficially frozen. The coldest weather of the winter came at Christmas, after a very strong northeaster 12/23 briefly dropped temperatures to 2 degrees Fahrenheit at some places.

Snow Geese arrived in mid- to late Dec as usual. Because they were not frozen out of their roosting quarries and snow never covered cornfields, they didn't leave until Feb and Mar. There were several reports of flocks exceeding 10,000 birds, especially in eastern Berks. A restless flock of 50,000, gleaning cornfields in Maxatawny Twp. 1/27, was cruised by 5 Bald Eagles, one of which almost managed to snag a meal (MW). The bigger the Snow Goose flock, the harder it can be to find Ross's Geese, but one was seen at LO 12/9 (JSp), 2 near Mertztown 2/25 (JH, RG), and one at Shartlesville 2/27 (MW). Two Greater White-fronted Geese at BQ 2/20-21 (MW, et al.) were the only ones reported. Cackling Geese, mostly singletons, were reported at least a dozen times in Canada Goose flocks (m.ob.). Feral Mute Swans (there are still a few sedentary estate swans) were seen singly or paired at a few places, notably Bernhart's Dam and LO (RH, m.ob.). The season's high counts of 114 Tundra Swans at LO (Anon.) and 35 over Henningsville (PS) 12/28 came just a few days after the pre-Christmas storm. A few were sometimes seen through the winter.

Ducks are highlights of the dreary months, and many are reported every winter. It has become expected that migrants will have begun to appear by late Feb, but this year numbers began increasing earlier than that. **Northern Shovelers**, never common, are even less so in winter. One or 2 wintered at BQ, and single birds were sometimes seen elsewhere, with a high count of 5 at BML 12/24 (CE). The **Gadwall** flock that winters around LO numbered about 23 at peak. A **Gadwall x Mallard** drake, occasionally seen since 2015 with the **Gadwall** flock, made one appearance at LO 12/10 (RK). A male **Eurasian Wigeon** arrived with **American Wigeons** at LO 2/5 (MW, m.ob.) and stayed with them through Mar, a typically long sojourn for this rarity. LO is a significant stopover site for **American Wigeons**. A few hundred might be found there for one to three months in spring, often seen stealing aquatic salad from divers like **Ring-necked Ducks** and **American Coots**.

Wintering **American Black Ducks** have been declining for years. The high count was 27 at BQ 1/16 (EB), but most counts were of fewer than 10 birds. One or 2 **American Black Duck** x **Mallard** drakes were seen at BQ 12/20-2/7 (RH, RK), and single birds were at LO 2/6 (TU) and FCSP 2/20 (S&F). Before the Feb surge, 5 **Northern Pintails** were at BQ 12/20 (AZ). On 2/23, 127 were at LO (RK). The usual small flocks (fewer than 10 birds) of **Green-winged Teal** were found on shallow ponds in Dec and Jan, then counts doubled in Feb.

The expected 5 *aythya* ducks were here in the usual order of abundance. Least common was **Canvasback**, 2 of which were fairly regular at Morgantown L., 1/25-2/18 (FH, m.ob.)., formerly a winter hotspot for them. One or 2 others were seen a few times elsewhere. Hardly more common was **Greater Scaup**, 2 of which gave birders nice views at BQ in Dec; there were a few more in Feb. Birders enjoyed regular views of one to 3 **Redheads** at BQ all period. A little surge of 17 **Redheads** at BML 12/25 (Anon.) may have been storm driven. Flocks of one to 10 **Lesser Scaup** bobbed on BML and LO on various dates all period. Several eBirders chose the **Greater/Lesser Scaup** option for a flock of 50 at BML 12/24 (Anon.) and 29 there 12/25 (BL), also probably storm-driven birds. The 12/23 northeaster blew in **Long-tailed Ducks**; one was at BML 12/25-27 (m.ob.) and 5 at BQ 12/31 (RK). Singletons were at LO 2/1 (BL) and BML 2/4 (RK, BL).

One to 6 **Buffleheads** were up and down among the other divers at BQ all period. On 2/26, 40 were at LO (RK). **Common Goldeneyes** began appearing in late Dec, with a high count of 16 at LO 2/6 (RH) during one of the few icy periods. **Hooded Mergansers** and **Common Mergansers** were easily found all winter, greatly increasing in Feb, when counts of over 1000 Common Mergansers were sometimes made at LO. Single **Red-breasted Mergansers** were sometimes picked out of Common Merganser flocks in Feb; 4 to 5 were at BML 2/28 (BL, JSp). **Ruddy Ducks** first found BQ to be an agreeable winter home about 20 years ago. Many visiting birders made counts that ranged from one to 40 Ruddies this winter.

An escaped Northern Bobwhite seen at Berks Leisure Area 2/8 (RH, et al.) was apparently well known to local walkers, who left little stashes of corn for it along the path. Wild Turkeys have been most common on the Kittatinny Ridge, where 104 were found on the HCBC 12/30. The Kittatinny has been the only place to see Ruffed Grouse, one of which was at Northkill Gap 1/4 and 1/30 (KG). Put-and-take Ringnecked Pheasants were seen near SGL 280 and other release sites during the winter. A Chukar was seen at Pheasant Valley Farm, a private gamebird site near Robesonia 1/4 (PJW). One or 2 Pied-billed Grebes wintered at BQ as expected; one or 2 others were occasionally seen at LO and BML. Two Horned Grebes were at BML 12/25 (JS), but after that, all sightings were from LO where one to 3 were seen periodically, mostly in Feb (m.ob.). As many as 15 Eurasian Collared-Doves were reported in Shartlesville this winter. Where all those birds go during the breeding season remains unknown. Like Ruddy Ducks, American Coots have wintered at BQ for 20 years. Counts of the birds this winter ranged from one to 22 (m.ob.).Reports of coots from LO started in Feb, when the high count of 18 was 2/23 (RH).

A birder who arrived early at the BML beach 12/28 made one of the most memorable observations of the season, photographing and audio-recording a flock of 108 **Sandhill Cranes** crowded on a narrow gravelly spit jutting into the lake, where they had roosted overnight (SP). The flock was in view for about 30 minutes before it took flight at 8:50 a.m. This was by far the largest group of **Sandhills** ever recorded in *Berks*. Another flock of 10 to 12 **Sandhill Cranes** was spotted flying low in fog over Rte. 183 near BML 2/23 (JS).

One to 6 **Killdeer** were regularly seen at Bernhart's Dam, a drained reservoir, until 1/22 (RH). Many more appeared around the county in Feb. Two **Least Sandpipers** continuing from fall stayed on the mud at Bernhart's Dam to 12/9 (RH). One of those stayed until 1/16 (RH, ph.), becoming the first recorded on the RCBC 12/18 and the first in *Berks* in Jan. An **American Woodcock** flushed at FCSP 12/18 (TU). Given the mild weather, it seems likely that some overwintered. Birds were reported courting by mid-Feb. Unlike Killdeer, **Wilson's Snipe** were not reported until Feb, when multiple birds were seen.

This winter's rarest gull would have been reported as a Mew Gull until the recent split of that species into Common Gull of Eurasia and Short-billed Gull of western North America confused the identification. The bird in question was crisply photographed on the Dry Brooks Day Use Area beach at BML 12/16 (LSp) resting among hundreds of Ringbilled Gulls. Its darker mantle and short, indistinctly marked bill made it stand out. The bird was not photographed in flight, had left by the next day, and never returned. The photos were shown to a few gull experts, one of whom was comfortable calling it a Short-billed Gull, but the others thought it could not definitively be attributed to either species. For the record, it became a dreaded slash bird, in this case Shortbilled/Common Gull, and dropped into lister limbo. But a Mew Gull by any other name is still a very noteworthy rarity in Pennsylvania and the observers (JSp, LSp) are commended for recognizing its difference and recording it for posterity. A Mew Gull that caused a big stir in Berks and Pennsylvania in 1992 is now thought to have been a Common Gull, perhaps the more likely of the two species to appear on the east coast.

Among many birds blown in by the northeaster 12/23 were 6 **Bonaparte's Gulls** at BML 12/24 (JH) and one at LO 12/25 (RK). A Bonaparte's was seen occasionally with the BML gull flock 1/10-2/4 (m.ob.). The first **Iceland Gull** (first-winter bird) of the season was seen at Conestoga Landfill in New Morgan 12/7 (FH). Two first-winter birds, one lighter than the other, were seen at BML on various dates 12/31-2/14, sometimes on the same day. Counts of one to 7 **Lesser Blackbacked Gulls** made at BML and one to 3 made at LO on various dates were normal winter numbers. A first-winter **Glaucous Gull** was seen at BML 12/28, 12/31, 1/1, and 1/27 (m.ob.). Perhaps 2 birds were involved, one lighter than the other, but both were never present for comparison on the same day. One to 4 **Great Black-backed Gulls** were seen on just a few days this winter.

Gulls intermediate between **Lesser Black-backed Gull** and **Herring Gull** and between **Great Black-backed Gull** and **Herring Gull** have occasionally been seen at BML for a few years (RK). Previously they were left unidentified or, given larid variability, shrugged off as lighter versions of the dark-backed species. Online photos of Lesser Black-backed Gull x Herring Gull and Great Black-backed Gull x Herring Gull from Tullytown (*Bucks*) and other places have made it easier to identify these hybrids. This winter one Lesser Black-backed Gull x Herring Gull was photographed at BML 1/29 (RH ph., RK), and one Great Black-backed Gull x Herring Gull was photographed at BML 12/20 (TU ph., RK).

Ring-billed Gulls and **Herring Gulls** have a penchant for loafing on the beach at BML and have become so habituated to humans that they have allowed approach to within a few yards. This makes it fairly easy to see the birds' legs and any color bands, which identify their place of origin, that they might be wearing. Over the years, many blue-banded **Ring-billed Gulls** that breed on lakes around Montreal have been spotted (RK). This winter's bling wearers included a **Herring Gull** given an orange band as a nestling on the roof of the Portland, Maine, art museum, a white-banded **Ring-billed Gull** from Ontario, and (the farthest wanderer) a **Ring-billed Gull** with a red band from a breeding colony at Duluth, Minnesota (RK). The only reported **Red-throated Loon** was at LO 12/8 (TU). Three **Common Loons** migrated over HMS, one on 12/1 and 2 on 12/8. The last **Common Loon** of the season was at LO 1/4-5 (AW, JSp). Fall's last **Double-crested Cormorant** was at LO 12/8 (RH). Early returnees were one at BML 2/5 (JR) and one at LO 2/25 (AS), with many to come in Mar.

Migrating Golden Eagles were counted at HMS until 12/30. A Golden eating a carcass in an Albany Twp. field 2/11 (CF) was probably wintering. Snowless conditions made hunting easier for Northern Harriers, which were widely reported, most often at SGL 280, Green Hills Preserve, and Pheasant Valley Farm, all of which have voleproducing grassland and old-field habitat. A few Short-eared Owls were seen at some of the same places: one 12/20 (BL), one 12/26 at Reading Fairgrounds (JSp), and 2 on 12/31 (JS). Three Northern Saw-whet Owls were heard on the HCBC 12/30 and one at SGL 106 on 2/18 (DK). The only reported Red-headed Woodpeckers were 3 found on the HCBC at Bordner Bridge 1/5 and subsequently seen by many birders. The story was the same for American Kestrels as for Northern Harriers, both repeatedly seen at the same hotspots. Single Merlins were reported at about 20 places but, unlike American Kestrels, seldom more than once at any location. Peregrine Falcons were reported at 7 scattered sites on various dates through the period. As ever, it was not clear if these were wanderers or Reading's resident birds out hunting.

An Eastern Phoebe near Robesonia 1/30 (MS) was a survivor, while one that appeared near Bechtelsville 2/27 (DW) was an early arriver. It became apparent in fall that this would be another Blackcapped Chickadee irruption year. Single birds were widely reported, often at feeders, and small groups up to 4 were seen in the field all winter. Numbers reported on CBCs, including Bernville's, at feeders and afield indicated that **Tufted Titmice** have been steadily recovering from decimation by West Nile Virus in 2017. Though it was not a Horned Lark winter, a few large flocks were seen, notably 1100 in Mertztown area farmland 1/25 (JH). A lively fall movement of Red-breasted Nuthatches ended early. Passing birds were noted at about 20 places, and a few settled at feeders. A House Wren was recorded at Big Boy Farm 2/13 (CF). Two Gray Catbirds were reported early in the period: one at FCSP 12/8 (TU) and 1/7 (PW), and one near Breezy Corner 1/8 (PW). American Pipits are hard to see on bare earth, but the number of reports indicated that snowless conditions kept some of them around. Flocks were small, the high count having been 30 near Mertztown 2/25 (JH, JR).

Despite hopes aroused by an exciting fall movement of **Evening Grosbeaks**, it was not a boreal finch year. Fall's **Purple Finch** flight petered out by early winter. After Dec, a few birds were regularly reported only at the HMS visitor center feeders. Three **Pine Siskins** were found on the HCBC 12/30, and one visited a Bern Twp. feeder 12/9 (EB). Two **Common Redpolls** flew over North Lookout at HMS 12/14 (MW). That's it.

Lapland Longspurs, associated with snowy winters, were few. One was on Mertz Rd. in Lyons 1/25 (JV) and 2/28 (RK), and single birds were near Mertztown 1/25 and 2/25 (JH, JR). Knowing their rattle calls proved key to finding them in bare fields, where they are nearly invisible. Three sparrow species continued a trend of regular winter occurrence. Chipping Sparrows were seen, mostly singly, at over a dozen places on various dates. Fox Sparrows, maybe infiltrating the uncommon but regular group, were reported singly but sometimes regularly at 7 locations. Ditto the biggest sparrow, Eastern Towhee, one to 4 of which were found at more than a dozen places. A Clay-colored Sparrow, a prized rarity not found by all who sought it, wintered with a mixed sparrow flock along a seedy, weedy edge of BML 1/9 (RH ph.) until 2/19 (m.ob.). The mild, snowless weather allowed overwintering by many more Field Sparrows than usual. Of at least 25 reports, several were of 5 or more birds, including a big count of 15 at Green Hills Preserve 12/27 (CL). Seekers of the Clay-colored Sparrow reported up to 20 White-crowned Sparrows in its associated flock. Illustrative of its drastic decline, Eastern Meadowlark was convincingly reported just once at the end of the period with one at BML 2/27 (LCt). The flock of 36 Rusty Blackbirds found on the RCBC 12/18 provided the winter's highest count. Just 2

others were reported.

Birders reported five warbler species, a remarkable number for winter. An Orange-crowned Warbler was photographed at BML 1/9 (RH) at the Clay-colored Sparrow spot. Experienced birders thought Yellow-rumped Warblers were even less common than usual. One to 3 were sometimes seen, mostly in the Schuylkill R. valley. A Pine Warbler, maybe an early migrant, found a suet feeder in Amity Twp. 2/20 and continued to visit that reliable food source through Mar (RS ph.). An adult male Wilson's Warbler (first winter record) visited a suet feeder hanging just outside a window of a house near Bernville 11/22-1/14 (BB ph.). The bird often hovered at the window, probably fighting its reflection. Best of all, a Townsend's Warbler, a first Berks record, was seen 12/18-21 in a residential neighborhood near Reading Airport. The bird tended to appear in early morning on the sunny side of a Norway spruce in the backyard of the observers (JSp, LSp), where it was photographed 12/21 (RH), then it would disappear for the rest of the day. The neighborhood's gardens contained many mature ornamental conifers in which the bird probably roosted and fed. It was last seen two days before the strong northeast storm 12/23.

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Blair County

Locations: Bells Gap Trail (BGT), Bellwood Trolley Trail (BTT), Canoe Creek State Park and IBA (CC), Clubhouse Drive Pond (CDP), Fort Roberdeau (FR), Little Juniata River (LJR), Plummer's Hollow (PH).

A mild early December gave way to sub-zero temperatures around Christmas, but the rest of the season returned to mild conditions. There was little snowfall during the season. Most lakes and even smaller ponds did not freeze up for more than brief periods.

A total of 103 reported species included some rare and uncommon visitors, such as two **Cackling Geese** on Lakemont Pond 1/16 (JC), a flock of 9 **Red Crossbills** at CC 1/1 (JK), and a **Cape May Warbler** during the CULP CBC at FR 12/17 (m.ob.).

There were 23 waterfowl species sighted. **Tundra Swans** first wandered through on 12/28, when a flock estimated at 25 was reported over PH (DB) heading southeast; 2 more were seen at CC on 1/2 (JC). Migrants over PH began appearing almost daily starting 2/18, most recorded by nocturnal microphone, with a few diurnal flocks of up to 75 2/23 (DB); elsewhere, 69 were at CC 2/24 (JC, ph.).

Single **Wood Ducks** were recorded at PH along the LJR from 1/8 through the season (MB), including several records of the same male at a pond. Five lingered at CC for the CULP CBC 2/17 (M&LJ) and a migrant returned there 2/24 (JC); migrants were also at the TWL: 4 on 2/23 (JC) and 3 on 2/28 (MK). A single **Northern Shoveler** moved between two locations near the LJR below Altoona and was recorded several times from 1/11 (MN) to 2/5 (JC, MK). Wintering **Gadwall** were at three locations: a single at PH 1/31 (MB, ph.), 3 at Beaver Dam Rd near CC 1/1 (JK), and 6 at CC 1/29 (EB). Migrants began appearing 2/17 with 6 at CC (JC), 1 at a pond near Bellwood 2/23 (MK), 3 at CC 2/24 (JC), and the first nocturnal detections over PH on 2/27 (MB).

An **American Wigeon** stayed on a pond at PH, moving to the LJR nearby when the pond froze, through 12/10 (MB) and presumably the same individual, accompanying a flock of 40-75 **Mallards**, returned to

the pond on 1/3 and stayed until 1/24; it returned on 2/24. Other American Wigeon reports were apparently of migrants: 2 in Turkey Valley on both 2/19 and 2/25 (MK), and detections at CC: 2 2/17 (JC); 8 2/20 (MK); 6 /24 (JC). One to 6 **American Black Ducks** were seen at multiple locations around Bellwood and the north end of Altoona from the 12/17 CULP CBC (JC) through the season, including at a wetland where 6 were seen together 1/19 (MK); one or 2 were seen almost every week at BGT from 1/10 through the season (JC).

Five **Northern Pintail** were seen on the CULP CBC (m.ob.) at Fort Roberdeau and at or in the vicinity of CC. The species reappeared 2/24 at CC where 2 were seen (JC ph.)

An all-time county high of 22 **Green-winged Teals** were at the Army National Guard Readiness Center Pond 12/9 (PI); the observer saw 3 there again on 1/5. One was at Watts Rd Pond 12/17 and 1/16 (JC), 1 at a wetland nearby 1/17, 1/22, and 2/5 (mk), 3 were seen at Royer Mansion 1/22 (DG, GG) and 2 at the Beaver Dam Rd Pond 2/5 (JC); migrants were detected beginning with 15 on 2/24 at CC (JC).

Two **Canvasbacks** were at CC 2/17 (JC). Three **Redhead** were at CC 1/14 (MK), with migrants there beginning with 10 on 2/24 (JC). Between one and 4 **Ring-necked Ducks** were present from 1/1 to 1/21 in the Canoe Creek area (m.ob.), and migrants began 2/24 with a high count of 27 at CDP 2/26 (JC). Two **Lesser Scaup** were at CDP 1/21 (JC) and migrants began passing through around 2/24 there and at nearby CC with high counts of 8 (JC, JK). **Greater Scaup** were only at CDP and CC, 2 each, on 2/24 (JC).

Long-tailed Ducks barely made the period with two nocturnal detections over PH on the evening of 2/28. Four **Bufflehead** were at CC 12/4 (MK) and two during the CULP CBC 12/17 (M&LJ), with migrants beginning there with 3 on 2/23 (MN).

All three mergansers showed up, with **Hooded Merganser** spending the winter at multiple locations, including CC's high count of 30 2/27 (JK) but also at Lakemont Park Pond from 1/19 onward in numbers up to 25 (m.ob.) and one at Penn State Altoona 1/10 (MK). The dominant location for wintering **Common Mergansers** was along the Little Juniata River above and below Tyrone, with up to 6 at a time over PH prior to migration (MB), and a high of 23 2/28 (MB). A lingering pair of **Redbreasted Mergansers** was seen 12/4 at CC (MK). Finally, a single **Ruddy Duck** was seen 1/10 at CC (JC) and migrants were first recorded—a group of 6—at CC 2/24 (JC).

Single **Ruffed Grouse** were recorded at one county location, PH, 12/18, 1/1, and 1/19 (DB, MB), where extremely low numbers persist.

Prior to spring migration, the sole grebe sighting was of a pair of **Horned Grebes** at CC 1/13 (JK). Otherwise, this species first appeared at CC 2/23 (a pair, ph. MN), while **Pied-billed Grebe** first appeared at TWL 2/23 (JC) then CC 2/25 (MK) and 2/27 (JC), all records of single individuals.

Both regular gull species made appearances. **Ring-billed Gull** first appeared during sub-zero temperatures over Tyrone and PH 12/24 (MB); a flock of 13 went over PH 1/8 (MB), and spring migrants appeared regularly over PH beginning 2/17, often vocalizing at night (MB). Elsewhere, they first appeared at CC 2/12 (m.ob. through Feb) including a high of 41 on 2/17 (JC). **Herring Gull** was limited to a single sighting of 4 on 2/6 over PH at dusk (MB).

After a six-week absence, **Black Vultures** returned 1/1, showing up over PH and Tyrone (MB). A flock of 22, including a single kettle of 19, an all-time high for *Blair*, followed behind a flock of 25 **Turkey Vultures** at dawn over Tyrone and PH 2/10 (MB). Black Vultures over Tyrone and PH in the depths of winter probably derive from the over-wintering groups to the northeast in *Centre*.

The **Golden Eagle** migration along the Bald Eagle Mt-Brush Mt migratory corridor wrapped up with sightings of single individuals at PH on 12/1, 12/4, 12/8, and 12/18 (MB); a single wandering individual was sighted on a windy 1/14 at PH (MB) and the first spring migrant 2/23 (MB), also at PH. Elsewhere, an individual was sighted in Canoe Valley 12/17 during the CULP CBC (CE, KE).

All-time county eBird high numbers of woodpeckers were a feature

of the season, with 19 **Downy Woodpeckers**, 7 **Hairy Woodpeckers**, and 8 **Pileated Woodpeckers** on the same list 12/17 at PH (MB). A lone **Red-headed Woodpecker** was observed at FR 12/17 during the Culp CBC (MK).

The stand-out owl of the season was a **Short-eared Owl** 1/4 in Sinking Valley (JC); the species has been reported sporadically from the valley in winter over the last half-century, though several sightings are not in eBird.

Peregrine Falcons were sighted three times this winter, including singles at PH 12/18 and 2/8 (MB) and one at the Ray d'Amato Trail 2/14 (JC). Becoming more common in winter, **Merlins** were reported at Tyrone and PH 1/28, 1/31, and 2/24 (MB), Bellwood 1/12 (Anon), and Altoona 2/16 (MK).

Three **Fish Crows** interacting with **American Crows** surprised the observer at a private residence in Altoona 2/16 (MK).

Horned Lark had a rather mediocre showing, with singles and pairs at scattered locations through the season, but Sinking Valley came through with an estimated 143 during the CULP CBC 12/17 (MK and JC at 3 locations).

Ruby-crowned Kinglet was at SGL166 12/17 during the CULP CBC (MK) and one was found at CC 12/10 (JC), and from 1/7 to 1/29 (one by m.ob., and 2 by MK 1/14).

Red-breasted Nuthatch apparently left the county in Dec after good numbers all year but was found in Altoona and Tyrone (MK) and at CC (JC) at various times during the winter.

The wild grape crop in PH was responsible for high counts of **Cedar Waxwings** (185 on 12/11, MB) and **American Robins** (400 on 12/11, MB), but numbers diminished rapidly as this resource was exhausted, with county-wide numbers of both species much lower in the new year, including handfuls of waxwings at CC and urban locations through the season (m.ob.).

Other than the Red Crossbill noted above, the only significant winter finch appearance was the sole report of **Pine Siskins**, 3 seen the Martinsburg area 2/19 (SK).

Field Sparrows were found at CC with reports 12/10 (3 individuals), 1/14-1/16, and 2/26 (all JC) and at PH (1/1, 1/21, 2/4, 2/12); they were not found in preferred winter locations on every attempt, so it is possible that birds detected after the new year moved in from other locales. American Tree Sparrows were seen in numerous locations, with highs of 27 at CC 1/15 (MK) and 21 at BTT 1/3 (JC). One Savannah Sparrow was seen 12/17 at PH during the CULP CBC, quite rare for Blair in winter. Fox Sparrows lingered until Dec at PH, with 2 on 12/14 and one on 12/11 (MB), while another was found at a feeder near Bellwood 2/21 (JC). White-crowned Sparrows were reported from Sinking Valley and environs in numbers up to 12 in Dec (MK), and 1/29 at CC (EB). Between one and 4 Swamp Sparrows were recorded at CC through the winter (m.ob.), with a single at Moorhen Marsh on 12/17 during CULP CBC (JC). Finally, continuing a yearly uptick in overwintering individuals, Eastern Towhees never left, with two males spending the winter in an east-facing thicket at PH (MB), and a single at a private home outside Bellwood, where they visited the feeder regularly (JC).

A single **Eastern Meadowlark** was at BGT 2/9 (JC). **Red-winged Blackbirds** stayed the winter in the valleys (m.ob.), as did **Common Grackles** and **Brown-headed Cowbirds**. Mixed flocks of these species, representing up to a few hundred total individuals, were seen between Tyrone and Altoona at multiple locations (m.ob.). The largest Brownheaded Cowbird congregation ever for *Blair* eBird, of 303, occurred at Crissman Farm outside Hollidaysburg on 2/20 (CC).

Other than the Cape May Warbler, the only warbler species reported was **Yellow-rumped Warbler**, including a single at PH 2/26 (MB) and at CC 12/2-2/7 (m.ob.) with the high count of 7 on 12/10 (JC).

The CULP CBC was started in 1969, but this was the first year species numbers topped 72, though not all recorded species and numbers were from *Blair*, as the circle also includes part

of Huntingdon ("H" in the table).

Culp CBC:	Notable \$	Species	and	Numbers	

	Wood Duck	5	Carolina Wren	70
	Northern Pintail	1	Hermit Thrush	9
	Bufflehead	2	Eastern Bluebird	100
	Lap. Longspur (H)	1	American Robin	801
	Horned Lark	403	Eastern Towhee	2
	Golden Eagle	1	Field Sparrow	6
	Bald Eagle	8	Dark-eyed Junco	921
	Red-tailed Hawk	45	Carolina Wren	70
	Northern Harrier	5	Sav. Sparrow	1
	Mourning Dove	139	WC Sparrow	32
	RH Woodpecker	4	WT Sparrow	467
	RB Woodpecker	66	Swamp Sparrow	1

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Bucks County

Locations: Bradford Dam (BRD), Christmas Bird Count: Central *Bucks* (C-CBC), Southern *Bucks* (S-CBC), Upper *Bucks* (U-CBC); Core Creek Park (CCP), Maple Knoll Farms in Buckingham Township (MKF), Nockamixon State Park (NSP), Peace Valley Park (PVP), Penn-Warner Tract (PWT), Pine Run Dam (PRN), Quakertown Swamp (QTS), Silver Lake Park (SLP), Tullytown Landfill (TUL).

Overall, December was close to average in temperature ($-0.8^{\circ}F$) and precipitation ($+0.40^{\circ}$). December featured a brief but powerful cold snap at the end of the month, shaking up the waterfowl "snow globe" a bit. After that, temperatures were exceptionally mild with little to no snow. January was outlandishly warm ($+8.5^{\circ}F$) with average precipitation ($+0.36^{\circ}$). February continued the hot streak ($+5.3^{\circ}F$), with a small decrease in precipitation from the average (-1.39°). The total of 131 species brings our five-year winter average down just a shade to 135. Some seasonal goodies like gulls and geese attracted birders, but there were few outstanding rarities.

The 55th U-CBC was on 12/18, a little bit breezy after overnight showers but with seasonable temperatures. Although the species count of 94 was about the average of the past 10 years, the 25,557 count of individuals was below average. The 57th C-CBC occurred on 1/1, featuring mild temperatures but extensive ice cover following a cold snap. The 83 species were near the average for this count, but again the 21,871 individual count was low. Six new high count records were set, a better number than last year. The 76th S-CBC happened on 12/17 amid mild temperatures and breezy weather. Just like the other two counts, the 100 species were right on average, but the 54,629 individuals were low (in this case by a lot). Please note that every area has at least some space in a different county. Thanks to Mark Gallagher for the S-CBC, Diane Allison for the C-CBC, and Bill Etter for the U-CBC for providing summaries and/or spreadsheets, as well as August Mirabella for compiling general notes and observations. Ken Kitson's 1998 Birds of Bucks County and past updates from this journal were referenced for some historical information.

Snow Geese were generally not reported in large numbers, even of flyover flocks. The largest estimate of 1650 was of a flock sitting on ice in Springfield Twp 12/31 (JBH). The 1510 Snows seen on the C-CBC furnished a new high count. No Ross's Geese were seen this winter, which is mildly surprising considering the increase of reports in the past decade or so. **Greater White-fronted Geese** were reported as usual, though. One was at Churchville Park 12/4 (SM), the first report of the winter. One in Upper Makefield Twp near the Delaware R. 1/8 (MG) could have been the same as one reported nearby on 2/6 (CPI). Many birders went to see one at PVP and surrounding fields 1/14-29 (TF). Two other reports came in Feb:one from Buckingham Twp 2/16 (AG) and one in Solebury Twp 2/20 (KH). It was difficult to tell how many different geese these reports represented.

Always a popular rarity, a **Pink-footed Goose** was found at a private farm preserve in Upper Makefield Twp 1/4 (RS ph.). It soon relocated to nearby MKF, and birders saw it in that area up until 2/18 (PR). **Cackling Geese** were reported widely, but this winter some large numbers were seen. Eleven were counted at Core Creek Park 12/17 (CM, JV), and several groups totaling 13 were seen at PVP 12/29 (AM, CR). The latter group furnished a new *Bucks* high count, and the S-CBC total of 20 beat last year's record by one. The top tally this season of 62 **Mute Swans** came from PWT 1/5, a typical location for those numbers (DD). **Tundra Swans** were seen at four locations, including some good modern-day winter flocks. Thirteen stopped at NSP 12/28 (KC). At PVP, up to 35 were on the ice 12/28 (ED), and 40 were reported flying over the next day (LT).

Twenty-one duck species were reported, a bit lower than average. Seasonal high counts for several dabbling duck species included 31 **Northern Shovelers** at SLP 1/21 (DD), 36 **Gadwalls** at the same site 1/19 (Michael David), 11 **American Wigeon** at Pine Run Dam 2/11 (MGr). Among a group of 10 wigeons at PWT 1/1, one male was of the handsome cream-headed "Storm Wigeon" variant (DD ph.). Better counts of 166 **Mallards** at PVP 1/1 (SL) and 53 **American Black Ducks** at L. Towhee CP 1/22 (AM) were not exceptional, but very low compared to historical records.

The largest report of 24 **Northern Pintails** at PVP 2/24 (TF, RS) was almost certainly a migrating "spring" flock. Continuing numbers of **Green-winged Teal** from autumn included 45 at BRD 12/4 (AM). **Canvasbacks** were well-reported, especially from the Delaware R. where they may not be carefully searched for every year. High counts from the river included at least 81 at Mud Island 2/19 (DF) and 43 at Neshaminy SP 2/21 (DB ph.). Inland site high counts included 3 at NSP 12/5 (AH) and 9 at PVP 12/25 (DL).

Redheads were seen in quite good numbers, too. High counts from four sites included 2 at Core Creek Park 1/14 (MG), 7 at NSP 1/21 (SG, SM), 16 at PVP 12/25 (KI), and a great count of 29 at PWT 2/5 (DD). Ring-necked Ducks typically have chosen quieter, wooded ponds during winter, and 116 were in a favorite spot at SGL 56 on 2/15 (EB). Greater Scaup were reported from six locations, half of those on the Delaware R. where the species is typical. The high of 20 were seen at Mud Island 2/22 (MGr), with low single digits at the other sites (m.ob.). Lesser Scaup can sometimes be less frequent than Greater during midwinter, but a conservative count of 182 at PVP 12/24 (DF) bucked that trend. Such large flocks are more often observed during spring rain fallouts, but even then, this tally was the highest for any season since 2014. A short but severe freeze could have been the factor in this latest high count. Numbers at five other sites did not exceed 10 individuals (m.ob.). One male White-winged Scoter at PVP 12/11 was the only scoter reported for the period (IB, KR). Long-tailed Duck was present, but lightly reported. At least one was at NSP 12/4-1/16 (SG, m.ob.), and a female-type was at PVP 12/8 (AM). Two males stopped at PWT 1/15 (DF). A distant pair on the Delaware R. was observed from the Bucks side at Mud Island 2/19-21 (DF, BF). Two counts well above recent averages of Common Goldeneye occurred at their usual haunts, with 48 at NSP 2/11 (TF) and about 60 on the Delaware R. in Morrisville 2/19 (DF). Up to 51 Hooded Mergansers were at SLP, with that tally on 1/16 (AH). Larger groups like these are uncommon but can occur at this site. Most estimates of the Common Merganser mob at PVP reached about 2000 birds, a typical but always impressive total at this site (m.ob.). Up to 2 Red-breasted Mergansers were at PVP on both 2/5 and 2/11 (AM), with single birds at three other sites (m.ob.). Ruddy Duck was widespread, but in small numbers. Larger flocks used to winter at PWT, so the highs of 31 there on 2/8 (DD) and about 40 on other dates (DF) were very low by historical standards.

A few Horned Grebes were reported at four sites, with a high of 4

birds at NSP 12/26 (MS). One to 2 **Virginia Rail** were at QTS 12/18 and 1/28, including on the U-CBC (DF). Not everyone reports **American Coot** numbers when they visit the PWT area, where the species winters. One visiting group of gull-watchers did report 140 at the neighboring TUL 1/21 (BQ, m.ob.). Other counts from PWT were higher, such as 170 on 1/22 (DF). PRD's faithful pair of wintering **Sandhill Cranes** were back on 12/9 (KI), staying through the period (m.ob.). **American Woodcocks** are tricky to find outside of displaying season, which begins in late Feb (m.ob.). Singles were at BRD 12/20 (GJ) and at QTS 1/28 (DF). **Wilson's Snipe** winters in small numbers at BRD most years, but a group of 18 there 2/25 (VP) may have included migrants. Another pair of snipes was at SLP 2/14 (DD).

SPECIES	U-CBC	C-CBC	S-CBC	TOTAL	
Bonaparte's Gull				0	
Ring-billed Gull	1062	442	1415	2,919	
Laughing Gull			1	1	
Herring Gull	60	108	21,286	21,454	
Iceland Gull	1		13	14	
Lesser Blbacked Gull	479	127	637	1243	
Herring x Lesser Bl. Bk.			8	8	
Glaucous Gull			1	1	
Herring x Great Bl. Bk.			1	1	
Great Black-backed Gull		2	327	329	
TOTAL	1,602	679	23,689	25,970	

Bucks County CBC Gull Totals (Dec 2022 - Jan 2023)

Eight gull species were seen, an average total for the winter season. Bonaparte's Gull was only seen at PVP, with a high of 5 on 12/26 (MS). A Laughing Gull seen by several groups at PWT 12/17 was a rare bird for the S-CBC, just the second occurrence in the past decade (TJ, m.ob.). Iceland Gull reports were from seven sites, with multiple individuals at three sites (m.ob.). Judging by the number of adult and immature birds reported at each, conservative high counts at these locations included 4 at PVP, 7 at NSP, and 16 at the TUL. Carefully studied birds of the thayeri subspecies included an adult at NSP 1/8-9 (DF) and an immature at the TUL 12/17 (TJ, LH, GA, JW, EZ). Numbers of Lesser Black-backed Gulls at their NSP hotspot swelled to a high of 751 on 1/14 (DF). Their cumulative CBC total surpassed 1000 birds by quite a few. The story is not finished on Lesser Black-backs in Bucks and farther afield, it seems. An immature Glaucous Gull at NSP 1/14-15 is not an annual bird for that location (DF ph.). Another Glaucous was seen on the S-CBC at TUL 12/17 (TJ, LH, GA, JW, EZ). A second party of TUL fans discovered 2 Herring x Glaucous Gull hybrids there on 1/21 (BQ, m.ob.). See the table above for a more orderly picture of CBC gull totals:

Red-throated Loon was missed for the past two winters, but not this year. Two stopped at PVP 12/8 (AM), and one was photographed nicely at NSP 12/29 (CP). **Common Loon** reports were light at three locations, with a high of 2 at Neshaminy SP on 12/17 (RA, RM). Site high counts of **Great Cormorant** on the Delaware R. totaled 20 birds at eight sites (m.ob.), including a typical count of 8 in Bristol Twp. 12/3 (DF).

An immature **Golden Eagle** was described at PVP 2/25 (JBH) in a good window for this early migrant. **Northern Harrier** reports were only slightly fewer than last year, and the cumulative CBC total of 7 was the same as last year. Eighteen **Cooper's Hawks** on the S-CBC tied that count circle's record. The C-CBC set a new high count of 26 **Bald Eagles**, positive news for them. For several years, there has been a sharp spike in **Red-shouldered Hawks** on the CBCs. This winter continued the trend, with a record 11 on the S-CBC. Throw in the C-CBC's record of 21, and the cumulative CBC tally of 54 was a new all-

time high. Perhaps last winter's lower numbers were an anomaly.

This winter, CBC totals for Eastern Screech-Owl did not even break 100, with 98 tallied. A light morning rain will have to suffice as an excuse for low totals on the prime U-CBC turf. After many birders called for increased caution in reporting sightings, Long-eared Owl has finally been marked a "sensitive species" in eBird. One to two Long-ears wintered at PVP through the end of the period (DF, KI). A Great Horned Owl in the same roost area 1/16 could be a concerning sign for the smaller owls (DB). The CBC total of 26 Great Horneds was somewhat improved from last winter's historical lows. Reports of Northern Sawwhet Owls outside of the CBCs came from an upper Bucks site 12/4 (DF), PVP 1/29 (JF vr.), and Bensalem Twp 2/23 (DB). One on the S-CBC was the first in that circle since 2007 and just the eighth occurrence in 76 years. Four were on the U-CBC, a good number for that circle. A big woodpecker surprise came in the form of missing Red-headed Woodpecker completely this winter. An increase in known breeding sites lately made this even more surprising. Other woodpeckers were doing fine, however. Red-bellied Woodpeckers set a new S-CBC high count of 160, passing the previous high by 2 birds. Likewise, 54 Hairy Woodpeckers on the S-CBC were a significant step up from the previous record of 40. A record 51 were detected on the C-CBC, too. Eight American Kestrels were the best S-CBC tally since 2002, but neither of the other two circles had above-average kestrel totals. Merlin totals have been increasing over time, but the CBC total of 5 was fewer than in most recent years. Between the three count circles, 5 Peregrine Falcons were not exceptional either.

Eastern Phoebe made it on the S-CBC for the second consecutive year, and just the tenth overall. Common Raven used to be unheard of on the S-CBC, but this year's record count of 2 felt more like a formality than a fourth count-circle occurrence. Including the C-CBC's new record of 27 ravens, the cumulative count total of 39 reached new heights for this species in Bucks. Black-capped Chickadees had a decent irruption winter, with birds scattered neatly across the county (m.ob.). Several experienced birders felt that they were seeing a few Black-capped x Carolina Chickadee hybrids in areas significantly south of the known hybrid zone. Longtime chickadee researcher Dr. Robert Curry has stated that more research is needed on this, and migration movements of hybrids are unknown but not out of the question (fide AM). Both Carolina Chickadee and Tufted Titmouse numbers jumped up significantly from the ghastly numbers of the past few winters. Although totals haven't been up to historical averages, at least the U-CBC and C-CBC showed a sharp short-term increase. Horned Lark reports came from eight locations, but the high of 73 at a farm neighboring MKF 1/30 (AM) was on the lower side of average. A late Northern Rough-winged Swallow continued from the fall until 12/3 (Kiehl Smith) and 12/5 (AH) at NSP, a more northerly location than usual for late Rough-wings. Like the chickadees, Red-breasted Nuthatches were widely scattered at 40 or so sites across the county through the winter (m.ob. ph.). The single-site high count of 7 at NSP 12/18 demonstrated their winter showing well (SG), as did the cumulative CBC total of 29. Carolina Wren numbers weren't exceptionally high across the board, but the C-CBC's tally of 216 was a new high count for the circle.

A **Blue-gray Gnatcatcher** was outstandingly photographed at PWT 12/11 (DD), the only eBird record for the whole state this winter. Non-CBC **Gray Catbird** reports came from PVP 12/3-4 (JM, KI), Churchville Park 12/5 (RS), and NSP 1/31 (DF). Catbird was a surprising miss on all three count circles. The U-CBC had 2 **Brown Thrashers** and the C-CBC had one; the species is scarce in either circle. On 12/4, an observer familiar with *Catharus* thrushes carefully described a **Swainson's Thrush** in his Newtown Borough yard (BS). This would furnish the first winter record of Swainson's in the county, although prior winter records have occurred in Pennsylvania. The only significant **American Pipit** flocks were of 40 birds on the U-CBC 12/18 (DF) and 37 at MKF 12/9 (RS). The former number made for a new U-CBC high count by far. Most of the **Purple Finch** eBird reports from 19 locations were during the first half of the season, including 12 female-types at BRD 1/5 (MGr). An

outlier to this pattern was a group of 13 in Bensalem Twp 2/15, including 2 bright males (DB). Although other exciting winter finches were seen during the fall season, winter only added **Pine Siskin** as an additional irruptive species. Singles were seen or heard in Nockamixon Twp 1/15-2/28 (JBH, RS), Bensalem Twp 1/30 (DB), and in Lower Makefield Twp 2/9 (EJ). With snow in very short supply this winter, both Lapland Longspur and Snow Bunting went unreported.

Chipping Sparrows were not quite as numerous as last winter, but clearly there are numbers now wintering in the county. The sum of non-CBC high counts from 11 locations was 28 (m.ob.). Doing the same for **American Tree Sparrows**, a declining species, totaled 26 birds at 12 locations (m.ob.). Chipping again outnumbered American Tree on the CBCs. One of the sites mentioned above, in Plumstead Twp, reliably held a small flock of up to 7 tree sparrows (KI). That same roadside site held up to 19 **White-crowned Sparrows** through much of the season, a good total for one location nowadays (m.ob.).

Among the blackbird family, Eastern Meadowlark was a concerning miss on all CBC circles and was not reported in eBird anywhere in the county. Wintering **Baltimore Orioles** are a fairly new occurrence in the county (and state!), and new distribution patterns might be emerging. Three of the five locations this winter had a bright male oriole, whereas prior winters have included mostly females and immatures. Singles were in New Britain Twp (KC) through the whole period, at Upper Southampton Twp 2/4-28 (CM), MKF 12/21-25 (RS), and in Yardley 1/5-12 (SH). The Lower Makefield Twp yard that has hosted many orioles the past few winters had up to 3 this time (CF). Most counts of **Rusty Blackbirds** were low, just 12 birds at SLP 12/17 and 2/18 (DD). At QTS on 1/28, though, at least 29 and possibly over 75 Rusties were observed (DF).

Four warbler species were found this season, most of them now familiar to *Bucks* birders as winter warblers. Four **Orange-crowned Warblers** were seen in the lower part of the county, consistent with the species' regularity in neighboring *Philadelphia*. One stayed at SLP through the winter until 2/7 (DD, JV). One was on the S-CBC at PWT 12/17 (DF, BW), and singles were at feeders in nearby Lower Makefield Twp (RRF) and Newtown Twp (BS, PS) during Jan and Feb. A **Nashville Warbler** was a great bird for the S-CBC, just the second count-circle record. **Pine Warblers** were at six locations, with a high of 3 at SLP 12/17 (m.ob., DD). The S-CBC total of 4 Pines outnumbered **Yellow-rumped Warblers** by one. Besides just being a fun fact, this illustrated the light winter in *Bucks* for Yellow-rumps in general. **Northern Cardinal** numbers jumped much closer to historical averages this year, a good sign for them.

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Butler County

Locations: Bear Run Boat Launch (BRBL), Lake Arthur (LA), Lake Oneida (LO), North Shore (NS), Seven Hills Road (SHR), Slippery Rock (SR), South Shore (SS), Waterfowl Observation Area (WOA).

Migrant ducks were present in low numbers through December into January but disappeared after the third week of January when lakes Arthur and Oneida froze over. After a flurry of **Red-breasted Nuthatches** in November, some thought that it might be a good winter incursion but

most reports were of less than 5, the exceptions being 12 seen at Moraine State Park's South Shore entrance 1/8 (MC) and 27 in small groups there 1/22 (MC). In January, 24 inches of snow fell over five days in Slippery Rock and, shortly after a 10-inch snowfall, an immature **Baltimore Oriole** appeared at a feeder there 1/17 (GW). Otherwise, it was a non-descript winter season. No Evening Grosbeaks, no Redpolls, no Scoters, no Trumpeters, no rare gulls despite a few being seen in nearby *Allegheny*.

The winter months usually produce at least several hundred **Canada Geese** roosting at LA, but in Jan LO hosted up to 730 on 1/11, dwindling to 500 on 1/16 and 250 by the end of the month. A **Mute Swan** was seen at BRBL 1/15 and one, probably the same bird, was at South Shore the next day (m.ob.). Fifteen **Tundra Swans** were at BRBL 12/12 (MV), and 9 were at SS the same day (MC). They were not reported again until the first week of Jan, when flocks were seen at five different locations including 81 near Chicora 1/9 (SB)

Most **Wood Ducks** were gone by Dec, but one late bird showed up at LO 1/2 (KB). Up to 6 **Blue-winged Teal** and up to 12 **Northern Shovelers** remained at the WOA through 12/24 (m.ob.). Double-digit totals of **Gadwall** grazed there through early Jan after LA froze over. Seven tallies were in the high 30s with the high count of 47 at WOA 12/5 (RN). **American Wigeons** were scarce with only three reports, all from WOA 12/19-1/1, while **Mallards** were present through the season with the migrant push in early Dec featuring totals of 96 and 100 at WOA 12/2-5 and 109 there 12/16 (GK, MAK, MV). Low numbers of up to 10 **American Black Ducks** associated with Mallards through Dec until 1/21, most at LA (m.ob.).

Northern Pintail and Green-winged Teal were also scarce, each species making less than six appearances until mid-Jan. Fourteen **Redheads** gathered at North Shore 12/18 (MC) and a flock of 20 was at SS 1/10 (GK, MAK); 10 **Redheads** appeared there 1/16 (KB). Before the big lakes froze over, **Ring-necked Ducks** were much more numerous with close to 30 reports, most from LA. However, when the early migrants arrived 2/27, all Ring-neckeds were at LO. Most **Ring-necked Duck** reports were single digits, but a nice tally of 86 was seen at Johnson Road 1/8 (DB). Only a handful of **Lesser Scaup** reports came in but the high count was 31 at SS during the Bartramian Audubon CBC 12/18 (MC, RW).

Bufflehead were plentiful with up to 17 present continually at LA through 1/19 (m.ob.). **Common Goldeneyes** were much scarcer with only six reports of up to 3 birds seen. **Hooded Mergansers** and **Common Mergansers** were plentiful before the lakes froze with up to 98 Hoodies at SS 12/4 (GK, MAK) and 80 Common Mergansers at LO 12/1 (KB). Five reports of **Red-breasted Mergansers**, all from LA, were capped by a high count of 54 at SS 1/19 (EH). **Ruddy Ducks** reflected the overall underwhelming picture with a high count of 75 at SS 12/1 (MC), then steadily decreasing in numbers through 1/21 (m.ob.). Overall, 18 duck species were reported, with no really high counts.

The only **Ring-necked Pheasant** report was from Christy Road 12/30, and the only **Ruffed Grouse** reported was at Butler-Freeport Trail 2/15 (LC). The Game Commission has been reporting declining **Wild Turkey** numbers and has requested that reports of turkey flocks be submitted by the public to facilitate trapping and applying GPS trackers. The birds will not be moved but rather released on site to help monitor populations and to launch a large-scale hen study. **Wild Turkey** numbers here seem to have been steady with flocks of 55 at Kelly Road 1/1 (KB) and 41 at Stoughton Road 2/19 (MC), along with a number of widespread smaller flocks.

Pied-billed Grebe and **Horned Grebe** were both reported less than ten times, all at LA, with the high count of Pied-billed Grebes being 11 at SS 12/4 (GK, MAK), while Horned Grebes were seen only as singles or twosomes. **American Coots** were scarce with only three reports of one or 2 birds. The first **Sandhill Cranes** seen were 4 at Swope Road 2/20 (MC), followed by one or 2 spotted at SGL 95 through the end of the month. **Killdeer** arrived on schedule at the end of Feb, and an early **American Woodcock** appeared at SR 2/28 (BB). The only **Bonaparte's** **Gulls** seen were 2 at LA during the Bartramian Audubon CBC 12/18 (MC, RW). **Ring-billed Gulls** have often gathered in large number at LA during the winter, as 343 were present 12/2 (GK, MAK), with numbers increasing to 500 by 12/6 (MC) and reaching a high count of 700 on 12/14 (ST). By the time the lake froze in Jan, numbers had decreased to under 100. Smaller numbers of **Herring Gulls** appeared at LA 12/2-1/14 (m.ob.). **Common Loons** made a paltry showing, most sightings being single birds 12/2-1/1.

Turkey Vultures only started appearing 2/16. **Northern Harriers** were seen sporadically through the season at various locations. Three were seen at Stoughton Road 2/27 (MC). Not often seen in *Butler*, a **Rough-legged Hawk** was seen at County Line Road 2/8 (RS), one visited Reichert Road 2/11 (MAK, GK) and one was enjoyed at nearby Miller Esker 2/15 (OM), perhaps the same bird, as both were dark phase. **Red-headed Woodpeckers** were reported periodically through the season at Claytonia Road (BB). A **Merlin** was scoping out a feeder near Portersville 12/24 (MC), and one was seen in the area several times in Feb (MC, EH, RN). A **Northern Shrike** flew over SR's Elementary School 1/26 (GW).

One or 2 **Common Ravens** continued to be seen intermittently in various locations, which was intriguing because, as far as the author can determine, Ravens have not been conclusively confirmed to be breeding in *Butler*. A pair was described as courting in Cranberry Twp 2/28 (AH): "Around 10 am: circling together over the front woods. They joined in the air briefly multi times appearing to lock toes and then did a synchronized dive and roll very close together until they disappeared behind the treeline. I think they are in love."

American Robins were plentiful through the season with many remaining in the same areas, evidently finding abundant food, including over 100 staying at SR 1/31 through the end of the season. (GW). A few nice tallies of **Cedar Waxwings** were enjoyed, including 120 feeding with 400 European Starlings at SS 1/10 (MAK, GK) and 175 at WOA 2/26 (MC). The lone report of **American Pipit** came from Porter's Cove 12/5 (RN). Consistent with the decline of **American Tree Sparrows**, most reports were of small numbers, but a fine total of 80 foraged at BRBL during the Bartramian Audubon CBC 12/18 (MC, RW). **Fox Sparrows** frequented the evergreen groves at the Pleasant Valley entrance to Moraine SP through Jan where up to 8 were seen foraging along the road with up to 60 **White-throated Sparrows** (MC, ST).

A cis-montalis Dark-eyed Junco was photographed at SHR 2/4 (KB). More frequently seen during migration, up to 8 White-crowned Sparrows were seen in various locations 1/15-2/19. Small numbers of Red-winged Blackbirds were present in several locations from 1/2 through the end of Feb. Unusual among the reports was an estimated tally of 220 at Wright Road 1/2 (KB) and 75 at Butler Twp. 2/18 (MAK, GK). Certainly not unknown during the winter, 20 Brown-headed Cowbirds showed up a feeder at SHR 1/6 with the number swelling to 175 on 1/8 and 225 1/9 (KB). Double-digit tallies of 60 to 90 birds gathered with up to 14 Red-winged Blackbirds under the feeder the last week of Jan. Double-digit flocks remained through Feb with numbers gradually decreasing through Feb. Rusty Blackbirds were seen 12/2 and 12/18 near what's left of Muddy Creek Wetlands (KB, EH), and 6 were at Swope Road 2/26 (MC). The only warblers reported were Yellow-rumped Warblers with up to 3 birds seen, most around Moraine SP

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Cambria County

Location: Prince Gallitzin State Park (PG).

In total, 86 species were reported during the winter. Other than the blizzard conditions and negative temperatures over the Christmas holiday, mild temperatures caused most waters in the county to remain open to some degree throughout the period. Numbers of waterfowl at PG were low until late Feb. A **Mute Swan** was first found 2/8 and stayed through 2/27 (JC, m.ob.). While reports of small numbers of **Tundra Swans** were made throughout the winter, as were seen at numerous lakes throughout the central Pennsylvania area, large numbers made their arrival in late Feb. Estimates of up to 200 **Tundra Swans** were at PG 2/19-2/25 in the Killbuck Cove area (m.ob.).

A single **Ruffed Grouse** was found at SGL184 on 2/3 (NV). An early **American Woodcock** was found at PG 2/19 (MD). One **Rough-legged Hawk** was found at PG 2/13 (JC). A **Merlin** was noted in 2 reports at PG in the first week of Jan (TA, JP). The most notable report for the period was a **Northern Shrike** found at PG 1/8 near the park office, and it continued through 2/18 across the street at SGL 108 in Dugans Marsh (JC, m.ob.).

Horned Larks were reported throughout the period with a high count of 125 in Chest Springs 1/24 (MK). It was great to see the second report of the year of American Pipits when 2 were at PG 12/29 (JC). Though not an irruption year, Pine Siskins were reported 12/17 and 1/8 at PG (TA). Swamp Sparrows were still being reported in Dec at PG (PI, TA). Common Grackles were reported throughout the PG area in both Jan and Feb (JC, MD, JP).

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Cameron County

Locations: Emporium (EM), Sterling Run (SR), Sterling Run Mines (SRM), Sinnemahoning State Park (SSP).

There were 67 species found this season. Emporium held its 34th consecutive Christmas Bird Count on December 18th with 37 participants; 49 species were reported. The highlights were 234 Wild Turkeys, 2 Golden Eagles, 14 Bald Eagles, a Northern Mockingbird, 42 Cedar Waxwings, 9 Field Sparrows, 604 Dark-eyed Juncos, and 149 Evening Grosbeaks.

A nice push of waterfowl came through SSP 2/23 (m.ob.) including 70 Tundra Swans, 3 Northern Shovelers, 8 Gadwalls, 11 American Wigeons, 10 Mallards, 9 Northern Pintails, and 9 Ring-necked Ducks. An American Woodcock was at SRM 2/19 (AS). At SSP, a Ring-billed Gull was seen 2/24 (ES), a Great Blue Heron 1/7 (ES), and 2 early Turkey Vultures 2/20 (EK). A Northern Harrier was at SRM 2/14 (GJ). A Merlin was seen at SR 12/18 (GJ), and a Red-breasted Nuthatch was there 1/3 (MJ). Two Brown Creepers were at SSP 1/6 (GJ); a Winter Wren was there 2/14 (GJ). There were 18 Evening Grosbeaks at EM 1/12 (ES), and 42 American Goldfinches were at SR 2/18 (KJ). Seven Snow Buntings were seen at SRM 1/16 (AS), and 3 American Tree Sparrows were at SSP 1/6 (GJ).

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Locations: Beltzville State Park (BSP), Mauck Chunk Lake (MCL), Penn Forest Reservoir (PFR), Perryville Dam (PD), Strohl's Valley Road (SVR), Wild Creek Reservoir (WCR).*If no location is noted, the sighting was at Beltsville State Park.

The winter months were mild with little snow cover and lakes were open with ice cover only for short periods of frigid temperatures.

Snow Geese were on the move with a count of 55 by 1/22 (JE) and with 300 seen at MCL 2/25 (SH). Few Canada Geese were reported. Tundra Swans had good counts: 8 at MCL 12/28 (TS), 18 at PFR on the same date (MG), and 25 again at PFR (NW); then MCL had 22 on 2/25 (SH), and PFR had 5 (RR).

One American Wigeon showed up at PD 2/26 (RR). Six American Black Ducks were recorded 12/2 at WCR (PN). No Mallards were recorded; were they too common to count? Two Redheads showed up at PD 1/2 (RR), then 4 more were seen at BSP 2/5 (MY). Up to 5 Lesser Scaups were noted at BSP and PFR 12/26-2/5.

Odd to note that only single **Buffleheads** were seen at both WCR 1/6 (PN) and at MCL 1/9 (RR). Two **Common Goldeneyes** just might have been seen at both BSP 2/12 (BW) and before that PFR 2/4 (RR). Only 2 **Common Mergansers** at MCL 2/25 (SH) were recorded with 2 **Hooded Mergansers** at WCR 2/26 (RR). A raft of 28 **Ruddy Ducks** showed up on PFR 12/28 (NW).

No Ring-necked Pheasants or Wild Turkeys made the winter list.

A single **Red-throated Loon** was on Beltzville L. 12/10 (BS), and single **Common Loons** were spotted at several lakes in the region 12/29-2/18. The first sighting of a **Great Blue Heron** for the new year was at PD 2/4 (PN). The only grebes reported were 3 **Horned Grebes** at PFR 12/28 (NW), one at BSP 12/29 (MY), 2 again at BSP 1/11 (DH).

A year-round common species now, **Bald Eagles** were sighted at both PFR and BSP. One adult **Northern Harrier** was spotted at BSP 1/25 (RR) and a **Sharp-shinned Hawk** was counted at PFR 12/28 (NW). Singles of **Cooper's Hawks**, **Red-shouldered Hawks**, and **Red-tailed Hawks** were sighted 12/17-2/26. A highlight was the **Golden Eagle** sighting at BSP 2/4 (BW); boy, does this compiler wish they could have seen that!

Three **American Coots** were counted at PFR 12/28 (NW). However, no Killdeer were reported by the end of Feb. One **American Woodcock** was around at MCL by 2/25 (SH). Twenty **Rock Pigeons** were counted 1/11 (DH).

Owl counts included 2 Eastern Screech Owls at MCL 12/28 (TS), one Great Horned Owl at WCR 12/28 (NW), and one Northern Sawwhet Owl at BSP 1/22 (RR). Falcons also showed up in the counts: one American Kestrel at MCL 2/25 (SH), a Merlin at SVR 1/20 (JD) and another at BSP 2/19 (RR), and a Peregrine Falcon at PFR 12/28 (RR).

Three Horned Larks were seen along SVR 1/29 (RR). No Carolina Wrens made the list, but a single Winter Wren did 1/2 (RR) and also at PD 1/14 (RR). Eastern Bluebirds, Hermit Thrushes, and American Robins were spotted through the area, and an early Eastern Towhee was heard at BSP 1/30 (JD).

A Chipping Sparrow 2/12 (BW) and a Clay-colored Sparrow 1/8 (RR) were seen, but interesting to note was that no White-crowned Sparrows. Fifteen House Finches were seen 1/14 (PN). To finish up, a lone **Red Crossbill** spent time at WCR 1/28 (MS). Was it really alone?

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Centre County

Locations: Bald Eagle State Park (BESP), Colyer Lake (COL), Duck Pond/Centre Furnace Pond (DUCK).

The relatively warm weather apparently convinced a lot of waterfowl that the lake at BESP was a great place to spend some or all of the winter fishing, swimming, and lounging on the beach. The following species were reported in five or more locations and will not be discussed further in this report: **Snow Goose, Tundra Swan, Wood Duck, Northern** Shoveler, Gadwall, Northern Pintail, Lesser Scaup, Hooded Merganser, American Woodcock, Golden Eagle, Merlin, Peregrine Falcon, Ruby-crowned Kinglet, Winter Wren, Gray Catbird, Fox Sparrow, Swamp Sparrow, Red-winged Blackbird, Brown-headed Cowbird, and Common Grackle. Information for this report was obtained from eBird with background and status from *Birds of Central Pennsylvania* by Nick Bolgiano and Greg Grove, 2010 (*B&G*, 2010).

Two **Greater White-fronted Geese**, accompanied by "a large flock of **Tundra Swans**" were present at BESP 2/23 (DH). While still considered accidental, they have been reported in five of the previous seven years. They had been reported only six times before 2016 (B&G, 2010; eBird). Up to 6 **Cackling Geese** were reported at DUCK 1/1-15 (DO, et al.), and 5 were observed at Pleasant Gap 1/11 (JL). There were also 6 at COL 1/14 (KO).

The 9th report of **Trumpeter Swans** came from BESP 12/1-26, where a single imm. bird was reported, usually in the company of **Canada Geese** (RL, et al.). All records but one, from 1996, have occurred since 2014 (eBird). There was one report of it accompanying a rare winter **Tundra Swan** (12/26, JK)

Green-winged Teal were spotted in several locations. One or 2 were observed in the Egg Hill area 12/1-2 (LR), and one was seen on Sinking Cr. Rd. 12/30 and 1/13 (DR, DH). Birders noted 2 at COL 12/2 (KO, et al.), and up to 15 were present at BESP 2/24-28 (LR, et al.). A single **Canvasback** visited BESP 12/23-26 (JG, et al.), and another lingered there 2/6-28 (JV, et al.). **Redheads** were identified at three locations. Up to 5 were seen at DUCK 12/25-1/31 (CE, KE, et al.) and 4 at Walnut Springs Park 1/15 (XW). Observations at BESP bookended the season, with one reported 12/25 (CE, KE) and as many as 30 between 2/4-28 (SB, et al.). A **Ring-necked Duck** was spotted from Rte. 322 near Centre Hall 12/3 (DH). At COL up to 4 were noted 12/5-16 (DR, Ae, KO), and as many as 8 were reported there 2/23-26 (Ae, et al.). One or 2 were observed at the Axemann Rd. pond 12/25-1/2 (CE, KE, et al.). **Greater Scaup** were reported only at BESP, with one or 2 present 12/26 (MD, JS, KK) and up to 8 seen 2/5-28 (Ae, et al.).

BESP also hosted one **White-winged Scoter** accompanied by 2 **American Black Ducks** 12/21 (JH). **Long-tailed Ducks** were noted, with one to 6 at BESP 12/25-28 (CE, KE, JP) and a single bird also at BESP 2/4-28 (AM, et al.). A single **Common Goldeneye** was spotted at DUCK 1/3 (MN, Ae), and up to 8 were present at BESP 12/6-2/28 (JK, et al.). Three to 10 were seen from the Howard Causeway 2/4-26 (AM, DH). Two were noted at Howard Park 2/19 (JV).**Red-breasted Mergansers** were reported at BESP throughout the winter, with one spotted 12/26 (JK), 2 on 1/14 (RL), and as many as 6 on 2/22-24 (JV, et al.). One was also seen at Howard Park 2/19 (JV) and another at the Howard Causeway 2/25 (DH). COL hosted 6 on 2/23 (Ae, SB).

Two late migrating **Horned Grebes** were observed at BESP 12/11 (JK), and as many as 6 early migrants were noted there 2/23-28 (AM, et al.). A **Sandhill Crane** flew over State College 12/25 (JB). One or two **Bonaparte's Gulls** took a break from migrating at BESP 12/23-26 (JG, et al.). A **Common Loon** flew over Egg Hill Rd. 12/2 (DR), and one or 2 were observed at BESP 12/3-25 (AB, et al.). There were also one or 2 **Double-crested Cormorants** spotted at BESP 12/11-20 (JK, et al.).

Two **Barn Owls** were located near Centre Hall 12/18 (JK) and again 2/20 (JK, AS). A **Short-Eared Owl** was seen on Fillmore Rd. 2/9 (JV), and two were spotted at the University Park Airport 2/13 (JG). One was noted at the Haugh Family Preserve 2/28 (RH). Three **Red-headed Woodpeckers** were observed in SGL 33 on 12/10 (AR). A single **Brown Thrasher** was present in Boalsburg 2/17 (AM).

Four **Evening Grosbeaks** flew by the hawk watch at the Bald Eagle Mtn. North Lookout 12/4 (NBo). Up to 30 visited a feeder station on Black Moshannon Rd. (JR). An immature **Red Crossbill** was spotted in Bellefonte 1/6 (LS).

A few **Snow Buntings** were observed, one each near Spring Mills 12/17 (JG) and at the Mid-State Airport 12/18 (DH, JK, KA). A birder found 2 at BESP: one on 1/14 and another 2/11 (RL). One **Savannah Sparrow** was at Fairbrook Park 2/9 (JV). Single **Eastern Towhees** were reported at BESP 12/5-6 (BS, JK) and on Bear Meadows Rd. 12/18 (JG).

Icterids of note included **Eastern Meadowlarks.** One was spotted in Boalsburg 1/5 (PS), and 2 each at BESP 2/26 (AH) and Rosslyn Dr. 2/28 (RL). One to 3 **Rusty Blackbirds** were also present at Millbrook Marsh Nature Center 12/18-25 (JG, et al.), with single birds reported Bald Eagle Cr. near Dowdy Hole Rd. 12/29 (NBo) and at Dreibelbis Birding Area, formerly known as Julian Wetlands, 1/15-2/28 (MN, et al.). Between 2 to 5 were noted at Curtin Wetland 2/14-23 (RL, AM).

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Chester County

Locations: Chambers Lake (CL), ChesLen Preserve (CLP), Coatesville Reservoir (CR), Glenville Farm Pond (GFP), Great Marsh (GM), Marsh Creek State Park (MCSP), Mosquito Lane Retention Pond (MLRP), South East Chester County Refuse Authority (SECCRA), Struble Lake (SL), West Vincent Township Sewage Pond (WVT).

Snowfall was absent this winter; cold weather was not. A strong cold front moved into the area just before Christmas bringing nighttime temperatures into the single digits. With the chill came an influx of waterfowl. The cold was then followed by a near record-setting warm-up.

The sole Ross's Goose of the period was picked out of a long line of migrating birds above Coventry Woods Park on 2/16 (JW, PW); the observer noted that this form of observation was much simpler than finding a small goose amongst multitudes of larger white geese on the ground: "It was only about half the size of the rest of the birds in the flock, with a proportionally much shorter neck than the snow geese exhibited" GFP was host to a single Greater White-fronted Goose, initially reported 12/19 (JK, m.ob.). After its departure 12/23, 7 birds were there on 1/27 (RG, m.ob.), increasing to 10, remaining at GFP and nearby areas until 2/5. A juv. Trumpeter Swan was found in the middle of MCSP 12/1 (SS, m.ob.); it later moved to the Little Conestoga Rd area, where it was easily viewed until 12/18. A month later, on 1/16, possibly the same, juv. was found nearby, and at GFP (RG, m.ob.), remaining until 1/18. Tundra Swan sightings came primarily from the northern portion of the county at MCSP where the high count of 44 was observed on and above the lake 12/28, and at SL and CL.

Waterfowl excitement increased with the report of a Eurasian Wigeon from SL 2/17 (FH, m.ob.), staying through 2/20; fortunately, the male of this species is easily distinguished from its American counterpart, as most sightings were from the far side of the lake. Interestingly, a second Eurasian Wigeon was reported from Berks, not far to the north, on the same dates, excluding the possibility of being the same bird. A nice flock of 15 Canvasbacks was observed at MCSP 12/25 (JK, AR); a day later, a single bird, a male, was at CL (RR, m.ob.); this bird, sometimes joined by 3 more, seen up through 2/21. During this time a bird or 2 would wing over to CR. Last report of the species was made at SL 2/24 (SS). Redhead reports followed a similar pattern, with 4 birds reported from MCSP 12/24, and 25 (JK), then 13, were at CL 12/25 (RR, m.ob.). This number increased to 25 on 1/4, before dwindling to one to 2 birds last reported 2/28. A few were also seen at nearby CR during the observation period. The small impoundment at WVT has provided easy access with good viewing and did just that for 3 Redhead from 2/10 through 2/26.

Greater Scaup could be found in small numbers at multiple bodies of water during the period, while sightings of **Long-tailed Duck** were limited to CL, where a female was reported 12/8 (RR, LL, LLy), and MCSP, where another female was there 12/25-1/11, at times joined by a second female and the only drake of the period. A few **Common Goldeneyes** were around, with a high of 6 at MCSP 1/9, and a longstaying female at Wedgewood Pond (restricted access) 12/27-2/15. The high count for **Red-breasted Mergansers of** 5 was at MCSP 12/3 (LL); birders who went to SL for the Eurasian Wigeon (FH, m.ob.), were also rewarded with 3 Red-breasted Mergansers 2/17, while 2 birds were there 2/24. A single was at Longwood Gardens 1/2. **Horned Grebe** reports were few, with a single bird at MCSP 12/8 and 12/10, and another single at Atwater Quarry 1/8 and 1/11. Alas, there were no reports of Rednecked Grebe for the period.

Virginia Rail was reported from two reliable sites. One was heard only at GM 1/14 and 2/12 (a portion of a feather was seen for a fraction of a second during one observation); another was heard at CLP 2/8, 2/14, 2/21, and 2/22. From 12/1 through 12/17, up to 6 **American Coots** were at CL. Single birds were at Wedgewood Pond, Honey Brook WTP and WVT for several days during Dec and Jan, while the high count of 7 was from MCSP 1/7 (JS). Unlike last year's bonanza, only one **Sandhill Crane** report was received. Two birds flew over the *Chester* airport on 12/2 (JS ph). Several smaller birds, **Least Sandpipers**, spent two weeks at GFP 1/27-2/11 (RG, m.ob.), representing the first winter sighting in *Chester* since Feb 2013. Ebird reports listed between one and 4 individuals sighted at a time.

With warmer weather and partial ground thawing, **American Woodcock** began showing up and putting on their show mid-Feb with the first report 2/14. Concurrently, reports of **Wilson's Snipe** started, with GFP and CL being reliable locations. A **Bonaparte's Gull** was at MCSP 12/1 (SS) and 12/6 (KF). Expectedly, most rarer gull species are reported from SECCRA; this year's reports were augmented by afternoon sightings at nearby MLRP. Due to construction, visitors were not permitted inside the landfill, but could view from points outside. **Iceland Gulls** were there on several dates in Jan and Feb, single birds each time except for 3 on 1/27 (RG). A single fly-over was also reported over SL 2/5 (CS). The other white-winged gull, **Glaucous Gull**, was reported from SECCRA and MLRP 1/14, 1/27, and 1/28.

More frequently reported, **Lesser Black-backed Gull** was at SECCRA 1/6-28, with a high of 6 on 1/13 and 1/27, and at MLRP 1/16 until last report of 2/26 with a high count of 8 on 2/9. Date range and location of observations for **Great Black-backed Gull** are the same as previous species, with a high count of 7 at SECCRA 1/13 and 6 at MLRP 2/9. Not many loons were reported; the lone **Red-throated Loon** was at SL 12/1 (LL, RR), while **Common Loon** was reported from all 3 viewing hotspots at MCSP. First report was 12/1 (SS) with a max of 2 birds (JK, PH), and one was still seen through the end of the winter period.

Noteworthy were reports of **Great Egret** during Dec, with a single bird at SL 12/6 (RK, m.ob.) that stayed until 12/21; one flew over CL 12/16 with a flock of **Ring-billed Gull** (RR ph.). During winter months **Northern Harrier** may be found anywhere near swamps and open grassy areas. Sightings were widespread, and typically of a single bird; at the Doe Run Area, specifically Chapel Road, as many as 7 were reported 1/9 (GT). The first report of 2 birds was 12/27 (WB, m.ob.) and continued throughout the winter period.

Coverage of this area was intensified by **Short-eared Owls** in the area. A nice find for the Western *Chester* CBC, one was observed 1/1 (AC, WB, m.ob.) with the last report 2/19; a second was reported on 12/16 (JK) at Bryn Coed Preserve and seen by many through 2/5. Another owl species recorded for the Western *Chester* CBC was **Long-eared Owl**; there is no available information in eBird, but CBC data stated 5 were observed. Yet another highly sought after species, **Northern Saw-whet Owl** was reported during this CBC. Found at Hibernia C.P. 12/9 (LL, m.ob.), this was last reported 2/26. Other reports for this smallest of *Chester* owls came from Crow's Nest Preserve 12/30 (SS) and 1/10 (JK, AR), where 2 were heard giving their "toots and

whinnies"/ "chirps and squeals." On 1/24, a bird responded to play back near a residence in Downingtown (ZB), and one was heard at SGL 43 on 2/18 and 2/23.

The long staying **Red-headed Woodpecker**, sometimes 2 birds seen, continued along Beaver Dam Rd, as did a **Peregrine Falcon** at Schuylkill R. Trail. **Black-capped Chickadee** made it into *Chester* in reasonable numbers, with first reports from late Oct and continuing through the winter period. Another semi-invasive species, **Red-breasted Nuthatch**, continued from their earlier arrival of late Aug. Many reports came from CR, where the species was quite common in the pines lining the reservoir. At CLP, **Marsh Wren** have been found year-round with reports of vocal birds 1/28 (RG), 2/8 (JD, JK, AR) and 2/10 (BS, AC). Small numbers of **Gray Catbird** and **Brown Thrasher** remained to clean up remaining berries; **Cedar Waxwing** numbers declined by late Dec. There were scattered reports of small numbers of **American Pipit**, but a high count of 120 at Wolf's Hollow C.P. (JM) was impressive.

Purple Finch reports continued in small numbers. Perhaps the event of the season was the appearance of 10 **Red Crossbills** at Nottingham C.P. 2/22 (MG, m.ob.). With the last report 2/28, there was plenty of time for many *Chester* birders to descend on this unique area. A high count of 26 birds occurred on 2/26 (IB, KR). After several "heard only" reports from the previous Nov, it was great sport to search for the roaming flock(s). So, what species were they? What type were they? Consensus seemed to settle on Northeastern-Type 12.

Pine Siskin remained in the area in small numbers, with a high count of 17 reported from Waterloo Mills Preserve 1/21 (KF). Wintering grassland birds remained in short supply. A **Lapland Longspur** was seen at the expected location of Homestead Road 12/4 (LL) and several dates afterwards. A single **Snow Bunting** was there the same day and 12/26. Two birds were reported 1/30.

An unexpected report of **Yellow-breasted Chat** came from a residence near Thorndale. Submitted to eBird on 2/18 (MK), the bird had been initially seen on 1/25 and several times in between. A female **Yellow-headed Blackbird** was discovered, then reported, within a mega-flock of blackbird species north of Atglen 2/2 (LB). The flock, and the bird, was rediscovered later that day (RG), when the size of the flock was estimated at 750,000! Now, where is the yellow? A male was also found the following day. Several of the handful of successful searchers commented on the many raptors attending the flock.

Rusty Blackbird was at GM 12/11-2/19 (MC, m.ob.) with a max of 6 birds; at MCSP's Little Conestoga Bridge there were up to 18 birds on 2/28, 10 first reported 2/11 (SS, m.ob.). In addition to Yellow-breasted Chat, there were reports of 4 warbler species, including **Yellow-rumped Warbler** with two reports of **Common Yellowthroat**: one at Charles H. Martin Memorial Park 12/17 (KC, others), and the other from SL 2/12 (EH). **Palm Warbler** was observed at Stroud Preserve 2/11 (RRg). Frequently seen at feeders, one **Pine Warbler** visited a residence near Kennett Square for two months, starting 12/13 (KM, EM.). At another feeder near Kennett, a bird visited sporadically for a month, starting 1/20 (KP); 2 were at Longview on 12/12 (JS), and a single at CR and SL on several different dates.

Correction to Summer 2022 Summary: The male Dickcissel was initially found on 6/4, not 6/24.

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Clarion County

Locations: Clarion (CL), Curllsville (CV), Foxburg (FB), Kahle Lake (KL), Leeper (LE), Limestone (LI), Lucinda (LU), Mt Zion/Piney Tract/SGL 330 (MZ), New Bethlehem (NB).

A single **Cackling Goose** was found with a flock of **Canada Geese** during the *Clarion* CBC 12/17, possibly a first county record (JM). An **American Wigeon**, unusual in winter, was found with a large wintering flock of **Mallards** on a farm pond near LI 1/21 (CW). **Northern Pintail**, typically only found in low numbers, were located at KL with 5 birds there 2/17 and then 2 on the Allegheny R. near FB 2/25 (ES). **Green-winged Teal** continued to winter in small numbers on Redbank Cr. in NB, as they have for at least the past five years. At least 2 birds were seen there regularly 12/21-2/18 (BR, ES). A single **Redhead** was also found at NB 2/8 (J&AK), and **Hooded Mergansers** were noted as overwintering there, with up to 3 birds present regularly 12/19-2/28 (J&AK, BR, ES). Hooded Mergansers were also found at FB, possibly staying the winter on an Allegheny having no significant ice cover, with 5 birds 1/9-2/20 (ES).

Ruffed Grouse continued to be scarce, with one bird noted near CL 12/21 (ES). A lone **Eurasian Collared-Dove** remained present in Strattanville and was counted during the CBC 12/17 (R&TGS). **American Woodcocks** returned to their typical breeding habitat very early this year, with extended mild weather and no snow cover. They were first heard in display flight and calling near LI 2/15 (ES), and in fields near CV, where they breed yearly, with 3 birds 2/16-20 (DD, CW). Most likely a late migrant, a **Wilson's Snipe** was found at a seep in a cow pasture near CV during the CBC 12/17 (DD, CW).

Unusual for *Clarion* in mid-winter, **Ring-billed Gulls** were likely taking advantage of open waters during the exceptionally mild winter. Three were found at KL 1/9, as well as 5 on 2/17 (ES). Three birds were also reported in CL 2/23 and one in LU 2/23 (ES). A **Common Loon** was also present well into winter, with a single bird seen at KL 1/9 (ES).

In recent years, Turkey Vultures winter in areas not far from Clarion, so that in mild years they have been seen more frequently even in winter months. Such was the case this season, as one was near Fryburg 1/24 (ES), and 3 were seen during a WRS in eastern Clarion 1/28 (MH, LT). An even more unusual sighting for winter was a Golden Eagle, seen and photographed near CV 12/30 (JB), possibly remaining in the area to take advantage of carrion and multiple gut piles available for feeding from hunting activity. Perhaps due to a mild winter with little snow cover, Northern Harriers once again showed higher numbers through the season. At the start of winter, 4 were found at Mount Airy 12/2 (MH, LT, GE, AT), and then 3 in the CBC 12/17. A male and female were seen at CV 1/6, 1/21 (CW), and one nearby 2/18 (ES). A pair was seen again at MA 2/17 (DD, CW), a male at MZ 2/21 and one at KL 2/20 (ES). In the northern half of Clarion where there are large areas of open farmland, Northern Harriers were found in 9 sightings of single birds scattered over 7 areas near LU and LE 12/3-2/26 (ES).

Bald Eagles were found occupying a nest in a former heron rookery along the Allegheny R. near FB 2/17 and still present 2/25 (CB, ES). A leucistic **Red-tailed Hawk** continued in Leatherwood near NB where it has been present regularly the past several years (MW). **Rough-legged** **Hawks** were in scattered grassland areas, with 3 found on a WRS in eastern *Clarion* 1/28 (MH, LT) and one light morph in CV 2/5 (CW). On farmland in the north, they were more common, with one in Lickingville 1/5 (T&JK) and 3 in separate areas 1/24 (ES). A dark morph was found regularly in locations near Snydersburg 12/24-2/16, as well as single sightings in two areas near LU 2/8 and 2/19 (ES).

With specific routes completed using playback during the CBC, a total of 15 Eastern Screech-Owls, 3 Great Horned Owls, one Barred Owl, and one Northern Saw-whet Owl were all found during the CBC 12/17 (MH). Single Short-eared Owls were seen near Callensburg in two areas 12/2 (GE, MH, AT, LT) and 2 in the same area during the CBC 12/17 (MH, LT). A single bird was also found in a regular winter location near CV 1/6 (CW).

A Yellow-bellied Sapsucker was found again this year near LE 12/27 (SK), and Northern Flickers, still unusual in winter, were present with single birds in LI 12/17 (CW) and at Cook Forest 2/13 (AL). Just one Merlin was seen, near LU 1/11 (ES). For the second year, Northern Shrikes were scarce with just a single report of a bird at MA 2/17 (DD, CW).

Horned Larks were reported in generally low numbers, with just 11 near CV during the CBC 12/17 (CW), 2 also near CV 2/18, and one at LU 2/15 (ES). The largest flock was 44 birds near Fryburg 1/24 (ES). **Red-breasted Nuthatches** were found in fewer locations this season, with just 6 found during the CBC 12/17, one near Marble 12/27 (DS), and one near Shippenville 12/31 (ES). The only regular location was at feeders near CV where one to 2 birds were present 12/4 through the season (CW). Northern Mockingbirds have been regular but limited in winter, with mostly single birds seen in just four locations with multiflora rose habitat in southern *Clarion*, on 12/20, 1/14, 1/15 (CW) and 12/17 (ES).

Evening Grosbeaks were seen widely on this incursion year in the fall, but they were much less reported as the season continued. At several feeders, 46 were seen during the CBC 12/17, still an excellent number for a species that is absent most years. The only other reports after this were 3 birds at LU 12/24 and then one 1/11 (ES). **Snow Buntings** were absent last year but reported again this season in small numbers. A small flock was found in fields in LU 12/9 (ES), then 3 near CV (CW) and one at MZ 12/17 (ES).

American Tree Sparrows showed up in higher numbers initially, with 50 reported during the CBC 12/17. They were otherwise reported in 13 scattered areas through the season but in flocks no larger than 8, mostly in weedy field areas and not at feeders (SK, ES, MS, TS, JT, et al.). Fox Sparrows lingered into the winter season, with one in CV 12/1 (CW), and one in LE 12/3 (SK). Just one Eastern Towhee was reported this year, at a feeder in Fisher 12/26 (DK). Eastern Meadowlarks are occasionally present in open fields during winter, but only one was seen this year, on a WRS near LI 1/24 (CW).

The most unusual sighting for the season was a female **Rosebreasted Grosbeak**, seen and photographed at a feeder near CV 12/4-12/7 (CW), the only one in Pennsylvania in eBird and one of just a handful in the northeast for the season.

Observers: **Carole Winslow, cjwinslow94@gmail.com**, James Baker, Chelsea Beck, Don DeWolf, Gary Edwards, Ron and Tracy George-Snyder, Mal Hays, Danette Karls, S Kaye, John and Avis Keener, Tom and Janet Kuehl, Alejandra Lewandowski, Jim McGuire, Bill Reddinger, Eric Schill, Tabassam Shah, David Snyder, Mark Strittmatter, John Taylor, Alice Thurau, Larry Towse, Mike Weible.

Clearfield County

Locations: Bimini Lake (BL), DuBois Reservoir (DBR), Treasure Lake (TL).

The unseasonably warm weather may have contributed to the Dubois Christmas Bird Count's high counts of 1400 **Canada Geese** and 17

Turkey Vultures 12/17 (MA, JSm).

Three **Snow Geese** were observed at BL 12/27-1/1 (DK, DR). Two **Greater White-Fronted Geese** were photographed at DBR 12/8 (CL, TS) as was a single **Cackling Goose** at DBR 2/21 (JF, DR, JS). Offseason **Green-Winged Teal** were seen at L. Sabula 1/7 (DR) and DBR 1/12 (SH).

Ruffed Grouse were observed at Park Dam SP 1/1 (CK, DK) and DBR 2/14 (DR). **Common Loons** were seen during the milder weather with one at DBR 12/12 (CB) and as many as 8 at BL 1/3 (BM). **Black Vulture** numbers continued to increase in the County with sightings near Grassflat 1/18 (JS), Kylertown 1/22 (JL), and Woodland 2/23 (LB).

Golden Eagles were seen near Frenchville 2/1 (JS), at the Karthaus Elk Refuge 2/25 (JF), and at TL 2/25 (DR). A single **Northern Saw-Whet Owl** was heard at TL 2/2 (DR). A **Northern Shrike** was seen at Sandy Ridge Road 1/21 (DR) and 2/14 (JF) with another one seen near Karthaus 2/25 (JF).

It is possible some **Red-winged Blackbirds** stayed throughout the winter: one was seen in Hyde 12/2 and another on 1/5 (JS) with numbers increasing in mid-Feb (m.ob).

Personal communication was supplemented by information from the PABirds listserv and eBird for this report.

Observers: Diane K. Bierly, 143 W. Lytle Ave., State College, PA 16801, (814) 238-8183, dkb246@usa.net, Marianne Atkinson, Chelsea Beck, Logan Brunner, John Forcey, Susan Hanslovan, Colin Keith, Dave Keith, Jen Lee, Carol Light, Bill Mendat, Dan Richards, Tim Schreckengost, Jerod Skebo, Jocelynn Smrekar (JSm).

Clinton County

Locations: Lock Haven (LH), Loganton (LN), McElhatten (ME), Mill Hall (MH), South Avis (SA), Susquehanna River (SR).

On 12/16, a Long-tailed Duck was observed near ME (BS). A Whitewinged Scoter was seen at Kettle Creek State Park on 1/3 (SL). On 1/1, a Ruddy Duck was seen on the SR at LH (WL). On the 12/17 CBC, one Cackling Goose and three Greater White-fronted Geese were found at the Ohl/ McElhatten Reservoir near LN (AH). A Cackling Goose was seen east of LH on 1/13 (MS). From 12/16 through at least 2/25, a Ross's Goose was reported at various locations: the SR at LH, Mackeyville, MH, and east of LH. (m.ob).

An **American Coot** was reported near MH on 12/17 (MA). On 12/17, a **Double-crested Cormorant** was seen near ME (BS).One **Killdeer** was found on 12/17 at LH (BS, JB).

A Rough-legged Hawk was spotted near MH on 12/17 (LMS). On 12/15, a Red-shouldered Hawk was observed near ME (BS). An Osprey was reported near MH on 12/17 (LMS). One Golden Eagle as well as 4 Black Vultures were tallied on the local CBC on 12/17 near ME (BS). Single Northern Harriers were reported on 12/17 at LH, ME, MH, and Rauchtown (BS, MA, DK, DR). A Northern Harrier was seen at Swissdale on 12/28 (WL). Two Peregrine Falcons and one Merlin were also spotted on the 12/17 CBC at LH (BS).

On 12/17, a flock of **Horned Larks** was observed with 5 **Snow Buntings** near LN (AH). Another flock of **Horned Larks** was found at SA on 12/20 with at least 6 **Snow Buntings** (WL). Again at SA, on 12/21 a flock was observed containing **Horned Larks**, one **American Pipit**, one **Lapland Longspur**, and 2 **Snow Buntings** (EH). On 12/17, 2 **Hermit Thrushes** were observed near LN and one at ME (AH, BS).

A great find for the 12/17 CBC was one **Red Crossbill** recorded near LN (AH). Through the period, a flock of up to 20 **Evening Grosbeaks** was observed at feeders at a residence near LN (AH).

Observers: Wayne Laubscher, 749 E. Croak Hollow Road, Lock Haven, PA 17745, (570) 748-7511, wnlaubscher@comcast.net. Mervin Allgyer, JoAnn Bowes, Eric Hartshaw, Amos Hershberger, Dave Krempasky, Sarah Lindgren, Dave Rothrock, Matthew Schenck, Brian Schmoke, Leroy and Melissa Smith.

Columbia County

It was a warm winter season with little to no measurable snowfall. The mild season allowed a few birds that typically migrate farther south to linger longer than usual.

Ruffed Grouse lately have been only found at the highest elevations of the county. This year, there were two winter sightings of single birds in SGL 58: the first 2/23 (AB), and the second in a different section 2/26 (AB).

During the Bloomsburg CBC, a **Gray Catbird** was observed eating privet berries near the Bloomsburg Church of Christ Pond 12/18 (AK). The season's only **Eastern Towhee** was found at Briar Creek L. 1/2 (BC).

Observers: Andy Keister, 110 Hawk Ridge Road, Bloomsburg, 17815, (570) 337-3802, akeister110@gmail.com, Aaron Bierly, Betsy Checchia.

Crawford County

Locations: Erie National Wildlife Refuge (ENWR), Linesville (LN); Pymatuning State Park (PSP): Causeway (CAU), Miller's Ponds (MP), Spillway (SPL).

The most notable observation of the season was a single **Common Eider**, believed to be the third observation in the state and the first live observation in Pennsylvania. It was first seen at Pymatuning SP's Causeway on the Ohio side initially during the Linesville CBC 12/18 (RH, BiM, TNn, KP). The bird was observed 12/18-21 (m.ob.), after which it was shot by a hunter.

Observations of **Snow Geese** at CAU included a notable count of 53 on 12/20 (m.ob.), 6 on 12/21 (PS), and 12 on 12/29 (RKi). Reports of **Cackling Geese** included a single bird at Conneaut L.'s Marina 12/19 (MW), 6 birds at CAU 12/28 (RKi), 2 at the same location 12/29 (BiM), and 5 at SPL 1/1 (GV). A good count of 5160 **Canada Geese** were observed during LN CBC 12/18 (m.ob.). Reports of **Mute Swans** included a single bird in the Townville area 12/10 and 2/18 (BiM), and 2 seen in the Pymatuning area during LN CBC 12/18 (MH, JM). **Trumpeter Swan** observations included 2 at SPL 12/29 (RKi), 6 at PSP's Orchard Road Boat Launch 2/20 (MH), and one at ENWR's Deer Run Trail 2/25 (JH), a now-expected location for this species. **Tundra Swans** were as expected (m.ob.) with a good count of 250 seen at SPL (RHa, SH).

Notable counts of waterfowl during LN CBC in the Pymatuning area 12/18 included 398 Gadwalls, 508 American Black Ducks, 39 Greenwinged Teals, 148 Common Goldeneyes, 935 Hooded Mergansers, 543 Common Mergansers, and 111 Ruddy Ducks (m.ob.). A single Northern Pintail was in the Cambridge Springs area 1/21 (KZ), a notable date. A good count of 200 Redheads was at Conneaut L. 1/2 (RHo, BiM). The only Greater Scaups were 2 at Conneaut L.'s Marina 12/20 (MD, JHo, ST). Long-tailed Ducks included a single bird at PSP's Black Jack Swamp area during LN CBC 12/18 (RH, BiM, TNn, KP) and 20 at CAU 12/20 (DM, AY, JY, RY).

American Coot numbers were significantly lower than expected, perhaps due to the milder winter (m.ob.). A notable high count of 248 Sandhill Cranes were at LN CBC 12/18 (m.ob.). A single American Woodcock was heard at a private location in the Custards area 1/18 (SG), an early date. Three Killdeer and a single Wilson's Snipe were in PSP's Black Jack Swamp area during LN CBC 12/18 (RH, BiM, TNn, KP), notable dates for these species.

A high count of 5869 **Ring-Billed Gulls** was recorded during LN CBC in the Pymatuning area 12/18 (m.ob.). A notable count of 200 **Herring Gulls** was at PSP's Dam 2/15 (MCr). **Lesser Black-backed Gulls** included 4 at PSP's Dam 12/22 (JPa) and a single at the same location 2/10 (MW). Two **Red-throated Loons** were at PSP's Dam 12/22 (JPa). The observation of 24 **Great Blue Herons** on LN CBC 12/18 (m.ob.) was notable.

Early Turkey Vultures included a single bird in the Conneaut L.

area 2/4 (BD) and 3 in the Meadville area 2/12 (KP). A good count of 69 **Bald Eagle** was on LN CBC 12/18 (m.ob.). **Rough-legged Hawks** included single birds in the MP area 12/4 (BiM), 12/23 (TK), 12/27 (KZ) and 1/15 (MH). Observations of a single **Short-eared Owl** occurred at MP 12/6 (BiM), 12/16 (JH), 12/17 (PF), and 12/18 (m.ob.).

There were multiple observations of **Red-headed Woodpeckers** at PSP's Jamestown Campground, an expected location for them over the winter (m.ob.), with a high count of 5 on 1/2 (RH, BiM). Reports of **Yellow-bellied Sapsuckers**, notable during the winter, included a single bird at a private residence in the ENWR's Sugar L. Division 12/9 through the end of the season (RE), a single bird at a private residence in the Meadville area 12/25 (TNo), and a single bird at PSP's Teakettle Road 2/12 (BiM).

Observations of **Merlin** included single birds in the Hartstown area 2/2 (MW) and on the Allegheny College campus in the Meadville area 2/13 (BiM). **Northern Shrike** included single birds at the Hartstown area hunting over a goldenrod field during LN CBC 12/8 (MW) and at ENWR's Seneca District 1/24 and 2/12 (RS). **Common Ravens**, increasing in the eastern half of *Crawford*, were as expected (m.ob.). **Horned Larks** included a single bird at PSP's Area J during LN CBC 12/18 (RHo, BiM, KP, TNo), 5 at a private residence in the Rundeltown area 1/28 (BiM), at least 2 singing near a private residence in the ENWR's Sugar L. area 2/20 through the end of the season (RE), and single birds at a private residence in the Townville area 2/11 (AL) and SGL 122 on 2/16 (AL).

Red-breasted Nuthatches were in their expected frequency and locations (m.ob.). **Winter Wren** observations included single birds during LN CBC 12/18 (m.ob.), at Conneaut Marsh's The Wells 12/27 (DBa) and ENWR's Tsuga Trail 2/25 (JH). A single **Northern Mockingbird**, rare for *Crawford*, was along Rte. 285 in the Custards area 12/21 (KE, CK).

After an irruption in the fall, the only observation of **Evening Grosbeak** was a single bird at a private residence in the Townville area 12/7 (AL). **Purple Finches** were in their expected numbers and locations (m.ob.). **Pine Siskins** included a single bird in the Saegertown area 12/14 (RK), a single bird during LN CBC 12/18 (m.ob.), and one at a private residence in the Townville area 1/30 and 2/25 (AL).

Lapland Longspur observations included single birds at MP 12/16 (JH) and in the Rundletown area 1/28 (BM). Snow Buntings were in their expected numbers and locations (m.ob.). A single Eastern Towhee was observed coming to a feeder at a private residence in the Springboro area 1/28 and 2/4, an early date for this species (CN). Notable winter sparrow observations included a Fox Sparrow at ENWR's Observation Blind Trail 12/2 (DBa) and a White-crowned Sparrow in the Pymatuning area 12/20 (MHo).

A notable count for the season of 50 **Red-winged Blackbirds** was at Conneaut Marsh's The Wells 12/26 (DBa). **Rusty Blackbirds** included 2 at ENWR's Observation Blind Trail 12/2 (DBa), 16 in the Cambridge Spring area 1/15 (KZ), and 2 in the Saegertown area 2/26 (RK).

Observers: Rob Hodgson (RHo), 709 Alden Street, Meadville, PA 16335, (515) 708-0603, robhodgson888@gmail.com, Thomas Allison, KM Andersen, Sameer Apte, Drew Bailey (DBa), Debbie Beer, Theo Bockhorst, Paul Bogumil, Jenny Bowman, Alex Busato, Claudia Canfield, Merri Carter, Chia Cory Chiappone, Lenore Charnigo, Patrick Coy, Michael Crist (MCi), Michael David, Brittany Davis, Dave DeReamus, Richard Domokos, Rich Eakin, Kurt Engstrom, Mike Fialkovich, Adrian Fenton, Jennifer Ferrick, Isaac Field, Patience Fisher, Ross Gallardy, S Gormley, Alice Griffin, Ryan Hamilton, Mark Hanneman, Robert Hass (RHa), Steve Hass, Joshua Heiser, MiMi Hoffmaster, Craig Holt, Veronica Holler, Jason Horn (JHo), Chad Kauffman, Don Keffer, Jeff Kenney, Ripley Kindervater (RKi), Rick Koval, Tristan Kozel, Donna Kuhn, Gustino Lanese, Yianni Laskaris, Alejandra Lewandowski, Geoff Malosh, Matt Mason, Ethan Maynord, Jim McConnor, Jerry McWilliams, Ben Meredyk, Dennis Mersky, Brian Miller (BiM), Bruce Miller (BrM), Duane Miller (DMi), Kelly Miller, Ron Mumme, Claire Nicolls, Todd Nicolls, Tomas Nonnenmacher (TNn), Cynthia Norris (CNr), Bill Ohlsen Julie Pasini (JPa), Chris Pierce, Ken Pinnow, John Pogacnik, Thomas Reiter, Isaac Rogers, Natalie Rogers, Phillip Rogers, Angela Romanczuk, Sarah Sargent, Eric Schill, Steve Schmit (SSc), Robert Scribner, Gregg Severson, Paul Sherwood, Jim Smallwood, Isaac Smith, Shawn Sowers (SSo), Russ States (RSt), Mark Strittmatter, John Tautin, John Taylor (JTv), Shannon Thompson, Mark Vass, Grace Vesho, Tabatha Volle, Karie Warner, Katie Wickert (KWi), Bill Wilkinson, Michael Williams, Chad Wilson, Nina

Wolf, Warren Wolf, Atlee Yoder, Josh Yoder, Ryan Yoder, Kendall Zook.

Cumberland County

Locations: Kuhl Lake (KL), Lisburn Road Quarry (LQ), Winding Hills Nature Trail (WH)

Unless otherwise stated, occurrences and the number of prior occurrences of the species listed in this report are according to eBird records and "Annotated List of Cumberland County Birds" (*Pennsylvania Birds* 30:138-147, V. Gauthier, 2016). It should also be noted that there may be current and historical sightings for *Cumberland* listed on eBird from the Susquehanna River that may be possible to list on this report, but without clear documentation otherwise, they are considered to have occurred in *Dauphin* since the county line is the west shoreline of the river.

Two **Mute Swans** were seen in flight over SGL 169 on 1/1 (CP, RP), while an immature made rounds at a pond along Rte. 233 north of Newville 2/7 (VG), SGL 169 on 2/23-26 (CP, RP, R&TGS), and KL 2/27 (DB, SB). Three **Trumpeter Swans** appeared at Zion Road Pond 1/30 (AD), one at KL 12/7 and 12/31 (VG, CP, RP), one at SGL169 2/14 (VG), and 4 at the mill at Big Spring 1/16-17 (VG, JB, DW). One **Common Goldeneye** was at Brackbill Road Pond 2/8 (SK), while up to 17 were at LQ 1/2, 1/28, and 2/12 (SK). One **Ruddy Duck** was at Children's L. 12/28 (KK, AMh, SS), one at LQ 1/14 and 1/28 (SK), and one at SCI Camp Hill 12/28 (BB).

Two to 3 **Eurasian Collared-Doves** were in their traditional area near Rte. 233 and Roxbury Road 12/31-2/25 (CP, RP, VG). One **Sandhill Crane** was at SGL 169 on 2/26-27, an especially rare record for winter (CP, RP, DB, SB). One **Golden Eagle** was seen along the Kittatinny Ridge at SGL 230 1/22 (IG).

Due to minimal snowfall this winter, Lapland Longspur sightings were limited to a single bird along Ott Road 1/8 (CP, RP), and 2 Snow Buntings along Baltimore Road 2/10 were the only reports for the season (TA). A Grasshopper Sparrow, a first winter record for *Cumberland*, was photographed at WH 1/4 and also reported 1/10 (AMI, NM). A Clay-colored Sparrow continued from fall through 12/21 at Cumberland Valley Rail Trail in Greason (KJ, TJ, DH), while another was at WH 12/31 through the end of the season (AMI et al). A Gambel's White-crowned Sparrow wintered in Greason for the second straight winter, returning 12/12 and staying throughout the season (KJ, TJ). A Nashville Warbler with an injured wing was photographed at West Fairview Boat Launch 1/7, providing a first winter record for *Cumberland* (JF). A late Common Yellowthroat was still at South Middleton Township Park 12/13 (TJ). A Palm Warbler was at WH 12/31 (AMI), and another was at Vincent DiFilippo Nature Preserve 1/30 (BM).

Observers: **Tim Johnson, 334 Greason Road, Carlisle, PA 17015, (717) 409-4805, tj359@sbcglobal.net**, Tony Arnold, James Beard, Benjamin Boone, Doris Brookens, Steve Brookens, Andrew Dapkins, John Fritchey, Ian Gardner, Vern Gauthier, Ron and Tracy George-Snyder, Debby Hook, Karena Johnson, Stefan Karkuff, Kathy Kuchwara, Annette Mathes (AMh), Allison Matlock (AMI), Barb Matthews, Nicholas Minnich, Chris Payne, Rebecca Payne, Susan Strassner, Don Weidemann.

Dauphin County

Locations: State Game Lands 290 Haldeman Island (HI), Susquehanna River (SR).

The Harrisburg CBC on 12/17 included observations of a **Surf Scoter**, a **Black Scoter**, and an **Eastern Phoebe** among a total of 92 species reported during the count (m.ob.). The Curtin CBC in northern *Dauphin* produced 74 species, with 2 **Northern Harriers** spotted 12/27 (m.ob.).

A **Trumpeter Swan** was observed on the SR in Harrisburg 12/5 (IG), and one was seen at HI 2/18 (LM, NM). A **Tufted Duck** was

photographed off Harrisburg City Island 12/29-1/24 (m.ob.). A **Horned Grebe** was spotted on the SR in Harrisburg 2/23 and 2/26 (JK, NM).

An early American Woodcock was observed in northern Harrisburg 2/13 (KS) and a Wilson's Snipe was seen on HI 2/25 (AB, SB). An Osprey was seen at Wildwood L. 1/18 (KA, JR). There were 2 fly-over observations of Golden Eagle: one at Ft. Indiantown Gap west corridor 1/19 (JD) and the other at HI 2/5 (LM, NM). A Northern Saw-whet Owl was seen north of Halifax 12/2 (SB). A Barn Owl was observed in lower Dauphin 1/6 (TN).

A couple of unexpected songbirds were observed during this reporting period. An **Eastern Phoebe** was seen on HI 1/1 (ZR) as was a **Gray Catbird** 2/17 (LM, NM). A **Brown Thrasher** was observed in the Hershey area 2/17 (DP). One lone **Common Redpoll** was reported in northern Harrisburg 1/2 (KS) while a **Vesper Sparrow** was at HI 2/19 (SB, SBi) and a **Lincoln's Sparrow** was seen on HI 2/11-19 (m.ob.).

Observers: Sandy Lockerman, 3830 Lexington Street, Harrisburg, PA 17109, (717) 329-8040, sandylockerman@yahoo.com, Karen Atwood, Scott Bills, Stephanie Bills (SBi), Andy Brought, Jerrod Derr, Joseph Kavanaugh, Laura Minnich, Nicholas Minnich, Ted Nichols II, Daniel Petruzzi, Joan Reith, Zach Richard, Kevin Shannon.

Delaware County

Locations: Barrett's Meadow (BM), Brinton Lake (BL), Commodore Barry bridge/riverfront (CB), Delaware River/Hog Island Rd (DRHIR), John Heinz National Wildlife Refuge (JHNWR), Ridley Creek State Park (RCSP), Springton Reservoir (SR), Tyler Arboretum (TY).

Except for a cold snap Dec 23-25, temperatures continued above average, with several Feb days in the 60s Fahrenheit. Snowfall was limited to a trace. It was just another winter that wasn't.

The 103rd Glenolden CBC was held 12/17 and tallied 96 species through the efforts of 104 participants. Though no new species were added, record high counts included 8878 Snow Geese, 31 Bald Eagles, 26 Red-shouldered Hawks, 10 Merlin, 20 Pileated Woodpeckers, 364 Fish Crows, 142 Eastern Bluebirds, and 4 Orange-crowned Warblers. Thanks to Dave Eberly for 14 years of compiling counts; Rich Horwitz will take over next year.

Snow Goose reports were numerous throughout the period, coming from multiple locations, often in large numbers, continuing the trend over the past five years of more birds being seen later. Similar to last year, Cackling Goose was reported from about a half-dozen locations on multiple dates (m.ob.), including BL, CB, Bethel Springs Elementary School and Springton Middle School. Tundra Swan were regular at CB throughout Jan (m.ob.).

A **Canvasback** was at SR 12/27-28 (RF et al.) as was a **Redhead** 12/26 (JZ) and 12/28 (BS). Four **Long-tailed Ducks** set down on SR 1/3 (RF) while a single bird was reported from DRHIR 1/20-22 (RF et al.) and 1/26 (RF). Once again **Common Goldeneye** were noted from SR on seven dates with up to 5 birds reported (m.ob.). A single **Pied-billed Grebe** was reported from SR, mostly in Feb (m.ob.), while others were at JHNWR 12/10 (JZ, KE) and 2/24 (RR) and DRHIR 1/26 (AG, RF). Of 4 **Horned Grebes** found at SR 12/27, a couple remained through 12/29 (AB, DB et al.). One was also seen at DRHIR 1/10 (RF).

American Woodcocks began displaying at Darlington Tract 2/20 (JZ) and were going strong through the end of the period. Unfortunately, the formerly reliable spot in Lester is under developmental pressure. Wilson's Snipe showed up in their usual area DRHIR 2/19 (DB). A possible Greater Yellowlegs was reported 1/17 from JHNWR (RR).

Laughing Gull was last reported DRHIR 12/3-4 (DB et al.). An Iceland Gull was found at CB 1/22 (JH) and at Marcus Hook 1/29 (DB). There were 2 Lesser Black-backed Gull reports: from Governor Printz

Park 1/1 (JZ, DO, JD) and from Morton Homestead 1/7 (EK).

Great Cormorant was reported only from CB 12/17-1/16 (RF et al.). A **Great Egret** was at DRHIR 12/5 (RF) and JHNWR 12/1 (JJ) and 12/8 (BS) when there were 2.

Northern Harrier fared well for the third winter in a row with many reports from JHNWR and DRHIR as well as reports from Aston 12/4 (m.ob.), Glen Mills School Area 1/4 (EK), Harvey Run Trail 1/28 (RF) and Ridley Twp Municipal Marina 2/7 (EB). Similar to last year, **Eastern Screech-Owl** and **Great Horned Owl** reports were numerous, but reports of **Barred Owl** declined, those being heard only in the BM area on multiple dates (m.ob.), in Glen Mills 1/30 (EK), and in Pennock Woods Park throughout the period (SG et al.). A **Short-eared Owl** was reported DRHIR 1/9 (RF). **Northern Saw-whet Owls** were found at RCSP 1/5 (JZ) and 1/22-23 (RG) and in Wallingford 1/6 (RF).

An **Eastern Phoebe** was found at JHNWR 2/11 (RR) and 2/15 (RR) and another was at BM 2/12 (m.ob.). Five **Horned Larks** were reported at DRHIR 12/5 (RF), and 15 were there 12/17 (AG); one was reported from First State National Historic Park 12/25 (EK). **Tree Swallows** showed up early with one at SR 2/23 (JZ) and 10 at JHNWR 2/24 (RR). **Red-breasted Nuthatch** reports were only occasional except at TY (m.ob.) where a couple were reliable throughout the period. About nine locations reported a **Gray Catbird** during the period, but only JHNWR had one consistently (m.ob.). **Brown Thrasher** was reported 12/14, 12/17, and 1/15 from the DRHIR area (AG, JMc).

Purple Finch reports were scattered in space and time but mostly from the end of Dec and beginning of Jan (m.ob.). A **Pine Siskin** was sporadic at a Swarthmore feeder 1/5-2/19 (DE); one was also found at The Willows 12/17 (RF). **Chipping Sparrows** were reported from a half-dozen locations but, like last year, they were most reliable at Hildacy Preserve in Jan and Feb (m.ob.), though the high count was 20 at RCSP 1/22 (RG, MG). A **White-crowned Sparrow** was at DRHIR 12/3 (AG) and JHNWR 1/29 (JMc). **Savannah Sparrows** were reported from TY 1/8 (JZ) and Glen Mills 1/27 (EK) as well as occasional reports from DRHIR (m.ob.) throughout the period. The latter location also held as many as 6 overwintering **Eastern Meadowlarks** (m.ob.). One **Baltimore Oriole** was photographed at JHNWR 12/10 (JZ) and another at a Media feeder 1/7 (CC). **Rusty Blackbirds** were reported throughout the period from their usual stronghold JHNWR (m.ob.), and one was also at Chadds Ford Marsh 2/11 (EK) and BL 2/24 (BQ).

An **Orange-crowned Warbler** was at CB 12/4 (DB) and 1/1-13 (JZ et al.); there was also one in Aston 12/10 (AK, CB). A **Nashville Warbler** also frequented the CB location 1/12-22 (AG et al.). A **Common Yellowthroat** hung out at DRHIR and was found 12/17 (JMc),1/2 (RF),1/4 (JMc) and 1/8 (JZ) while one was also found at JHNWR 1/2 (JZ, KE) and 1/17 (RR). **Yellow-rumped warblers** were reported from more than a half-dozen locations with multiple reports from CB 1/1-4 (JZ et al.) and JHNWR (m.ob.). The **Hermit Warbler** in Aston continued through the first week of Dec and was last seen 12/7 (m.ob.). We will be looking for it next year!

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Elk County

Locations: Kersey (KER), Millstone (MIL), Wilcox (WIL).

Only 60 species were reported on eBird his winter. Early migrants included 117 **Tundra Swans** near KER 2/23 (CB), one **Blue-winged Teal** at Beaver Run Impoundment 2/17 (JP), an **American Black Duck** seen in KER 1/1 (CB) and 1/2 (CB, KW), and 8 **Sandhill Cranes** photographed near KER 12/28 (CB, KW).

A **Golden Eagle** was seen near Sigel 2/5 (CB) and at Winslow Hill Elk Viewing Area 2/24 (CL), where a **Northern Shrike** was also sighted 1/1 (LC, BG).

Evening Grosbeaks were reported as follows: two near WIL 12/11 (LD) and three there 12/24 (SL), 23 females and four males on Tambine Ridge 12/24 (AM), one near Loleta 1/28 (JS), 11 females and four males between Johnsonburg and WIL 2/17 (AM), 18 near MIL 2/17 (DH), a high count of 48 "showing up again in large groups" in James City 2/18 (BJ), and six near MIL 2/19 (DH).

There were several sightings of **American Tree Sparrows** throughout *Elk* 12/8-2/27 (BB, CB, BG, BJ, CL, AS) with a high count of eight near KER 1/16 (CB).

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Erie County

There was only one major snowstorm this winter with snowfall averages well below normal. It was a mild winter as well, with most bodies of water freezing only temporarily. Presque Isle Bay was covered with ice for a little more than a week, just long enough for a few ice fishermen to venture out onto the bay. Lake Erie remained ice-free throughout the season. Despite the mild winter there were few overwintering passerines. There was no northern finch movement, with only one or two reports of **Pine Siskin** and no **Common Redpolls**, **crossbills**, or **Evening Grosbeaks**. Some highlights of the season included waterfowl with a continuing **Ross's Goose** from the fall season, large flocks of **Snow Geese** at the closing of the winter season, **Greater White-fronted Geese**, **King Eider, Harlequin Duck**, a probable female **Barrow's Goldeneye**, the first ever wintering **Purple Sandpiper**, and a juvenile plumaged **Yellow-headed Blackbird**. The following birds of note were recorded from Presque Isle State Park (PISP) unless noted otherwise.

Single Snow Geese were reported from several sites including a blue imm. 1/24 on Edinboro Lake (BZ), one on 2/11 at Presque Isle (RG), an imm. in mid-Feb in Harborcreek (SS) and one seen from the top of the Tom Ridge Environmental Center (TREC) tower on 2/27 (JB).If you were lucky enough to be in the right spot at the right time you would have seen 50 Snow Geese over Erie on 2/24 (TD) and 48 white and two blue from the top of the TREC tower on 2/28 (JB). The Ross's Goose reported last season was last seen on Edinboro Lake 12/11 (KRZ). Greater White-fronted Geese were reported more frequently than in the past with one at the LECOM campus in Erie 12/30- 31 (BM, et al.), and perhaps the same bird at the Fairview Business Park 1/6 (DS). Two were photographed over Gull Point 12/30 (JK). A small flock of six were seen from the top of the TREC tower at first light on 2/19 (JB). A Brant was spotted at Sunset Point during the waterbird count (WC) 12/3 (JM) and again the next day at Gull Point (CE). Cackling Geese are becoming more frequently reported with too many now to single out each sighting. However, the flock of 18 on Edinboro Lake 12/16 was noteworthy (RS). A female-type King Eider flew past Sunset Point during the WC 12/12 and probably a different bird was seen there on the WC 12/20 (JM). At least two Harlequin Ducks were observed flying past Sunset Point during the WC 12/3 and likely the same bird or birds were seen periodically from Sunset Point or the eastern-most breakwaters until 12/17 (JM et al.). Two female-type Harlequin Ducks were observed flying past Sunset Point during the WC again on 1/9 (JM), which could have been the same birds seen in Dec. A whopping 185 White-winged Scoters were counted flying past Sunset Point 12/6 (JM) while a flock of at least 500 Long-tailed Ducks were estimated offshore there 1/15 (JM). A probable female Barrow's Goldeneye was observed and photographed at Presque Isle2/11 (RG). Even though it was photographed, the images were not conclusive. A decision as to whether or not to accept will be determined pending PORC review. Single Red**necked Grebes** were observed 12/2- 2/9 from the WC at Sunset Point, off Beach 11, and south of the channel (JM). An **Eared Grebe** was spotted offshore from Cranch Park east of Erie 2/15 for a first Feb record (JB) and was seen again the next day off the north pier (JM).

The 10 Sandhill Cranes flying over Waterford Twp.12/4 were a large flock for this time of year (JH). A Sanderling at Gull Point 12/22 was a rather late date for this shorebird (RSw). Purple Sandpipers were reported from the eastern-most breakwaters and Gull Point through Dec with a high of three on 12/6 (m.ob.). As many as two were at Gull Point from 1/19-30 with one spending the rest of the season at the eastern end of Gull Point for a first overwintering record (RD). Probable hybrid gulls were seen in Presque Isle Bay with a Herring X Glaucous Gull 1/19 and a different one 1/31 and again 2/6 (JM). A probable adult Herring X Great Black-Backed Gull was observed 2/7 (JM). The number of whitewinged gulls reported was lower than usual, probably due to the mild weather and extensive open water, but a grand total of perhaps a dozen Iceland Gulls of both Thayer's and Kumlien's type was not bad (JM). Glaucous Gulls were particularly scarce with only four different birds observed around Presque Isle through the winter (JM).

A record-late **Green Heron**, by about a month, was at Leo's Landing 12/6 (JH). The only **Long-eared Owl** was one located in the pines 12/3 (RD). A **Northern Saw-whet Owl** was heard calling in a ravine in Erie 12/12 (KA). Single **Saw-whets** were found in the pines on 12/17 and 1/25- 2/11 (RD). Only three **Northern Shrikes** were reported, all by the same observer: at Summit Twp. 1/25, in Edinboro 2/7, and at SGL #109 in Waterford 2/12 (RS). Quite unusual was a female **Yellow-headed Blackbird** that was in incomplete basic I plumage at the Ranger Station feeder 12/9 (DS).

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Fayette County

Locations: Deer Lake (DL), Greenlick Run Lake (GRL).

It was a mild winter with a brief cold spell late in December. There was a small waterfowl fallout March 7, but overall waterfowl numbers were low.

Seven **Tundra Swans** were at Spring Valley 12/10 (DB), 5 were at GRL 12/22 (MF), and 7 were there 12/25 (AB, ABe). Up to 5 were at Nemacolin Woodlands Resort 12/26-2/12 (m.ob.). A **Northern Pintail** was at DL 2/21 (JC).

An **American Woodcock** was found just south of Brownfield 12/17 (ER). Two were at the same location 2/19 (ER).

Gulls are hard to come by in *Fayette*, but GRL is the most reliable place to find them during storms. A flock of 28 **Ring-billed Gulls** were there 12/4, and 2 were there 12/15 (MF). **Black Vulture** reports include one at Spring Valley 12/29 (MD), 2 south of Brownfield 2/19 (ER) and 2 at DL 2/25 (JC).

Hermit Thrushes winter in small numbers in the county. Reports include single birds at Stewart Twp. 12/29 (PL), Ohiopyle SP 1/1 (BB), SGL 51 on 1/21 (KB) and at Quebec Run Wild Area 1/22 (KB).

A **Purple Finch** at Confluence 1/15 (CT) was the lone report for the season. A **Yellow-rumped Warbler** was in Connellsville 12/26 (AB), and 2 were at Jacob's Cr. Wetlands 1/14 (KB). Two **Pine Siskins** were reported in eBird at Smithfield 2/17 and described well (CM).

Observers: **Mike Fialkovich, mpfial@verizon.net**, Kerry Bell, Dwight Blough, Allison Bergeron (ABe), Bill Blauvelt, Alex Busato, Jane Clark, Matthew Domer, Phil Lehman, Cindy McMahon, EJ Regula, Carl Thompson.

Forest County

Locations: Marienville (MAR), Tionesta (TIO)

Of the 58 species seen this winter, the largest were 2 **Tundra Swans** photographed at TIO 1/1 (KS). A **Ring-billed Gull** was at TIO 2/6 (ES) and near Cooksburg 2/20 (SK).

A Sharp-shinned Hawk was at Buzzard Swamp 1/28 (JS) with 250 American Robins, where the observer gave a "conservative estimate of large flock on crabapples. Most of flock observed simultaneously after being put up by Sharpie." A Cooper's Hawk was in MAR 2/26 (NL, DY) and near Starr 2/6 (ES). A light-morph Rough-legged Hawk was south of TIO 2/6 at the same time as a female American Kestrel (ES). Two Northern Saw-whet Owls were on the south side of Beaver Meadows RA 1/28 (JS). A Northern Mockingbird was in TIO 1/16 (MH).

Evening Grosbeaks were reported numerous times at a private residence in MAR 12/15-2/26 (DY *et al.*). When photographed 12/23, it was noted there were "continuing flocks of Evening Grosbeaks since early Nov. Birds persist throughout day" (DY). On 1/14, notes indicate that observers "color-banded 10 birds and deployed transmitters on 5 birds" (DY). On 1/29, the high count of 219 was an "exact count of simultaneously visible birds, perched in treetops on both sides of road" (JS). On 2/4 "the sex ratio was drastically skewed toward females" (TH).

A Rusty Blackbird was in MAR 2/26 (NL, DY).

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Franklin County

Location: Antrim Commons Ponds (ACP).

The Great Backyard Bird Count promoted by eBird took place over the four-day period that ended on President's Day this year. During the GBBC, volunteer eBird reviewers often get a ramped-up number of reports of birds that are unlikely for location and season. A report of American Bittern 2/19 in Franklin during this year's GBBC was one of those reports that seemed to be questionable. When questioned, the observers Pat and Fred Walls forwarded photos of a bittern that was frequenting a small spring fed run along their backyard just west of St Thomas. In following up on 2/21, they graciously brought me into their home and to a window where they showed me where to look to see the bird. It was first seen 12/27 or 12/28 and was regularly viewable by the homeowners in Jan and Feb. It was observed by other birders 2/21-24 before moving on from its long-staying location. In reviewing eBird history in Pennsylvania, there are not many records of this species during the winter period, and most were in early to mid-Dec or in the far southeast marshes like John Heinz NWR near Philadelphia. It was a nice surprise here in Franklin!

The winter reporting period continued with a lack of significant waterfowl, mirroring 2022. *Franklin* is not a prime flyway for **Snow Goose**, so as usual there were only scattered single birds reported including near Mercersburg 12/8 (DB, SBr), near Chambersburg 12/17 during CBC (BO, VG, GA, JD, SD), at Penn National Estates 1/23 (DH), and at a pond behind NAPA east of Chambersburg 2/25-26 (BO). Carrying over from the prior reporting period, a **Ross's Goose** was present 11/28-12/1 at Keefer Road Farm Pond (BO, BKt, DE, VB, m.ob.). A **Greater White-fronted Goose** was at ACP 2/26 (DE, JE, BO, m.ob.). A juvenile **Mute Swan** was at a pond on Burnt Mill Road 1/13-14 (JS, BKt). There are no pet swans in this area, and the bird moved on after a short stay.

The single **Trumpeter Swan** that had been present at Letterkenny Res. since 3/22/22 was last observed there 12/12, concluding a nearly nine-month stay (BO, BKt, m.ob.). Interestingly, a pair of Trumpeters were later present at the same location 1/29-2/21 (BKt, BO, TM). Whether or not these birds have a connection with swans successfully nesting in recent years in nearby western *Cumberland* is unclear. Seventeen duck species were reported during the winter period. Activity was extremely light and the rarer species were absent. However, on 2/28 there was a lot of activity on local water with good numbers of divers including **Redhead**, **Ring-necked Duck**, **Greater Scaup**, **Lesser Scaup**, **Bufflehead**, and **Red-breasted Merganser**. Three male Redbreasted Mergansers were at Mountain Brook Road Pond 2/28 (BO, BKtz, KR), and 6 males were on an Upper Strasburg pond the same day (BO, BKtz).

Not unusual here but reportable based on the rarity of the species in Pennsylvania in general, there were continuing almost daily reports of **Eurasian Collared-Doves** from the Greencastle to Marion to Shady Grove area where there is an established colony. The female **Rufous Hummingbird** banded in Upper Strasburg and previously reported in the fall-season report was last observed 12/7 (TS, BO, KS, VB, KR). This bird was the fifth eBird record for the species in *Franklin*.

Unusual in mid-winter, an **American Coot** was observed at ACP 12/29-1/14 (KR, DE, JD, SD, m.ob.). First reports of **American Woodcock** were of a bird at the end of Tower Road in Buchanan SF 2/20 (GA) and displaying birds near Upper Strasburg 2/23 (BO). Reports of overwintering **Wilson's Snipe** were made during CBC near Lemasters 12/14 (DB, SBr, KR), at Greencastle Res. 1/22 (GA), and 5 along Sandy Mount Road 1/26 (BO). A late **Double-crested Cormorant** was at Mountain Lake Fannettsburg 12/12-13 (BKt, BO).

Golden Eagles were observed in southward migration 12/2 on the *Franklin* side of the *Franklin/Fulton* ridge at Tuscarora Summit-The Pulpit with 2 in the morning (VG) and one in the afternoon (BO). The species was again observed in flight over ACP 2/15 (KR). An exciting late afternoon observation 1/31 was of 9 **Northern Harriers** congregating and interacting with each other just before dusk at a field observed from Blairs Valley Road (BO). **Barn Owls** continued to be seen occasionally at an undisclosed location in the St Thomas area. **Red-headed Woodpecker** is a species that may or may not hold over here in winter. This winter there were reports from many of the locations where they are typically found nesting. Normal in winter, there were scattered reports of **Merlin** and **Peregrine Falcon** from various locations.

An **Eastern Phoebe** spent a large portion of winter at Kriner Road Retention Ponds as indicated by occasional observations of the bird 11/18-1/28 (BO, DC, m.ob.). There were also several other reports with 2 birds at separate locations near Ft. Loudon 12/14 during CBC (BO, KS, CP, RP), and single birds at Martin's Mill Park 1/13 (R&TGS) and near Chambersburg Sewage Plant 1/20 (BO). Early migrating phoebes were reported at HROO 2/27 (BK) and at Long Lane Pond 2/28 (BO). Not surprising and in line with other reports in Pennsylvania, early **Tree Swallow** were at ACP 2/23 and 2/25 (KR, SB).

It wasn't a good winter in *Franklin* for winter finches. A female **Evening Grosbeak** was observed at feeders by a homeowner on Knob Hill Road 12/24 (DK), not seen again until 1/19 (BO), and then seen irregularly through the end of the reporting period (TM, BKt, KR). **Purple Finches** wintering here were few and far between. The only **Pine Siskin** report was a single bird from a Greene Knolls yard 2/7-12 (VB).

It was not a good winter for finding Lapland Longspur or Snow Bunting. The only report of Lapland Longspur was after a five-inch snow along Boundary Road 1/25 (BO). There were no reports of Snow Bunting. A Chipping Sparrow was photographed at a Guilford Hills feeder 1/2 (JD, SD). Single Fox Sparrows were reported from SGL 230 - Bricker Road 1/21 (BO, KS) and on a property along Walker Road (BO). Northbound migrant Rusty Blackbirds were reported from Creek Road in Path Valley 2/12 and 2/27 (BKt) and from Sportsman's Road 2/28 (KR). A Common Yellowthroat was photographed near Mercersburg 12/14 (KR). Although I am aware of a few wintering here in distant past

years, this is the first eBird historical report of this species in winter in *Franklin*.

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Fulton County

Locations: Boy Scout Road (BSR), Haines-Seville Wetland (HSW), Meadow Grounds Lake (MGL).

Overall, it was a relatively mild winter with very few days that larger lakes were frozen over. There was a total of 101 species reported during the period.

With the mild temperatures and little ice, there were 20 species of waterfowl seen at MGL during the period. Three of the better species seen included 4 **White-winged Scoter** at MGL 12/2 (TM). This was the fourth eBird record for the species in *Fulton* but only the first winter record. The other three records were all from the month of April. **Common Goldeneyes** were also seen at MGL with 2 on 12/19 and one 2/28 (TM). One **Long-tailed Duck** was seen at MGL 1/10 (TM).

There was one report of 8 **Bonaparte's Gulls at** MGL 12/12 (TM). **Horned Grebe** was reported twice: 2 at MGL 2/4 and 4 at the same location 2/28 (TM). With the mild weather there were two early reports of **American Woodcock**, with one recorded peenting at MGL 2/18 (JS, SC) and 2 at Buchanan SF's Big Mountain Overlook/Tower Rd. (CB, AH).

Red-breasted Nuthatch were reported in moderate numbers in various locations through the season. Most of the reports for **Purple Finch** were early in the season with only two reports after the new year at HSW, 2 on 1/6 (TM, VG) and one 2/25 (TM). There were no reports of Pine Siskins, crossbills, or Evening Grosbeaks.

Unexpectedly absent was Swamp Sparrow, reported at HSW and BSR in recent winters. There were three reports of one **Fox Sparrow** at MGL 12/7 and 2/21 (TM) and at BSR 2/7 (TM). Additionally, there was a male/female pair of **Eastern Towhee** that overwintered at the Harrisonville Substation (TM, VG) and an additional one seen at MGL 2/18 (JS, SC).

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Greene County

Locations: East View (EV), Franklin Twp. (FT), Greene River Trail (GRT), Monongahela Twp. (MT), Sycamore (SY).

Snow Goose was seen in FT 2/10 (EJR) and Greater White-fronted Goose was seen in SY 1/13 (JC). Tundra Swan was found GRT 12/30 (JF). Among ducks seen at GRT were Wood Duck 2/26 (JF), Gadwall 2/7 (JF), American Black Duck 2/5 (JL), Green-winged Teal 12/27 (AW), Redhead 2/5 (JL), Ring-necked Duck 2/10 JL), Lesser Scaup and Bufflehead 2/5 (JL), and Ruddy Duck 12/28 (KM). Common Merganser was seen at several locations throughout the period (m. ob.) while Hooded Merganser and Red-breasted Merganser were at GRT 12/31 and 12/27 (AW). Pied-billed Grebe was seen at GRT 2/10 (JL), and Horned Grebe was there 1/29 (JF).

Killdeer was at Lake Wilma 12/7 (NR). **American Woodcock** was seen in Freeport Twp. 2/13 (JW). **Ring-billed Gull** was sighted at GRT 12/27 (AW). **Great Blue Herons** were at the rookery in Center Twp. 2/19 (MH).

Bald Eagle was seen in many locations (m.ob.). Red-shouldered

Hawk was in Wayne Twp. 12/30 (NR). Barred Owl was in Aleppo Twp. 1/18 (NR). Belted Kingfisher was at GRT 2/5 (JL). Yellow-bellied Sapsucker was found in MT 1/1 (ZT). Merlin was observed in Washington Twp. 1/1 (SW).

Eastern Phoebe was observed in Dunkard Twp. 12/17 (ZWM). **Horned Lark** was in Cumberland Twp. 12/6 (NR). **Ruby-crowned Kinglet** was found in Dunkard Twp. 12/4 (ZWM), and **Golden-crowned Kinglet** was in MT 1/1 (ZT). **Red-breasted Nuthatch** was seen at SY 12/28 (JC) and **Brown Creeper** in MT 1/1 (ZT). **Winter Wren** was found in Dunkard Twp. 12/17 (ZWM).

Hermit Thrush was in Whiteley Twp. 12/8 (NR). Brown Thrasher was found in Perry Twp. 1/16 (KA). Pine Siskin was at SY 12/11, and Purple Finch was at the same location 1/19 (JC). Field Sparrow was at SY 12/15 (JC) and in Aleppo Twp. 1/18 (NR). American Tree Sparrow was in EV 12/26 (MH) and Fox Sparrow in SY 2/17 (JC). White-crowned Sparrow was in EV 1/14 (MH) and Swamp Sparrow at Lake Wilma1/4 (NR). Eastern Towhee was observed in Aleppo Twp. 1/18 (NR).

Eastern Meadowland was at SGL 223 on 12/6 (NR). Red-winged Blackbird was in Freeport Twp. 1/19 (JW) and Rusty Blackbird in EV 12/26 (MH). A large flock of Common Grackles was sighted in Cumberland Twp. 2/24 and over 50 Brown-headed Cowbird were at the same location 1/10 (CB). Yellow-rumped Warbler was at SGL 223 on 12/6 (NR).

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Huntingdon County

Locations: Aitch Access at Raystown Lake (AA), Brumbaugh's Access at Raystown Lake (BA), Cornpropst Mills (CM), Entriken Overlook at Raystown Lake (ENT), Huntingdon – town (HU), Juniata College (JC), Marklesburg waterfowl area-SGL 420 (MAR), McAlevys Fort (MF), Mount Union (MU), Old Crow wetland (OC), Petersburg (PET), Raystown Lake (RL), Seven Points Rec Area at Raystown Lake (SP), Shaver's Creek Environmental Center (SCEC),Stone Mt. (SM), Stone Valley (SV).

For the season, 111 species were entered into eBird for *Huntingdon*. The weather, in a word – mild. December was close to average, except for one severe cold snap around Christmas, but January and February were 10 and 8 degrees above normal at State College (*Centre*), respectively. Precipitation was close to normal, except that little came in the form of snow.

The 39th Huntingdon CBC was held on 12/18. The species total of 70 was slightly above average. A **Brown Thrasher** was new for the count and **Yellow-bellied Sapsucker, Tufted Titmouse,** and **Northern Cardinal** set record highs (DG *et al.*). The 30th Lake Raystown CBC was held on 12/28. The species total of 72 was above the average of 66. New for the count were **Greater Scaup** and **Northern Shoveler**. Record highs were established for **Redhead, Ruddy Duck, Horned Grebe, Red-shouldered Hawk, Yellow-bellied Sapsucker** and **American Robin** (JK *et al.*).

Waterbird diversity was high, presumably influenced by the mild weather. Uncommon and usually in low numbers, 65 **Snow Geese** were at SCEC 2/23 (MM). Moving somewhat early, 200 **Tundra Swans** were at the JC field station at RL 2/22 (PM, PMi, LMy).

Nineteen duck species were recorded. **American Black Duck** continued in numbers lower than a few years back: 13 reports were all of five birds or less. Following are a few high waterfowl highlights. Thirty **Northern Pintails,** early migrants, were at the JC field station at RL 2/22 (PM, PMi, LMy). Sixty **Redheads** and 55 **Ruddy Ducks** were at SP for the LR CBC 12/28 (MM, LMc, SM), both unusually high counts in late Dec. Also for the LR CBC, 207 **Common Mergansers** were at ENT (NB, DW, BM), and 150 were at the same location 2/6 (DK, TK, LMc, PM), fairly typical high counts for this species. Two lingering **Red-breasted**

Mergansers were found at AA for the LR CBC; early returning birds on 2/28 were one at ENT (LF) and four at Old Plank Rd. (KT). Also not usually present in mid-winter, 7 **Horned Grebes** were at SP for the LR CBC (MM, LMc, SM).

Four reports of **Ruffed Grouse** were all of single birds: two in SV and one each near HU and on SM (m.ob.). A very early **American Woodcock** at MAR 2/3 set a new early date record in eBird (PM, PMi, LMy). Despite the mild conditions, the only **Wilson's Snipe** was found on the last day of the period, 2/28, at CM (GG, DG).

Away from ridges and hawk watches, 3 **Golden Eagles** were found: one near MF 12/18 (RR) and singles near HU 12/27 (LSp) and 2/11 (JG). The only **Rough-legged Hawk** was on Piney Ridge Rd. 12/27 (SM). Two **Barn Owls** were at an undisclosed nest box site (JK). **Merlins** and **Peregrine Falcons** are now expected in winter, albeit still uncommon. Merlins were reported four times from scattered locations (m.ob.) and Peregrines three times, all in HU (KT).

Not surprisingly, there were more than the usual number of **Rubycrowned Kinglets** found, with at least nine reports. **Hermit Thrush** reports have been increasing in recent winters and that trend continued this year with numerous reports, the majority coming in Dec, when CBC participants were out in number. Reports of **Cedar Waxwing** were also numerous, with several flocks in excess of 50 birds.

A female **Evening Grosbeak** was heard and then located in SV 12/5, the only report (SK) following several Nov reports of as many as seven in that area. A **Lapland Longspur** was photographed near Tyrone during the Culp CBC (KE, CE). An early **Fox Sparrow** was at the JC field station 2/24 (PM), the only report. **White-crowned Sparrows** were few except for a flock of up to six at OC through much of the season (m.ob.). Two over-wintering **Eastern Towhees** were near PET 1/24 (DK, TK); one at OC 2/19 could have been an early migrant during mild weather (IG, XS).

By current standards, a count of 12 **Eastern Meadowlarks** in Germany Valley 1/16 was excellent (GG, DG); elsewhere, only two singles were reported, at MU 2/23 (LS) and at JC 2/26 (NI). Four reports of **Rusty Blackbird** were topped by five individuals at BA 2/6 (KT). A late **Common Yellowthroat** at Grazier's Mill Pond 12/6 (MN) provided a first county eBird record for the winter season. Five reports of **Yellow-rumped Warbler** totaled seven birds (m.ob.).

Observers: **Greg Grove**, **gwg2@psu.edu**, Nick Bolgiano, Iggy Colon, Carl Engstrom, Kurt Engstrom, Luke Fultz, Deb Grove, Joe Gyekis, Stefan Karkuff, Jon Kauffman, David Kyler, Trudy Kyler, Betsy Manlove, Lauran McConahy (LMy), Mark McLaughlin, Laurie McLaughlin (LMc), Sean McLaughlin, Payton Miller (PMi), Pedro Miranda, Mark Nale, Nico (Ni), Ron Rovansek, Xavier Scharff, Lynn Sprott (LSp), Logan Stenger, Ken Tucker, Zachary Turner, Scott Watson, Adam Webster, Doug Wentzel, Zealon Wight-Maier, and Jeanne Williams.

Indiana County

Locations: Indiana (IN), Indiana University of Pennsylvania (IUP), White's Woods (WW), Yellow Creek SP (YC).

The *Indiana* CBC was held Dec 26; 49 observers listed 75 species plus an additional five for count week. Six species' counts reached equally high or record-breaking status.

Top **Tundra Swan** counts at YC included 80 on 12/26 (ED, TM, MS, JT) and 83 on 2/22 (AL). With the large areas of open water at YC in late Feb, many waterfowl species were early. All waterfowl reports were at YC, unless otherwise noted. Seven **Wood Ducks** 2/26 (AH) and a single **Northern Shoveler** also 2/26 (CG, MH, RH, JT) were early returnees. The best count of **Gadwalls**, which were present all three months, but not continuously, was 50 on 2/26(AH). A **Eurasian Wigeon**, first observed 2/23 at WW (HR), was subsequently seen at YC 2/25 (GT) then subsequently sighted at YC through 2/28 (m.ob) and eBirded by 14 birders this quarter; this was the seventh county record. High counts included 35 **American Wigeons** 2/23 (GT), 24 **American Black Ducks**

2/12 (LC), 47 Northern Pintails 2/25 (MCa), and 17 Green-winged Teal 2/25 (MS, JT). Canvasbacks began drifting into YC 2/22 (AL) with highs of 24 on both 2/26 (AH) and 2/27 (CG, MH, RH). By 2/28, Redheads (JaP, JP) and Ring-necked Ducks (LC, CH, MH, RH, GT) had started to peak, with respective tallies of 50 and 280. Two Greater Scaup appeared 12/13 (SD, CH); high counts included five on 2/3 (MW) and six on 2/28 (LC, CH, MH, RH, GT). Forty Lesser Scaup were tallied 1/31 (LC, JC, SD, ED, CH, MH, RH); the next largest flock included 30 on 2/28 (JaP, JP). Hemlock Lake hosted a Long-tailed Duck 1/21 (AK, JKe), the lone report. Buffleheads remained in low numbers throughout the period. One to 6 Common Goldeneyes were the norm this season with a top count of 12 on 1/31 (LC, JC et al). Eighteen was the high Hooded Merganser tally both 2/3 (MW) and 2/23 (GT). The largest Common Merganser flock included 73 individuals on 2/9 (LC). Red-breasted Mergansers numbered 54 on 2/25 (MCa), the highest count this winter. Peak Ruddy Duck numbers were 109 on 12/13 (SD, CH) and 115 on 2/26 (CG, MH, RH).

A single $\mbox{Ruffed Grouse}$ was sighted at Two Lick Reservoir 2/12 (MS).

One to two **Pied-billed Grebes** showed up at YC 2/23 (GT) and remained through the end of the period (LC, CH, MH, RH, GT). YC yielded a single **Horned Grebe** 1/10 (MW), then five were listed on both 2/25 (MS, JT) and 2/28 (LC, CH *et al.*).

The **Rufous Hummingbird** that had been visiting a feeder near Seward since 9/25 (GT) was banded by Sandy Lockerman 12/2 (GT *et al.*) and last sighted 12/21 (GT).

Lingering at YC 12/20 (ED, MH, RH, DK) was a flock of 26 American Coots. Six Sandhill Cranes flew over YC 12/28 (JT) an hour before sunset, a nice addition to the IN CBC count week list. A flock of 20 Killdeer 2/25 (MCa) was an interesting find near YC. The first American Woodcocks noted were three males calling and displaying at the Conemaugh Floodlands 2/15 (DL) and three near IN 2/24 (JC). A Wilson's Snipe at the Windy Ridge Industrial Park 12/26 (MW) was a great CBC bird.

An extremely early **Bonaparte's Gull** appeared at YC 2/3 (MW); 14 also stopped at YC 2/24 (JL); these are the only Feb sightings for *Indiana* on record. The best **Ring-billed Gull** count was 62 at YC 2/9 (LC). Single **Herring Gulls** were present at YC 1/10 (CH, ED, PF, MH, RH), 1/11 (JT, MW), and 2/3 (MW).

The last **Common Loons** were two sighted at YC 12/20 (ED, MH, RH, DK).

Four **Black Vultures** were recorded 1/22 (MCa) at Tunnelview County Park and 1/28 (JK, TK) near Seward. Twenty was a good count of **Turkey Vultures** in IN 2/18 (VS).

A first-year **Golden Eagle** was photographed between Hillsdale and Cherry Tree 2/4 (MW). A light morph **Rough-legged Hawk** was found 2/9 (GT) near YC; another was listed at YC 2/27 (DM). The West Lebanon strips harbored one to 3 **Short-eared Owls** 1/4 (MH, RH) through 2/11 (LM). A roosting **Northern Saw-whet Owl** was a great find at SGL 332 on 12/18 (MW).

An adult **Red-headed Woodpecker** 12/26 (MH, RH, NJ, WJ) near Creekside was the lone report this winter. Single **Merlins** were sighted in various areas of the county between 12/1 (GT) and 2/15 (CH).

After a somewhat long winter absence, **Fish Crows** returned to IUP 2/15 (CH, TH).

A lone **Ruby-crowned Kinglet** was found at YC 12/26 (ED, MS) and another (perhaps the same individual) was present 1/5 (GS, MS). **Red-breasted Nuthatches** were noted at only four *Indiana* locations (m.ob.). **House Wren** was recorded at YS 12/26 (TM). **Winter Wrens**, too, were more widespread than usual with consistent reports at Waterworks Conservation Area between 12/5 (SD) and 2/11 (SD); various YC locations between 12/4 (AL) and 2/28 (LC, CH, MH, RH, GT) also harbored Winter Wrens.

A **Gray Catbird** lingered near Saltsburg 12/31 (MB). Single **Hermit Thrushes** were listed at YC 1/7 (TH) and at SGL 411 on 1/15 (MCa).

A Chipping Sparrow was present at a feeder near Shelocta 12/22-

24 (MH, RH); one was also noted 2/28 (MH, RH) at the same location. A **Fox Sparrow** appeared near Lewisville 12/3-4 (MC) and at Nolo 12/4-6 (GL); another was present near Seward 12/1, 7 (GT).

Two **Eastern Meadowlarks** were spotted near YC 2/25 (MCa).A flock of 23 **Rusty Blackbirds** was seen at SGL 411 on 1/21 (MW); this was the only Rusty report eBirded in the county.

Yellow-rumped Warbler sightings included one south of IN 12/26 (AL, JS), three at SGL 411 on 1/15 (MCa), one near Lewisville 2/9 (MC), and one at Floodway Park 2/10 (JP).

Observers: Margaret Higbee, 3119 Creekside Road, Indiana, PA 15701-7934, (724) 354-3493, bcoriole@windstream.net, Mark Bowers, Michele Carlson (MCa), Lee Carnahan, Jeremy Castle, Marcy Cunkelman, Sue Dickson, Ed Donley, Carol Guba, Court Harding, Amy Henrici, Roger Higbee, Tyler Hodges, Noah Jones, Warren Jones, Debbie Kalbfleisch, Avis Keener, John Keener (JKe), Jan Kuehl, Tom Kuehl, JeffLarkin, Gloria Lamer, Dennis Lauffer, Annie Lindsay, Lynn Mamros, David Medler, Trent Millum, James Pumford (JaP), Joseph Pumford, Henry Rummel, Joe Saxfield, Vicki Stelma, Garrett Strittmatter, Mark Strittmatter, John Taylor, Greg Tomb, Mike Weible.

Jefferson County

Locations: Cloe Lake (CL), Mohney Road (MR), Ringgold (RG), Fordham Lake (FL), Washington Township Highway (WTH), Clear Creek State Forest (CCSF), Richardsville (RV), Brookville (BV), Filtering Plant Road (FPR).

The 2022-23 winter season was decidedly mild with only sporadic periods of ice coverage on the region's waterways. Local birdwatchers took advantage of the open water and recorded some notable species. The best bird of the season was **Ross's Goose**. A pair of these diminutive geese were photographed on FL 12/4 (JAK). Another noteworthy species was a pair of **Trumpeter Swans** which appear annually in RV 2/5 (LC). A trio of **Gadwall** were tallied at FL 2/23 (JAK), and eight **Northern Pintails** were observed at the same location 2/10 (JAK).

Four Wild Turkeys and a Ruffed Grouse were encountered at CCSF 12/17 (RF), and a Common Loon was noted at CL 12/20 (JAK). Noteworthy birds of prey included an adult Golden Eagle along WTH 2/2 (DR), and a Northern Harrier along MR 2/27 (JAK). An Eastern Screech-Owl was present at a yard in RG 12/4 (JAK), and a Great Horned Owl was discovered in BV 12/10 (ES).

Notable passerine sightings included a pair of **Winter Wrens** along FPR 2/19 (NV), a **Purple Finch** in RG 2/15 (JAK), and a wintering **Common Grackle** in RG 1/6 (JAK).

Observers: Dan Richards, 1151 Treasure Lake, DuBois, PA15801, (814) 771-2471, drichards7@verizon.net, John and Avis Keener, Lisa Catarouche, Rob Fallon, Eric Schill, Nick Voris.

Juniata County

Locations: Academia (AC), Casner's Crossing - Juniata River (CC), East Salem (ES), East Waterford (EW), Lewistown Narrows Canal Park (LNCP), Licking Creek Valley (LCV), Lost Creek Shoe Shop (LCSS), McAlisterville (MA), Mifflintown (MIF), Mifflintown River Access (MRA), Port Royal (PR), Thompsontown (TT).

For the winter season in *Juniata*, 92 species were recorded in eBird, similar to recent years. The CBC, now officially re-named Juniata County-Lewiston, was held 12/17 and produced 70 species. Notable was a first count record of **Blue-headed Vireo**.

Waterfowl highlights were few and the best were of flyovers. At MA, 125 **Snow Geese** were recorded 1/25 (JP, MP), the unusual mid-winter date probably reflecting the birds' confusion over where they should be or go during this very mild winter. Somewhat more on time, though still a bit early, up to 200 **Tundra Swans** went over CC 2/22 (CK, JP, MP, TF) and 200 as well went over LCV the next day (DB). Ducks were unremarkable except the two reports of **Ruddy Duck**, the first ever in

eBird in *Juniata* for the winter season: two at MRA 1/1 (CK) and one at EW 1/19 (CK, TW). A **Common Loon** was a bit early at PR 2/25 (KR) as was a **Double-crested Cormorant** at MIF on the same date (DaB).

Top report of **Bald Eagle** was 17 at Seven Stars 2/16 (KB). A good assemblage of **Northern Harriers** spent 1/8-2/19 in the vicinity of Billyville and Cuba Mills Rds, with counts as high as eight (m.ob.). That same location held 2 **Short-eared Owls** 1/28 and one both 2/9 and 2/19 (MP, JP, SS). A **Barn Owl** was at Flint Rd 1/7 and 1/28 (CK, SS, TW, JV, DV) and one was at MA 2/18 (MP, JP). A **Long-eared Owl** was recorded at an undisclosed location three times during the period. One to 2 **Red-headed Woodpeckers** were at the usual location at the grounds of the Juniata Saddle Club through most of the period, and one was at CC 1/28, where it is not usually found (CK).

American Kestrel reports were above average, presumably owing to the mild conditions. A Merlin was at Meiner Rd 1/21 (TW, CK, JP) and one near AC 2/25 (CK, NK, TW). Single Peregrine Falcons were near MA 12/27 (BM), and at TT 1/7 (DaB, JP, MP) and again 1/19 (KB). Four Eastern Phoebes were recorded, above the usual winter number. Three were birds apparently trying to over-winter: near Walnut (GG, DG) and near AC (MP, JP) for the CBC 12/17, and one at a beaver pond on Red Rock Rd 1/7 (SS, CK, TW). However, one at EW 2/25 may have been a returning bird during mild weather (CK, NK, TW). There were few reports of Horned Lark; the high count was a meager 35 at LCSS 1/1 (CK).

More half-hardies, a **Ruby-crowned Kinglet** was at LNCP 1/21 (MP) and **Hermit Thrush** was reported at least 13 times, including three at ES 12/27 (BM). **Red-breasted Nuthatch** saw few reports though one was at a feeder in LCV most of the season (DB).

A good mid-winter count of 30 **American Pipits** was made at MA 1/5 (MP). There were only four sightings of **Purple Finch**: three reports of two birds each came from a feeder in LCV (DB) and two birds were near AC 2/5 (TF). Seemingly less easy to find these days, a **Snow Bunting** was at ES 12/27 (BM), in a season where numbers across the state were low.

About eight **American Tree Sparrow** reports were all single digit totals; three were regular visitors to a feeder in LCV Jan-Feb (DB). Four reports of **White-crowned Sparrow** totaled only five birds. Similarly, four **Swamp Sparrow** reports totaled seven birds, four of which were at MA 1/21 (JP). The only **Eastern Towhee** was at PR during the CBC 12/17 (DG). The only **Eastern Meadowlarks** were singles near MA 2/21 and 2/27 (MP, JP). In such a mild winter, shouldn't there have been more? Five **Yellow-rumped Warblers** at Red Rock Rd 1/7 was a good mid-winter number (JP, SS, TW, CK).

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Lackawanna County

Location: Lake Scranton (LS).

It was yet another mild and nearly snowless winter within the northeast region. The period's only significant snow event for much of the area occurred in mid-Dec, and it didn't amount to much more than a few inches. Ice coverage atop the region's lakes and ponds was also nearly non-existent with two exceptions occurring after temporary deep freezes in late Dec and early Feb. Many birders were hopeful for diverse waterfowl and gull congregations on the open reservoirs, but above average temperatures appeared to have encouraged the region's winter inhabitants to remain farther north, closer to their breeding grounds.

Unexpected waterfowl encounters were largely absent this season. One exception was a single **Horned Grebe** that visited LS 1/4-9 (BC, JC). Somewhat unusual was a lack of **Common Goldeneyes**; no reports of this annually expected winter duck occurred for the period. **Ring**-

necked Ducks and **Buffleheads** were reported countywide but rarely in double-digit tallies. An **American Coot** at Griffin Reservoir 2/21 (RW) was a notable find. *Lackawanna* birders will likely agree that the best discovery of the period was the **Glaucous Gull** that was located at LS 2/5 (TH, HL). This sighting was only the second occurrence of this species in county eBird history. A **Great Black-backed Gull** at Chapman Lake 2/16 (Melanie Mack) was also a significant discovery. Winter raptors, including **Short-eared** and **Snowy Owls** as well as **Rough-legged Hawks**, remained absent across the region. Despite this, **American Kestrel** sightings occurred in larger quantities than normal throughout the northeast, as is to be expected during milder winters (m.ob.).

Sightings of open country songbirds were limited to a single species: a lone **Horned Lark** was spotted scampering across the parking lot at the shopping plaza in Daleville 12/3 (RJ). Winter finches were not abundant this winter but still occurred in small numbers. A **Common Redpoll** was documented well at a private residence in the Mt. Cobb area 1/8-2/5 (Brian Hess). A second **Common Redpoll** was spotted at a private residence in Dalton 1/15 (MM). **Pine Siskins** were reported three times: 2 seen during the CBC 12/17, 2 on 1/15 in Dalton (MM) and one at Hubbard Mtn. northwest of Blakely 1/17 (RW).

The annual Scranton Area CBC on 12/17 was a success despite its results representing a continual decline in wintering species. This year's count reported 51 species by 15 observers. Highlights and significant observations for the count are listed in the chart below.

Species	#	Significance
Bald Eagle	7	New high count
		(surpassed 5 set in 2015)
Pileated Woodpecker	12	New high count
		(surpassed 9 set in 2020)
Field Sparrow	1	Unexpected sighting of an
		irregular winter inhabitant
American Tree Sparrow	7	Low count-wide tally
Dark-eyed Junco	182	Low count-wide tally

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Lancaster County

Locations: Lancaster Airport (LA), Middle Creek Wildlife Management Area (MCWMA), Noel Dorwart Park (NDP), Susquehanna River Lake Clarke (SRLC), Susquehanna WTP Washington Boro (SWTPWB), Woods Edge Park (WEP).

It was an unusual winter, with high and low temps holding at an average of 5F above normal. Dec was slightly colder than normal, but Jan and Feb were exceptionally warm. According to the Millersville University Weather Information Center, we received an astonishing one inch of snowfall this season, which is an all-time record low in the last century. Weather information is sourced from the NWS Harrisburg station.

The species count was 134, compared with the 5-year average of 138 (130, 141, 133, 138, 146 previous). Traditional wintering birds were scarce, able to remain to our north enjoying the favorable conditions. The 3rd county record Say's Phoebe, 4th Western Tanager, and 3rd "Audubon's" Yellow-rumped Warbler were excellent seasonal highlights. The all-time county list stands at 363.

Lack of ice cover allowed **Snow Geese** to peak unusually low at 79,000 at MCWMA on 1/31, about a month earlier than normal. Numbers slowly declined through Feb until nearly all birds were gone by Mar. A few **Ross's Geese** were seen at several locations, primarily MCWMA (m.ob.). There was a single **Greater White-fronted Goose** at MCWMA in the last week of Dec (m.ob.), three just east of LA 1/10 (ZM), and four at MCWMA 2/25 (CB). Diving ducks began pushing into SRLC in Jan, including **Canvasback** which amassed 109 birds 1/21 (ME, m.ob.). Sea

ducks such as **Long-tailed Ducks** and **Red-breasted Mergansers** were seen in low numbers at SRLC and MCWMA (m.ob.), but scoters were absent.

A **Virginia Rail** wintered at WEP, as they have each year since 2016 (m.ob.). An impressive flock of **Sandhill Cranes** estimated at 80 birds flew over the Oyster Point area 12/28 (anon.). It's likely that this was the same flock photographed in *Berks* just 3 hours prior, which tallied 109. There were a variety of juv **Iceland Gull** sightings 12/31 through Jan around SRLC (ME, m.ob.). A late **Great Egret** made the Lititz CBC 12/17, lingering from late fall (m.ob.).

An adult **Golden Eagle** was photographed at MCWMA 1/15 (JJ), and the same day a dark-type **Rough-legged Hawk** was reported along Rt. 283 near Manheim (CH). A **Barn Owl** was heard north of Manheim in the wee hours of 12/17 during the Lititz CBC (BC), and a single **Shorteared Owl** was observed through the winter at MCWMA (m.ob.).

Eastern Phoebes wintered in about six locations, mostly in the vicinity of the Susquehanna R. or lakes (m.ob.).

A **Say's Phoebe** was discovered at SWTPWB on 12/31 during the Lancaster CBC, marking the 3rd county record (JH, JM). It continued throughout the period, feeding on the insect hatches from the warm water treatment tanks.

It was a moderate irruption year for **Black-capped Chickadees** and **Red-breasted Nuthatches**, which many saw all over the county. Two adventurous **Tree Swallows** got a head start, showing up at WEP on 2/16 (DK). **Purple Finches** and **Pine Siskins** persisted in low densities from their fall movements (m.ob.).

The only **Lapland Longspur** was near Peach Bottom 1/28 (RG), and Snow Buntings were missed. A large mixed flock of blackbirds was tracked near Gap and White Horse 2/2-6, containing several male and female **Yellow-headed Blackbirds** (LB, RG, m.ob.).

Five warbler species were recorded. An **Orange-crowned Warbler** was photographed in the birdbath of a Rohrerstown home 1/1 (DK, SK), and a **Common Yellowthroat** lingered nearby at NDP to 12/3 (SM). A **"Yellow" Palm Warbler** wintered at MCWMA along the Willow Point trail (m.ob), and another hung out at SWTPWB (JH, JM, m.ob.). A male and female pair of **Pine Warblers** attended a suet feeder near White Oak all winter (MB). Most notably, a juv male **"Audubon's" Yellow-rumped Warbler** was discovered at SWTPWB 1/4 with a small flock of our East coast "Myrtle" subspecies. It was photographed well by many observers, and despite its basic plumage, didn't appear to show any hybrid traits. At the time of this writing, it was nearly through prealternate molt and looked quite striking. This was the 3rd county record for this subspecies.

A cold snap drove a female **Western Tanager** to the heated bird baths of a Columbia home 12/23 (DW). Fortunately, the homeowner allowed quite a few visitors to see the rarity. It was last observed 12/30 and becomes the 4th county record, all since 2017.

The Bowmansville **Painted Bunting** did not make his annual pilgrimage, bringing an end to his phenomenal run since the winter of 2016-17. If he lives on, blue skies and tailwinds.

Observers: Zach Millen, 101 Bridle Path, New Holland, PA 17557, (717) 723-1279, zjmillen@gmail.com, Larry Bernhardt, Craig Boyhont, Marah Brubaker, Bruce Carl, Mike Epler, Ross Gallardy, Christopher Heckscher, Jonathan Heller, Josh Jones, Dan Keener, Sammy Keener, Seth McComsey, Joe Meloney, Dennis Weaver.

Lawrence County

Locations: New Wilmington area (NW), Shaner Road marsh (SR), Plain Grove Twp. (PGT), Volant Strip Mines (VSM).

It was a very pedestrian season for Lawrence with no rarities except Northern Shrike (which isn't much of a winter rarity in Lawrence) and not a great deal worth discussing otherwise. One of the more unusual sightings of the season was of the 55 Tundra Swans at PGT on the unusual date of 1/1, late for fall migrants but quite early for spring migrants. Highlights at SR included seven Northern Shovelers 2/17 (CH), 15 American Wigeon 2/25 (MV), 15 American Black Ducks 12/16 (CH), and a fine Feb count of 245 Ring-necked Ducks 2/25 (MV). Elsewhere, two Gadwall at NW 1/14 (MC) were rare for Jan, nine Northern Pintails were at McConahy Rd. 12/20 (DB), single Canvasbacks were at PGT 1/1 (DK, KSJ et al.) and VSM 2/18 (MC), and 18 Hooded Mergansers were at SGL 151, Mason Road 12/10 (MV). Top count of Sandhill Cranes for the winter was 90 at VSM 12/20 (DB). Seventy cranes on Bonanni Rd. 1/14 (DK) was also a nice total. A flock of 150 Ring-billed Gulls on the Beaver River at West Pittsburg 2/4 (JS) was a good count for Lawrence. Rough-legged Hawks were frequently noted pretty much all season from five general locations, with the most reports around Lake Road and nearby (m.ob.). The only report of Shorteared Owl at VSM was one on 1/17 (JB). This species has become much harder to find there, a location that was a reliable wintering area for them for many years through the first decade of the 2000s. They are still there annually but have been much less reliable in recent years. Single Merlins were reported around the VSM area 12/26-1/27 (BB et al.), not all of which were necessarily of the same bird. A Northern Shrike was first found at the corner of Golf Course Rd. and McConahy Rd. in PGT 12/9 (RS) and was reported periodically there and nearby through 2/18. Some sightings from nearby may have been a different bird. There were five reports of Common Raven 12/26-2/22, mostly from the northeastern section of the county (m.ob.). Red-breasted Nuthatches were frequent in a New Castle yard the whole season (PS) and were noted from two other New Castle area locations as well. Reports of White-crowned Sparrow came from five locations, mostly around PGT and NW, representing a good winter for them here. An Eastern Meadowlark was back at Heather Heights Rd. 2/14 (RN).

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Lebanon County

Locations: Cold Springs Road (CSR), Fort Indiantown Gap Military Reservation (FIG), Greater Lebanon Refuse Authority (GLRA), Lion's Lake (LL), Memorial Lake State Park (MLSP), Middle Creek Wildlife Management Area (MC), North Mt. Pleasant Rd (MPR), SGL 211, Stover's Dam Park (SDP).

Both the Lebanon and Lititz CBCs were held on 12/17. This season marked the 43rd year of the Quittapahilla Audubon-sponsored Lebanon CBC. Thirty-four participants found 81 species during the Lebanon CBC, slightly down from the record of 83 species.

On 12/17, during the Lebanon CBC, Rita Stima discovered a **Common Shelduck** on a small pond at the GLRA. According to GLRA staff, the Shelduck had been in the area for several weeks. It remained at the GLRA until 2/4, before relocating to LL, where it stayed through the winter quarter. The potential 2nd state record drew a multitude of birders to the GLRA, and the staff made every effort to accommodate them. The concentration of experienced birders resulted in several other interesting sightings from the landfill area and at nearby Lion's Lake. Rita Stima is to be commended for her extensive efforts

to investigate the duck's provenance. She eventually had a first-hand conversation with a *Lebanon* resident who had lost a pair of Common Shelducks late in the spring of 2022, although he had no way of knowing for sure that the GLRA bird was one of them.

A Greater White-fronted Goose was at the GLRA 1/6 (RS, IT). A Canvasback was at MLSP 2/24-26 (JH, TN). Two Redheads were at MLSP 12/17 (SW, JD), with eight there on 2/28 (MC, JD). Three Redheads were at Millard's Quarry Pond 12/30 (ME, TN). Three remained for most of January at LL 1/1-26 (m.ob.). Seven Redheads were at SDP 2/23 (JM). A Greater Scaup was at LL 1/5-26 (m.ob.). Two Common Goldeneyes were at MLSP 2/26 (RS, JD, MC, KH). Two Redbreasted Mergansers were at MLSP 2/28 (MC, RS).

An **Iceland Gull** was occasionally seen at the GLRA 12/19-2/12 (RS, JM). Up to four **Lesser Black-backed Gulls** were at the GLRA 12/20-1/23 (m.ob.). A **Glaucous Gull** was at the GLRA 12/28-1/12 (m.ob.), with two there on 1/26 (RS, LD, AL).

Great Egret, accidental in Dec, was found during the Lititz CBC at MC 12/17 (NW, WW, JH, CF).

A **Barred Owl** was vocal at SGL 211 on 1/1 (JH). A **Short-eared Owl** was found at MC during the Lititz CBC 12/17 (CF). A **Northern Saw-whet Owl** was along CSR in FIG 12/17 (JH), and one was nicely photographed at FIG 2/25 (JD). Four Saw-whet Owls were found along the rail trail at SGL 211 on 1/1 (JH).

Five **Red-headed Woodpeckers** provided a good count during the *Lebanon* CBC at FIG 12/17 (SW, JD, CT).

Merlins were seen at the GLRA on 12/21 (MV, MD, JG, JV) and 1/14 (RW). One was in the Cleona area 12/21 (P&RW). There were five **Peregrine** sightings during the quarter: at MPR 12/17 (RP), Annville 12/27 (PN, JR), GLRA 1/1 (MS), Quentin 1/1 (SSc), and MLSP 2/16 (TS).

Seven **Red-breasted Nuthatches** provided a good count at MLSP 12/17 (JH). A **Gray Catbird** was an unusual winter find at the Union Canal Tunnel Park 1/1 (MH).

A Red Crossbill was found at the GLRA 1/2 (CH). A Northern Parula provided a first *Lebanon* December record at MLSP 12/21 (DH).

Observers: **Timothy Becker**, **tjbecker**81@aol.com, Kathy Becker, Mary Coomer, Michael David, Jarrod Derr, Lauren DiBiccari, Mike Epler, Cameala Freed, John Good, Karen Hardy, Jonathan Heller, Christopher Hinkle, Daniel Hinnebusch, Matt Hunter, Alex Lamoreaux, J.A. Mohl, Patrick Newcombe, Ted Nichols, Robert Peda, John Rice-Cameron, Susan Scanion (SSc), Mike Schall, Steve Schmit, Thea Sinclair, Rita Stima, Irene Taylor, Cassidy Titus, Mark Vass, Jeff Vinosky, Steve Walthius, Ryan Webb, Pat and Richard Williams (P&RW), Nina Wolf, Warren Wolf.

Lycoming County

Locations: Robert Porter Allen Natural Area (RPANA), Rose Valley Lake (RVL), Williamsport Dam (WD).

It was a comparatively warm winter, and RVL had at least some open water for most of the season. A total of 108 species were reported during the winter.

Six **Cackling Geese** were at RVL during fallout conditions 12/11 (BB). Two **Mute Swans** were in Pennsdale during early Jan (BB *et al.*). A **Blue-winged Teal** was in a small stream in Hughesville 1/1 (BB, DB, RB, BoB), the first Jan record of that species in *Lycoming*.

Four White-winged Scoters were at RVL 12/11 (BB). A Longtailed Duck was at RVL 1/5-8 (BB *et al.*). A Common Loon was at RVL 12/3 (AM, BB) and 12/4 (BB). A Double-crested Cormorant was at WD 12/8 (EH), and 2 were at RVL 12/11 (BB).

Short-eared Owls returned to Mill Hill Rd. in Jan and Feb (m.ob.) and one was seen in Eldred Twp. 1/16 and 1/18 (DR, JD).

The **Northern Shrike** first found at the end of Nov at RVL was seen frequently throughout the winter (BB *et al.*) and remained through at least 2/17 (RB).

Two Savannah Sparrows were at RPANA 12/18 (BB). An Eastern Meadowlark was found near Elimsport during the Williamsport CBC 12/17 (BB, DB, BoB). A Rusty Blackbird was at RVL 12/4 (BB).

The **Common Yellowthroat** first reported at RVL in Nov remained at the lake for the entirety of the winter season (BB *et al.*) and provided the first Feb record of that species in *Lycoming*.

Observers: **Bobby Brown, bobbybrown1011@gmail.com**, Bob Brown (BoB), David Brown, Rebecca Brown, Jean Dalton, Evan Houston, Allison Matlock, David Rothrock.

McKean County

Locations: Bradford (BRD), Ludlow (LUD), Port Allegany (PTA), Shinglehouse (SHI), Smethport (SME).

There were 49 species reported in winter, including 25 **Tundra Swans** "floating on water at gravel pit" near SHI 2/23 (KE). There was only one report of **Ruffed Grouse**, with two at Meade Run Area 12/4 (JE). A **Great Blue Heron** was at LUD 2/20 (NA). A **Golden Eagle** was seen near Ormsby 2/4 (TB, MS).

The only owl sighting this period was of a **Barred Owl** along Rte 6 between PTA and Smethport 2/20 (MS). Three **Merlins** reported were one outside SME 12/18 (MS), one on Rte 6 outside PTA 12/19 (MS), and one that "returns yearly" at SHI 2/15 (KE ph.). A **Northern Shrike** was photographed near Clermont 12/21, presumed the same seen in that area 1/5 (both AS).

There were 40 **Evening Grosbeaks** – "could be more, hard to count" - outside BRD 2/19, with 60 there 2/20; the observer stated that "[they] have been visiting my feeders for years, feeding on black oil sunflower seeds" (PeL). Two were near LUD 2/20 (NA). A **Pine Siskin** was outside BRD 2/19 (PL), and 4 were near LUD 2/20 (NA). There were four sightings of **American Tree Sparrows**: 5 near Norwich 12/31 (AS); 2 at West Eldred Swamp 1/20 (BR); two 2/17 and one 2/19 outside BRD (PL).

Observers: Carol Light, PO Box 6, Benezette, PA 15821, (717) 964-2324, lightpc2@gmail.com, Nancy Antonelli, Tanya Burnett, John E, Kathy Ebeling, Pat Lindstrom, Peter Lindstrom (PeL), Bruce Robinson, Matthew Schenck, Andrew Sidelinger.

Mercer County

Locations: Cannery Rd (CA), Chestnut Run (CR), Greenville (GN), Grove City (GC), Hermitage (HE), Ko Rd (KR), Millcreek Road (MC), New Wilmington Area (NW), Old Mercer Rd (OM), Propagation Area (PR), Sharon (SH), Sharpsville (SV), Shenango Trail (ST), Smith Rd (SM), Tieline Rd (TE), Transfer (TF), Trout Island (TI), Volant Area (VO).

Temperatures for Dec-Feb were unusually mild with hardly any snow deposition. December was mild with an average temperature of 57F (max 62F, min 54F). Precipitation of 1.97 inches and one inch of snow accumulation occurred. A two-day period, 24-25 Dec, experienced high winds and arctic cold with temperatures reaching -3F. January continued to be mild with temperatures averaging 55F for the month (max 60F, min 49F); there were nearly five inches of precipitation and three inches of snowfall. February continued the mild weather for a third straight month with an average of 58.7F (max 69F, min 47F); there were two inches of precipitation and no measurable snow. Despite the relatively mild weather, few bird observations were noteworthy. Many of the noteworthy records for the period occurred 12/26 during the Grove City CBC which occurs almost entirely within Mercer County.

Single **Snow Geese** were reported for the period: 12/2 at Maurice Goddard (MK, MM, MiC, AB), 12/4 at Lake Wilhelm (SR), and 12/28 at Jamestown (MW). **Tundra Swans** were scarce with only two reports: 13 at DR 12/26 (KS) during the Grove City CBC and 75 at CR 2/23 (MH,

SS). Other waterfowl species of note were two **White-winged Scoters** 12/2 at MC (MK) and a single **Long-tailed Duck** at SH 12/30 (MH).

Wild Turkeys were observed in large flocks only twice with a flock of 47 recorded on 12/26 at OM (MC, BB) during the Grove City CBC and another flock of 21 on 2/18 at SV (BW).

Shorebirds of interest included a single **Killdeer** 2/16 at HE (SS), 2 **American Woodcock** 2/26 at GN (MW), and 3 **Wilson's Snipe** at CA 12/26 (MW).

Fifteen Great Blue Herons were reported 2/18 at TI (BW).

Five **Turkey Vultures** were reported from SV 1/28 (BW), and a single individual was at GC2/13 (LB). A high count of 12 **Bald Eagles** were at PR 2/8 (BW).

A single Long-eared Owl was found at VO 12/26 (MW). One Short-eared Owl was at NW 1/13 (MH).

Passerine species were notably missing during the winter, possibly due to a lack of berries and other forage. An **Eastern Phoebe** was first noted in a report on 2/20 at TF (KS). One **Loggerhead Shrike** was found 12/30 at KR (MW). An estimated 100 **Horned Larks** were tallied from VO 12/26 (MW). **Evening Grosbeaks** were found in scattered locations, mostly as individuals calling as they flew over. However, 3 visited a feeder 12/02 (KS) and were photographed. Other sightings included one 12/4 at PR (MW) and one 2/25 at GN (MW). During the Grove City CBC, 4 **Lapland Longspurs** and one **Snow Bunting** were found among 32 **Horned Larks** 12/26 at TE (KS). One **Field Sparrow** was recorded that same date (MC, BB) but the high count of 7 was tallied 1/18 at ST (MW). Fifty **American Tree Sparrows** at SM during the CBC (KB) was the highest count of the species for the period. Three **Rusty Blackbirds** were another CBC lucky find at GC (KS).

A high count of 52 **Northern Cardinals** was recorded at NW feeders 1/14 (SuS).

Observers: Mary Alice Koeneke, koenekema@gmail.co, Brendan Baptiste, Kim Berry, Lauren Brock, Alex Busato, Martin Carlin, Michelle Carlson (MiC), Michael McDevitt, Mimi Hoffmaster, Malcolm Kurtz (MK), Stephen Repasky, Steve Sanford, Susan Sipe (SUS), Kim Springer, Michael Williams, Bill Winkler.

Mifflin County

Locations: Back Mt Rd in Big Valley (BMR), Big Valley (BV), Bunker Hill Pond in Big Valley (BHP), Juniata River (JR), Lewistown (LT), McVeytown (MV), Victory Park in Lewistown (VP).

For the winter of 2022-23, 85 species were recorded in *Mifflin*. Reports of **Tundra Swan** were 27 at VP 2/11 (CK) and 51 over LT 2/22 (RD). Sixteen duck species were recorded, mostly routine. Less commonly reported species included up to 4 **Canvasbacks** at VP 12/31-1/7 (RD, JZ, MP, JP) and 2 on the JR south of LT 2/25 (DO); and up to 5 **Redheads** at VP 12/31-1/13 (m.ob.). On the negative side, only 2 **American Black Ducks** were recorded, one each at VP 1/4-2/8 (RD, JZ, MP, JP) and BHP 2/1 (RD).

Not as easy to find in winter as they once were, single **Wilson's Snipe** were found at three locations in BV 1/29 (2) and 2/1 (JK, RD). The only reports of **Rough-legged Hawk** were of one at BMR 1/11 and 2 there 1/16, one light, one dark (RD). One or 2 **Barn Owls** were at an undisclosed location. A **Short-eared Owl** was on BMR 1/7 and 2/1, where seen occasionally in recent winters (JK).

Red-headed Woodpeckers were in usual areas in BV 1/5 (JZ) and 2/1, one each (RD). Single **Merlins** were around LT 1/10 and 1/21 (RL, RD), and single **Peregrine Falcons** were in the LT and VP area 1/13, 1/21, and 2/15, where they have been seen in recent winters (RD, JZ).

As many as four **Ruby-crowned Kinglets** were found throughout the season at VP (m.ob.), an unusually high number for winter. Only 2 **Purple Finches** were reported: one each at LT 12/28-31 and BMR 1/16 (RD). Among very few reports, a bright spot for **American Tree Sparrow** was a count of 40 on BMR 2/4 (JZ). The only **Eastern Towhee** was at MV 2/20 (EP). Only one location had **Eastern Meadowlark**, BMR, where counts of one to 12 were recorded on several occasions 2/1-11 (JK, JZ, VG, CK, TW). A **Pine Warbler** at VP 2/7 (RD) provided the first winter eBird record for *Mifflin*.

Observers: **Greg Grove, 9524 Stone Creek Ridge Road, Huntingdon, Pa. 16652, gwg2@psu.edu,** Rob Dickerson, Vern Gauthier, Chad Kauffman, Jon Kauffman, Rich Laird, Desmond O'Donovan, Ed Poprik, Tiffany Willow, Jay Zook.

Monroe County

Locations: Cherry Valley NWR (CV),Delaware River (DR), Gouldsboro Lake (GL),Mt. Airy Lake (MAL),Pocono summit Lake (PSL), Skytop (SKY), Tobyhanna SP (TSP), Weir Lake (WL).

The winter season turned out to be very mild, with snowfall and arctic blasts occurring with little regularity. Freeze-ups were few and far between. Even so, fewer birds were found lingering or staying throughout the period, except a **Brown Thrasher**.

A **Cackling Goose** made for a nice surprise at SKY 2/25 (RK). The long-staying **Trumpeter Swan** continued at PSL all period and was seen by many. A male **Gadwall** was at WL 12/15 (PN). A high count of 6 **Northern Pintails** were at TSP 2/24 (PN). Two **Redheads** were on the DR 12/27 (JM). One male **Canvasback** was a pleasant surprise at MAL 1/4 (BJ). A lone male **Lesser Scaup** was at WL 2/13. Last but not least was a female **Long-tailed Duck** at the DR 12/4 (JM).

Saylor's Lake continued to produce impressive numbers of **Common Mergansers**, with up to 200 peaking 2/26 (Jacob Borger). A very early **Pied-billed Grebe** was observed at GL 2/20 (Mike Leggier). An **American Coot** was first found by Rich Rehrig 2/24 on Witmer's Lake and seen by many. An **American Woodcock** was peenting in the West End 12/31 (JM); the earliest one found in the new year was way up on Snow Hill Road 2/19 (Laurel Bishow).

A **Rough-legged Hawk** was down by the DR 2/10, and an overwintering **Golden Eagle** continued in the same general area during the period (all JM). A **Short-eared Owl** was a great pick-up while driving one evening in the West End (MG), while the secretive **Northern Saw-whet Owl** was an even better find in CV (JM).

Red-headed Woodpeckers provided wonderful winter appearances this year. One was a Christmas gift 12/24 at a West End feeder (MG), and another was a gift from President Lincoln 2/12 at a known Snydersville location (JM). The only **Merlin** tracked down this winter was one in Kunkletown 12/26 (CH). A lingering **Brown Thrasher** that was coming to seed since last fall in the Mt. Pocono area was last seen 12/26 (BJ). **Pine Siskins** were very spotty this winter; 4 were eventually seen 1/14 down by the DR (JM).

Observers: **Bruce Johnson, brucejohnson207@yahoo.com,** Maricatherine Garr, Cory Husic, Rick Koval, Paul Nale, Jon Mularcyzk.

Montgomery County

Locations: Dixon Meadow Preserve (DMP), Evansburg S.P. (ESP), Fort Washington S.P. (FWSP), Green Lane Park (GLP), Norristown Dam (ND), Palm/Hosensack Farmland (PHF), Pennypack Ecological Restoration Trust (PERT), Sandy Run Park (SRP), Valley Forge National Historical Park (VFNHP), Wissahickon Waterfowl Preserve (WWP).

Winter 2022-23 was one of the top five warmest on record for the region, with just a couple of relatively short-lived hard freeze periods and very little snowfall recorded. The generally mild temperatures, plus the tenacity of an ever-expanding number of observers, resulted in the detection of 132 species of birds in *Montgomery*. This is the highest winter total of the past decade. Among them was a county-first Whitewinged Dove; our first winter LeConte's Sparrow and Sedge Wren; and a county-first hybrid goose.

A mighty flock of Snow Geese was present in northern Montgomery

1/11-2/20, bouncing around between GLP and PHF feeding grounds (m.ob.). Peak estimates reported during this period, all at GLP, were 15,000 on both 1/17 (KC) and 2/5 (GF) and 10,000 on 2/9 (RK). The 15K noted on 1/17 represented a new Jan county high count, besting 10K in Jan 2020, our last big Snow Goose Jan/Feb. Per eBird records, at least, this Feb was only the third Feb on record with 15,000+ Snow Geese recorded. A potential Ross's Goose (or Ross's/Snow hybrid) was found among the Snow Geese in PHF 1/29-31 (AM, m.ob., ph.). Single Greater White-fronted Geese turned up at several places in mid-Jan: on a pond at Bethayres Swamp 1/13-15 (JC, m.ob., ph.); GLP 1/15-2/24 (KC, SGr, m.ob., ph.); Springfield Twp.'s SRP 1/16 (MG). Cackling Geese were spotted at six locations, in quantities up to 5, 12/3-2/18 (m.ob., ph.). An apparent Barnacle x Cackling Goose hybrid at GLP 12/16-18 and 1/21-24 was new for the county list (SS, m.ob., ph.). A Snow x Canada Goose hybrid, a more expected chimera, frequented a Worcester cemetery 2/12-18 (DBa, ph.). The largest of many large Canada Goose counts this period, 4900, was tallied at GLP 2/4 (SJ, KaJ).

Tundra Swans are expected in *Montgomery* at the margins of the winter season, including during the majority of Feb, but are typically absent from the county through Jan and the back half of Dec. This season, there were sightings from four locations during that mid-winter trough (m.ob.). These included a Dec high count record-setting 24 flying over Plymouth Meeting 12/21 (PB). A group of up to 11 at GLP 1/18-24 (DD, m.ob., ph.) represented just a second Jan county record of more than 10 Tundras.

Northern Shoveler numbers were strong at GLP, with 50+ reported to 12/19, and multiple instances of quantities in the teens through Feb (m.ob.). A Dec record high count of 145 shovelers was recorded 12/7 (PD), and 128 were counted 12/11 (KC). To date in the eBird era, Dec sightings of 100+ shovelers have occurred in only two years, 2017 and 2022. **Gadwall** were similarly bountiful, albeit not record-setting. The highest count reported, 143, was at GLP's Knight Lake 12/21 (KC), a location which saw high Gadwall numbers through 12/28 (m.ob.). The period's relatively paltry GLP **Northern Pintail** high count, 22, occurred on the rather early date of 2/1 (PD).

Canvasback were observed at GLP in ones and twos on four occasions 12/28-2/1 (m.ob.), plus 5 on 2/23 (LH, ph.). A Redhead was at GLP 12/29 (DB, m.ob., ph.), and as many as 10 showed up at GLP 2/1-15 (m.ob., ph.). A group of 6 Redheads was also seen on a Perkiomenville farm pond, a couple miles south of GLP, 2/10-12 (PK, SS, m.ob., ph.). Single Greater Scaup were viewed at Heuser Park 12/17 (DB, SGr) and GLP 2/3 (WS, SS, ph.), and a pair was at ND 2/9-19 (MR, m.ob., ph.). A Long-tailed Duck was present at GLP 1/5 (JF, JH, ph.); another 2 were seen at GLP 1/31 (SS, ph.). Common Goldeneye were detected at GLP and the usual Schuylkill River sites for nearly the entire period (m.ob.). ND saw the highest concentration of goldeneye, including 16-18 on 2/11 (m.ob.). Single Red-breasted Mergansers were at GLP 1/1 (LH, ph.), 2/11 (DB) and 2/18 (DB, ph.). Aside from a gap in mid-to-late Jan, Ruddy Ducks were present throughout the period, encountered primarily at GLP and WWP (m.ob.). Though the period's overall high count, 112 at GLP 12/7 (PD), broke no records, 11 counted at GLP 2/11 did (ML). A new Feb high count record was set by that raft of Ruddies.

Solitary **Horned Grebes** were seen at GLP 2/1 (JF, m.ob., ph.) and 2/25 (SE, KeJ, JFu, m.ob., ph.). Horned Grebe is not a common Feb species: prior to 2023, there are only eight records for the county.

The biggest "mega" of the period was a **White-winged Dove** photographed in an Elkins Park yard 12/17 (PD, ph., doc. submitted via eBird). While present for a few minutes only, and not relocated thereafter, that was enough to add a brand-new species to the county list.

American Coots were noted at GLP in larger quantities than some past winters, including 20 on 12/20 (KC) and 12-15 on 2/16-26 (m.ob.).

Three surprise Sandhill Cranes flew low over DMP 2/15 (SJ, ph.).

An **American Woodcock** reported at ESP 1/29 (DB) was the fifth county record for Jan. Right in line with expectations for an abnormally warm Feb, woodcock display started early, first observed 2/14, at the

ESP-adjacent Kibler Meadows (JW, MW). (Others noted non-displaying woodcocks 2/10-12 [m.ob.].) Single **Wilson's Snipes** were seen at DMP 12/27 (RM, ph.), McCarthy Park in Whitemarsh Twp. 1/21 (DB), Upper Merion Twp. 1/28 (KR), and DMP again 2/25 (RM).

A **Bonaparte's Gull** was at GLP 12/24 (WS), the first Dec bonie seen in *Montgomery* in five years. An immature **Iceland Gull** was at GLP 1/1 (AD, ED, ph.), and an adult was well-described at ND, 2/12 (JHa), representing a first record for that location. The **Lesser Black-backed Gull** high count for the period at GLP was "only" 130, recorded 1/1 (JFu). While 50+ counts were steady throughout much of the season (m.ob.), they were a far cry from GLP's 330 high count and seven days of 200+ Lesser Black-backed Gulls recorded the previous winter. A **Great Black-backed Gull** was at ND 12/27-30 (MR, ph.).

A Common Loon flew over FWSP 12/13 (NS). Double-crested Cormorant was scarce as well, with Schuylkill River sightings at VFNHP 12/31 (RH) and Oaks 1/5 (SGr), and none at GLP, even with open water present there for most of the period.

Great Blue Herons began congregating at their ESP rookery in Feb, and there were observations of 13 on 2/19 (CB, JW).

The rendering plant in Souderton attracted 108 **Black Vultures** 1/29 (AM). For the fifth winter since 2015, a dark morph "western" (or maybe "northern") **Red-tailed Hawk** was found in Upper Hanover Twp., present at least 1/29-2/4 (AM, m.ob., ph.). Hatfield's perennial near-white leucistic Red-tailed Hawk was again photographed 1/26 (AM). What was potentially a second near-white leucistic Red-tail was found at Central Perkiomen Valley Park, between Graterford and Schwenksville, 2/26 (DB, ph.). Eight miles and change separate the sites.

Up to 5 **Long-eared Owls** were at a known roost site in northern *Montgomery* through the period (m.ob., ph.). The only **Short-eared Owl** reported was at VFNHP 2/11-26 (SS, m.ob., ph.). Seven **Northern Sawwhet Owls** were noted at Lorimer Park 1/11 (PD, vr.), tying a county high count record set by the same observer a year earlier. A more typical 1-2 were noted at nine other sites 12/1-2/20 (m.ob.).

Despite the warm weather, only 2 **Eastern Phoebes** were known to have successfully overwintered: one at WWP (m.ob., ph.) and another at Twining Valley Park (LM, MG, ph.). There were also one-off phoebe sightings in Lower Gwynedd Twp. 12/1 (TV) and Rolling Hill Park 1/6 (SJ, KJ, ph.).

An atypically large winter flock of 25 **Fish Crows** was reported in Bala Cynwyd 1/10 (KW). **Common Ravens** were observed at more than 70 locations (m.ob.), including a group of four at ESP 2/14 (DB).

Widespread irruption of **Black-capped Chickadee** was exemplified by numerous reports this period (m.ob.). High counts of four were noted in Franconia Twp. 12/17 (SG) and GLP 12/21 (ML).

Seemingly at odds with the absence of snow and the march of time, **Horned Larks** were recorded in the highest numbers *Montgomery* has seen since the 1980s, before rampant development ate up much of their preferred barren agricultural land. Many observers counted 100-120 at PHF 1/21-2/7 (m.ob.).

As many as 4 **Northern Rough-winged Swallows** were seen at the WTP at Oaks to 1/5 (SS). **Tree Swallows** began their return early, with 6 at ND 2/12 (MR) being the 1st in a series of early sightings.

A **House Wren** was at WWP for the entire period, first observed 12/2 (AA, m.ob., ph.). A **Sedge Wren** found at VFNHP 12/8 was a winter first record for the county, and one of only a handful of winter records for the state (PD, m.ob., ph.).

Gray Catbirds were found in 10 locations (m.ob.), and **Brown Thrashers** were at SRP 12/5 (SN, ph.), Weidner Farm in Marlborough Twp. 12/18 (PB) and Norristown Farm Park 2/14 (PK).

We saw light irruption of a few northern finch species this period. Far and away the most abundant of these were **Purple Finches**. There were sightings of one to 5 Purples at 25 locations (m.ob.), plus a group of 14 at Camp Woods Preserve, near Ambler, 1/27 (RB, ph.). A pair of **Red Crossbills** were reported over VFNHP 12/4 (SGr). Single **Pine Siskins** were observed at feeders in Penn Valley 12/7 (PS) and Harleysville 12/16 (MRa, ph.). A flyover siskin was heard at FWSP 12/17 (DB, JB).

The period's only Snow Bunting was reported at VFNHP 2/18 (SGr).

Montgomery's 2nd-ever winter-season **Grasshopper Sparrow** was found at VFNHP 12/4 (RR, ph.). **Chipping Sparrows**, increasingly common in winter, were seen at 16 locations (m.ob.). While most of those sightings were of low numbers, PERT's unusually dense winter population was once again evident, with counts as high as 52 asserted and a regular sizable presence throughout the period (m.ob.). Away from PERT, the largest Chipping Sparrow flock recorded was 12 at Weidner Farm 12/14 (WBH, ph.). One or 2 **White-crowned Sparrows** were located at six sites (m.ob.), and as many as 5 were at the usual go-to spot for this species in winter, PHF (KR, m.ob.). *Montgomery's* first ever winter **LeConte's Sparrow** was at PERT 2/25 to the end of the period (PD, m.ob., ph., doc. submitted via eBird). In addition to claiming that first winter record slot, the Feb LeConte's is only the 3rd county record overall.

A female-type **Baltimore Oriole** visited a feeder at Bryn Athyn College for several days, 1/12-25 (EdC, ph.), while an adult male made a one-day appearance at a Harleysville feeder 1/26 (MLR, ph.). Three thousand **Red-winged Blackbirds** were estimated in PHF 1/29 (AM), defining a new winter high count for *Montgomery* by a huge margin, based on eBird data. An estimated 4000 **Common Grackles** at GLP 12/29 (DB) was a record Dec high count, more than double the previous record. As many as 12 **Rusty Blackbirds** were reported at Bethayres Swamp 1/4 through the end of the period (MG, m.ob.), while one to 2 Rusties were at a North Wales pond 12/8 and 2/25 (JS, ph.), Harriet Wetherill Park 2/16 (MS) and Four Mills Nature Reserve 2/23 (RB, vr.).

An **Orange-crowned Warbler** was reported at Heuser Park 12/12-21 (SGr). VFNHP hosted a male **Common Yellowthroat** 12/4 (KS, ph.) and a **Palm Warbler** 12/4-1/7 (SGr, DeB, m.ob., ph.). **Pine Warblers** remained, by far, the most common of the unexpected winter warblers, but there were more sightings during the previous two winters than this one. All told, Pines were recorded from nine sites (m.ob.), all singles except for 4 at VFNHP 12/2-9 (JF, m.ob., ph.).

Observers: W. Brian Henderson, Salford Twp., PA, wbhenderson@ gmail.com, Andrew Albright, Douglas Baird (DBa), Debbie Beer (DeB), Dave Belford, Jeff Belford, Carrie Bell, Paul Bernhardt, Redmond Brubaker, Josh Cooper, Kevin Crilley, Dave Dawson, Evelyn de Chazal, Andrew Dolan, Edward Dolan, Paul Driver, Steven Esrey, Jason Fehon, George Franchois, James Funk (JFu), Scott Godshall, Mike Grubb, Steve Grunwald (SGr), Jacob Hall (JHa), Jason Hall, Ralph Hall, Len Hillegass, Karl Johnson (KaJ), Kelly Johnson (KeJ), Kristen Johnson, Sheryl Johnson, Rudolph Keller, Paul Krepto, Maria Lozada-Rueger (MLR), Michael Lyman, Linda McGrath, August Mirabella, Robert Mottershead, Sean Naughton, Marc Radell (MRa), Randy Richard, Kenneth Rieker, Mike Rosengarten, Jennifer Segrest, Martin Selzer, Nathaniel Sharp, Kiehl Smith, Perri Strawn, Sam Stuart, Walter Stutz, Tom Voter, Ken Walsh, John Ward, Maureen Ward.

Montour County

Locations: Montour Preserve (MP), Fry Wetlands along Rte. 54 (FW).

Winter was extremely mild, leading to some species sticking around. Also, the open water at the MP boosted goose diversity: 6 **Greater White-fronted Geese** were there 2/25 (MH), and a single **Cackling Goose** was seen there in each month of the reporting period, with two 2/27 (AK).

A **Sandhill Crane** was at FW 2/26 (JD), where it continued for much of March. An **American Woodcock** at MP 2/15 (BP, WD) was on the early side.

In cold winters, **Turkey Vultures** are often absent, but in this mild winter, small numbers were present throughout the reporting period, including a group roosting near this observer's house in Danville. A few **Black Vultures** also stuck around. A **Red-shouldered Hawk**, typically a migrant through the county, overwintered in the MP area, where it was detected from Nov to Feb. The mild winter weather led to a paucity of **Rough-legged Hawk** sightings throughout the state, and only a single individual was reported in the county, in a traditional area on Strick Rd 1/24 (AK).

A Northern Saw-whet Owl at MP12/18 (BP, WD) during the Bloomsburg Christmas Bird Count was the first eBird record for the county.

The farmlands along Shady Hill Rd. were good for field birds, yielding numerous reports of **Lapland Longspurs**, with a maximum of 3 on 2/28 (AK) and as many as 60 **Snow Buntings** 1/26 (KP).

Observers: **Evan Houston, evanghouston@gmail.com**, Jonathan DeBalko, William Donmoyer, Matthew Heintzelman, Andy Keister, Karol Pasquinelli, Bryce Perles.

Northampton County

There was a brief cold spell in December that froze area ponds for a short period. Otherwise, it was an above-average winter for temperatures, with very little snow accumulation.

Ross's Goose was seen flying over a home in Moore Twp on 12/26 (BE) and at Nazareth Quarry 12/3-1/2 (SK, DD). Two **Greater White-fronted Geese** were at Silver Crest Rd Retention Pond 12/9 (AM) before moving to Regency Blvd. Retention Ponds 12/11-22 (MS). A **Barnacle Goose** was at Albert Rd Ponds 12/11-22 (MD). The ponds froze over two days before the bird finally moved out of the area. The high count for **Iceland Gull** during the winter period was 4 at Grand Central Landfill, Pen Argyl 2/22-25 (AM, MS). There were an estimated 300 **Lesser Black-backed Gulls** at the landfill 2/22 (AM).

A **Golden Eagle** was photographed circling over Walnutport Canal 2/26 (TB). **Long-eared Owls** again wintered at Martins Creek Environmental Preserve. **Red-headed Woodpeckers** are rarely seen during the winter period, so it was nice to see a report of 2 birds at Housenick Memorial Park 1/7 (LF) and another on the Palmer Bikeway Trail 1/8 (RG).

Winter finch reports were few during the period. Two **Evening Grosbeaks** visited a feeder in Moore Twp. 1/16 (BE). A **Red Crossbill** flew over the Little Gap Hawk Watch 12/18 (JY). Another **Red Crossbill** was reported from Albert Rd Ponds 12/13 (JD).

Thanks to a couple inches of overnight snow, a birder was able to locate 2 **Lapland Longspurs** at Arrowhead Rd 2/28 (AM), while another was seen on Miller Rd farmlands 12/24 (JM, SS). A **Baltimore Oriole** visited a feeder in Raubsville 12/1 (AS). An **Orange-crowned Warbler** was at Martins Creek Environmental Preserve 1/29-2/1 (JY, RR).

Observers: **Michael Schall, 610-737-5275, mdtjschall@yahoo.com,** Tony Bauer, Megan Davis, Jonathon DeBalko, Dave DeReamus, Bill Etter, Linda Freedman, Richard Guinan, Stephen Kloiber, Jessica McNally, Adam Miller, Rich Rehrig, Scott Singer, Adam Smith, Joe Yuhas.

Northumberland County

Locations: Adam T. Bower Dam (ATBD), Amish Pond (AP), County Line Road (CLRD).

The winter season was rather mild with little to no measurable snowfall. Waterways froze for only a short time, lack of snowfall made it harder to find field birds, and birds weren't drawn to feeders quite as often as normal.

A pair of **Surf Scoters** turned up at the ATBD in bad weather on 1/25 (KP, BP, WD) and stayed for less than a day.

A single **Sandhill Crane** was photographed at the AP on 2/20 (EC). This is probably the same bird that moved over to Fry's Wetland in Montour County and lingered into the spring.

It was a good year for gulls along the Susquehanna River. Up to 2 Lesser Black-backed Gulls were reported from the ATBD on 2/5 (KP) and 2/11 (JD). As this species continues to expand, sightings may become more common.

Northern Harriers were ground-roosting in a field of winter wheat along CLRD the entire winter season. The high count was 21 on 1/26 (AK).

The season's only **Short-eared Owl** sighting was a single bird perched in a tree along CLRD on the evening of 1/17 (AK).

Observers: Andy Keister, 110 Hawk Ridge Road, Bloomsburg, 17815, (570) 337-3802, akeister110@gmail.com, Jonathan DeBalko, William Donmoyer, "EC" (full name unknown), Karol Pasquinelli, Bryce Perles.

Philadelphia County

Locations: Bartram's Garden (BG), Delaware River (DR), Franklin Delano Roosevelt Park (FDR), East Park Reservoir (EPR), John Heinz National Wildlife Refuge (JHNWR), Navy Yard (NY), Northeast Water Treatment Plant (NEWTP), Pennypack on the Delaware (POD), Southwest Water Treatment Plant (SWWTP).

This was a totally bonkers winter. **Ash-throated Flycatcher**, **LeConte's Sparrow**, **Lazuli Bunting**, and **Painted Bunting** all showed up in the span of six weeks. The flycatcher was the second record for the city (CH, OJ), hanging out in perfect flycatcher winter habitat at NEWTP 12/4-2/26 (m.ob.); the first city record was during a Philadelphia Mid-Winter Census 1/9/2016 (RI, PB, MS). This year's Mid-Winter Census managed again to top all Pennsylvania CBC circles with a total of 104 species reported by 108+ participants 1/7.

The jaw-dropping **Lazuli Bunting**, Pennsylvania's 6th record, popped up at POD during the Pennypack CBC 12/17 and stayed for two days (PM, TB, MDe). Another bird was in *Bucks* three weeks later and might have been a different bird. Dozens of birders chased this species the day after its discovery at POD. The group ended up finding the **LeConte's Sparrow**, another Philly first (AR *et al.*). The sparrow was seen by about 200 people until 2/22 and was the final species to set the new annual county record at 251 species (PM).

In the new year, participants at one of the BirdPhilly field trips at BG 1/13 stumbled upon an unfamiliar yellow-green songbird that turned out to be a (likely female) **Painted Bunting** confirmed on another visit 1/16 (BF *et al.*). It was hard to find thereafter but was seen until 2/5 (m.ob.). This was the second record for the city; the first was from JHNWR in 2007.

Equally spectacular, though not necessarily in the same league, was an apparent adult male **Orchard Oriole** at FDR 12/8-9 (RK, HP). This guy should have been in Central America, or at least in Florida, and represented the first winter record in eBird for Pennsylvania. There are less than a handful of observations in the Mid-Atlantic and New England reported in eBird. Incredibly, three weeks later an immature bird was reported from Nova Scotia, Canada.

In more regular news, **Cackling Geese** were at JHNWR, EPR and POD (m.ob.). A male **Blue-winged Teal** was photographed at Fort Mifflin 1/19, the first Jan eBird record for this species (JL). The bird spent its time on either side of the DR 12/30-2/27 (m.ob.). The unusually high numbers of **Northern Shovelers** seen last winter were matched this winter with a maximum of 470 individuals at SWWTP 2/5 (DB). Up to 2 **White-winged Scoters** on the DR 12/29 were the only scoter species (BF, TS).

One or 2 **Bonaparte's Gulls** were along the DR 12/24-27 (m.ob.). Equally rare this time of year was a **Laughing Gull** floating on the DR at Lardner's Point Park 2/28 (LHa). More frequently seen were **Iceland Gulls** at the usual spots: Glen Foerd, NY, and POD (m.ob.). **Great Blue Herons** were back visiting their nest at the JHNWR rookery as early as 1/15, which is about a month earlier than last year (MDe).

One of only 2 winter **Blue-headed Vireos** in Pennsylvania was at NEWTP 12/7-11 (CE *et al.*). An influx of **Black-capped Chickadees** was noticeable, sometimes seemingly outnumbering our regular **Carolina Chickadees**. Two or 3 birds were not unusual, and the maximum was 6 individuals at West Fairmount Park 1/7 (BF). Interestingly, there were

zero records across the DR in southern New Jersey. Up to 4 Tree Swallows, the only ones in Pennsylvania in Jan, joined the usual overwintering flock of Northern Rough-winged Swallows at NEWTP 1/7-16 (m.ob.). While plenty of Purple Finches were seen in the suburbs, they seemed to avoid the city, with a handful of observations logged only from the northern fringes of the county. The maximum were 20 birds at Morris Arboretum 1/29 (PM). A singing Pine Siskin was a surprise at Wissahickon Valley Park 2/28 (HP). Up to 2 birds were in the general area 12/5-11 (LHa, DK), and a flyover was heard at NY 12/29 (BF). Single flyover Snow Buntings were regularly heard at NY 12/21-1/11 (MDo, BF). These were uncommon observations, and birds might have originated from locations with appropriate habitat across the DR in New Jersey. The mild winter might be the reason for Lincoln's Sparrows at Pleasant Hill Park 12/11 (OJ), NEWTP 12/11 (OJ) and 1/2 (MDe), and SWWTP 2/10 (HP). Singing was an Eastern Meadowlark at the former Island Green Golf Course 2/25-27 (JE, HP), one of less than ten winter records in Philadelphia.

Once again, the only **Ovenbird** reported from Pennsylvania was in Center City 12/3-7 (LHe, CH). One of only 2 **Northern Waterthrushes** reported north of the Carolinas was photographed at JHNWR 12/4 (JG). This was only the 2nd record for the city and Pennsylvania after a bird was seen at JHNWR 1/1/2017. A **Tennessee Warbler** at POD 1/1 was the 1st winter record for *Philadelphia* (m.ob.). The city is the place to be if anyone wants to find their winter **Orange-crowned Warbler**, with observations noted from nearly 20 locations. The hotspot was once again FDR with up to 4 individuals (m.ob.). A late **Nashville Warbler** at BG 12/9 (BF) and a **Magnolia Warbler** northeast of POD 12/17 (WB) round out the sextet of noteworthy warblers.

Observers: Holger Pflicke, Philadelphia, PA 19148, pflicke.holger@ gmail.com, Debbie Beer, Tanya Burnett, Peter Burns, William Buzzard, Martin Dellwo (MDe), Manny Dominguez (MDo), Carl Engstrom, John Eskate, Ben Filreis, Joshua Gant, Liam Hart (LHa), Laura Herschel (LHe), Christopher Hinkle, Oliver James, Dan Kalamarides, Robert Karchnyak, Jason Lott, Patrick McGill, Ashley Rathman, Martin Seltzer, Ty Sharrow.

Potter County

Locations: Baker Hollow Road Residence (BAHR), Cherry Springs SP (CSSP), Colesburg (COLE), Coudersport (COUD), Cross Fork (CRFO), Denton Hill, Billy Lewis Road (DH-BLR), Galeton (GALE), Galeton Lake (GALA), Green Forest Road (GFRD), Hungry Hollow Road (HHRD), Joerg Road (JOERG), Lyman Run SP (LRSP), Millport (MILLP), North Hollow Road (NOHR), Oswayo Fish Hatchery (OWFH), Pike (PIKE), Port Allegany (POAL), Raymond (RAYM), Roulette (ROUL), Shinglehouse (SHINGL), Sinnemahoning SP-Potter (SISP-P), Susquehannock SF—Forest Interpretive Trail (SSF-WIT), Sweden Valley (SWEDV), Sweden Hill-Green Forest Road (SWHI-GFR).

Data for notable sightings reported below were obtained from 24 locations, submitted by 17 observers, and listed after checking the overview data page, bar charts, and species maps from eBird. A total of 61 species were listed for the county.

As expected, waterfowl species and numbers of individuals were low; however, **Tundra Swans** were reported at two locations: 23 at GALA 2/16 and 4 at LRSP 2/23 (SS). Five **American Wigeons** were seen at LRSP 2/23 (SS), and **American Black Ducks** were reported from an unspecified location along US Rte. 6 between PIKE and GALE 12/8 and 12/11 (MS). Three **Ring-necked Ducks**, 2/16 and 2/23, and 2 **Lesser Scaups** 2/23, were reported from LRSP (SS). Two **Whitewinged Scoters** were observed at LRSP 1/9 (MS, SS). One **Long-tailed Duck** and one **Bufflehead** were reported from LRSP2/23 (SS). **Hooded Mergansers** (9 ob.) and **Common Mergansers** (16 ob.), both reported in low numbers (one to 14), were the most common ducks seen at GALA and LRSP 1/9-2/28 (m.ob.).

Wild Turkeys were reported from six locations (one to 12 birds), with a high count of 30 seen at SISP-P 2/26 (RE). Single Ruffed Grouse were at NOHR 2/21 (MA) and HHRD 2/27 (RS). One Horned Grebe was

seen at LRSP 2/23 (SS). Two Killdeer were found at GALA 2/26 (MA).

Accipiters were represented by only a single **Sharp-shinned Hawk** 1/22 at SWHI-GFR (RSc) and a **Cooper's Hawk** reported from Rte. 6, between SWEDV and COUD 12/2 (MS). There were 37 reports of **Bald Eagles** (one to 2 birds/report) mostly along the Rte. 6 corridor (m.ob.). Single **Red-shouldered Hawks** were reported from the CSSP area, including the SSF-WIT, 1/8, 2/21, 2/23, (MS, JK, SS). Twenty sightings of single **Red-tailed Hawks** were mostly reported from areas near or along US Rte. 6 (m.ob.). A single **Rough-legged Hawk** was seen along PA Rte. 49 from COLE to RAYM 1/9 (MS, SS).

There were no reports of **Eastern Screech-Owl** or **Great Horned Owl** and just two reports of single **Barred Owls** from SWHI-GFR 1/6 (RSc) and a location along PA Rte. 49 between COLE and RAYM 2/4 (MS). Northern Saw-whet Owl was not reported.

Single **Belted Kingfishers** were observed at SISP-Potter, LRSP and Rte. 6 near GALA 12/4-1/23 (m.ob.). One **Yellow-bellied Sapsucker** was reported for the county at DH-BLR 2/10 (LR). Single **American Kestrels** were reported from US Rte. 6 between the county line and POAL 12/17 and 12/19, and from PA Rte. 44 between SHINGL and MILLP 1/9 (MS, SS). A single **Merlin** was seen near a backyard feeder in SHINGL 2/15 (KE).

This winter was expected to bring a movement of winter finches south from Canada. **Red-breasted Nuthatches** were present but not in any great numbers (one to 2 per sighting) and only from five locations: GFRD, LRSP, CRFO, JOERG and SHINGL (m.ob.). **Evening Grosbeaks** were reported from five locations southward from US Rte. 6: SWHI-GFR 12/26,LRSP 12/1, 2-4 birds at CSSP 1/4-15, SSF-WIT 2/23, with a high count of 28 at CRFO 1/3 (SL). Another irruptive species predicted for the winter, **Purple Finches**, were observed in low numbers (1-2) at three locations with a high count of 22 from CSSP 1/8 (SS). Just one **Pine Siskin** was reported for the county at the OWFH 2/14 (RE).

American Tree Sparrows were observed at five locations; JOERG 1/28, BAHR 2/11, SWEDV 2/18, 10 at ROUL 2/18, and a high count of 35 at SISP-P 12/30 (m.ob.). Being curious about the abundance of **Darkeyed Juncos** in the county, 63 reports were noted 12/7–2/28 from 14 locations, with most reports showing one to 12 individuals; the highest counts were 20 at a residence on JOERG 1/15 and 45 at SISP-P 12/30 (m.ob.). White-throated Sparrows (one to 2) were reported only from one location, a residence on JOERG at the southern end of the county near CRFO (SL). Red-winged Blackbirds made their first appearances 2/10-22 as one to 5 individuals, mostly at locations along US Rte. 6, and also at SISP-P and JOERG (m.ob.). A single Brown-headed Cowbird was reported at NOHR 1/15 (RSc), and the first arrivals of Common Grackles occurred at three locations along US Rte. 6, 2/20 and 2/25 (MS, LT).

Observers: Robert Snyder, P.O. Box 603, Howard, PA 16841, (814) 753-2629, birdphotoginpa@gmail.com, Matt Altieri, Michele Davis, Robert Edkin, Kathy Ebling, Jeff Kenny, Sarah Lindgren, Kimberly Lott, Julian Pozzi, Angela Romanczuik, Matthew Schenck, Susan Schenck, Ronnie Schenkein (RSc), Andrew Sidelinger, David Schulze, Larry Tasillo, Steven Visco.

Schuylkill County

Locations: Air Products Wildlife Sanctuary (APWS), Hawk Mountain Sanctuary (HMS), Landingville Marsh and Dam (LVD), Lake Wynonah (LW), Locust Lake State Park (LLSP), Sweet Arrow Lake (SAL), Tuscarora State Park (TSP).

Although a few sightings were only posted to PABIRDS, most of the data were found on eBird.

Except for a cold snap in December, the temperatures this season were above average, which resulted in a lot of open water in our local lakes. This led to a good assemblage of waterfowl throughout the season. With the exception of **Mallards, Mute Swans, Canada Geese**, and **Common Mergansers** (in recent years), waterfowl species diversity and numbers are usually low for the county, so any postings are

considered notable. With open water throughout the season, however, we enjoyed more diversity than most years. The more notable waterfowl species follow. A single **Northern Shoveler** appeared at SAL 2/19 (RR), 2/20 (TB), 2/22 (KH), and 2/27 (TB). **Gadwall** appeared in four locations: SAL 2/20-27(TB, JD, KH, TJ, GM), LVD 2/24 (RR), LLSP 1/2 (TB), and APWS 1/28-2/27 (JoD, BeR, AK, CF). **American Wigeon** were reported at LVD 2/25-28 (TB, KH, DaK, RR), New Ringgold 2/27 (DaK), and APWS 12/28 (JD, JoD, SD). A single **Northern Pintail** was spotted at SAL12/9 (BR) and 3 more 2/24 at the same location (TB, GM). One was also reported at LVD 2/4 (TB). A good find was a **Common Goldeneye** at LVD 1/9 (TB, KH, RR). **Ruddy Ducks** are not easy to find, but 6 were at LW 1/19 (TJ); a single bird was also seen there 1/21-23 (KH).

Very unusual in the county was a Sandhill Crane that was photographed flying over the Orwigsburg area 1/5 (JT). A Common Loon was recorded 12/1 migrating past HMS, and 2 more passed by 12/8 (HMD). Most Golden Eagles recorded in the county are seen migrating past HMS where many were seen 12/1-30 with a high count of 7 in one day 12/14 (HMD). This year, however, they were also seen at three other locations within the county: in the Hegins Valley 12/18 (DB), outside Orwigsburg 2/2 (CF), and near the Vraj Mandir on Rte 895 on 2/1 (KH). The Northern Goshawk population moving through the county has seriously declined in the last couple of years; therefore, the one seen 1/1 near New Ringgold(DaK) was significant. Red-headed Woodpeckers bred near Church Road last year, the same location where one was seen 12/28 (JoD, JD). Peregrine Falcons were seen several times this season: 12/8 at HMS (HMD), 12/30 near Orwigsburg (KH), 1/2 near New Ringgold (DaK), 1/13 near Pine Grove (TB), and 2/5 in the Pitman area (IG). A Hammond's Flycatcher that was seen throughout last fall was located at TSP 12/4 (TB).

Some notable sightings at HMS this fall included **American Pipit** 12/2, **Evening Grosbeaks** 12/12, and **Common Redpoll** 12/14 (HMD). Also seen at HMS were **Red Crossbills** (HMD, DaB) and **White-winged Crossbills** (HMD, BB); both species were seen 12/2 and 12/18.

Observers: Dave Rieger, 401 Stony Mountain Road, Auburn, PA 17922, d.m.rieger@gmail.com, Dan Brennan, David Barber (DaB), Bracken Brown, Thomas Buehl Jr,John DeBalko (JoD), Jonathan DeBalko, Caroline Fegley, Ian Gardner, Karen Hardy, Tonia Jordan, Andy Keister, Dan Knarr (DaK), Grace Muench, Rich Rieger, Barb Ritzheimer (BR), Beverly Rockovich (BeR), James Trusky.

Snyder County

The mild winter provided abundant open water for early waterfowl but caused fewer sightings of some winter birds. Faylor Lake hosted its first **Gadwall** 2/2 (AH), **Northern Pintail** 2/18 (JS), and **Bufflehead** 2/12 (AH). The **Rufous Hummingbird** present at a private residence continued until the very cold weekend of 12/23. A **Golden Eagle** seen from Ulsh Gap Rd. provided the 3rd winter record for this species and only the 6th record overall in eBird (JK). Three reports, 12/24 (AS), 1/14 (AH), and 1/29 (DK), gave **Northern Harrier** a modest representation. A **Peregrine Falcon** sighted near Shamokin Dam 2/11 (JD) was likely one of the pair that nests in the neighboring county. Two **Ruby-crowned Kinglets** at Trail of Trees 1/13 (BP) was the only report of this species.

Observers: Andrew Hurst, andrewnerika@daystar.io, cell 717-580-3642, Jonathan DeBalko, Jon Kauffman, Dawn Kleinsasser, Bryce Perles, Jessica Sauder, Alex Sharp.

Somerset County

Locations: Allegheny Plateau Audubon Christmas Bird Count (APAS CBC), Berlin Area (BA), Confluence Area (CA,; Flight 93 National Memorial (FLT 93), Hidden Valley (HV), Indian Lade (IL), Laurel Hill S.P. (LHSP), Payne Property (PP), Quemahoning Reservoir (QR), Stonycreek Lake (SCL),Somerset Lake (SL). Except for a short spell between Christmas and New Year's with belowzero temperatures, it was an exceptionally warm and very low snowfall season. Lakes only briefly froze to the dismay of ice fishermen but to the benefit of waterfowl, which stayed late or returned early. No appreciable influx of northern birds appeared, so duck watching was the most productive past-time.

Always a nice county find, 4 Greater White-fronted Geese showed up at a pond near Boswell 12/20 (LG, BF, PL, JP). A single Snow Goose was intermittently present at QR 12/18-28 (SE), mixing with the above geese 12/20 and at SL 1/4 (JP) and Northfork Reservoir 1/16 (LG), very possibly the same individual bird. A Mute Swan was at SCL in early Dec and 3 were on IL 2/24. Tundra Swans were mentioned five times, with up to 38 on 2/19 at SL (MR). Rather late was a pair of Wood Ducks at QR for the APAS CBC 12/18 (T&JK) continuing until 12/20 (JP). Gadwall and American Wigeon both had six mentions. Up to 6 American Black Ducks were reported. Northern Shovelers appeared by 2/18 at SL (AD) and 2/19 at SCL (GN). Northern Pintails were at QR with up to 4 on 12/27 (SE). Small numbers of Green-winged Teal were spotted throughout the period. Four Canvasbacks were at QR 12/27-1/17 (m.ob.). Redheads put in an impressive winter showing with up to 31 present until 2/8 and 4 additional birds were at IL 12/16 (JP). Ringnecked Ducks seemed very numerous with a high of 131 near Boswell 2/25 (PL, PhL). Reports of one to 5 Greater Scaup were seen throughout the entire season while Lesser Scaup were only found in Dec and Feb. Buffleheads were present all months. Common Goldeneyes were found until 1/20. Hooded Mergansers were plentiful with a high of 91 at QR 12/18 (LG), while Common Mergansers topped out at 34 on 2/11 at LHSP (AB). Ruddy Ducks were also wellrepresented with 69 on 12/27 at QR (AR, PhL).

The increasingly rare **Ruffed Grouse** was reported only twice through the period, at PP 12/25 (JP, MP) and at HV 2/8 (SC). **Wild Turkey** flocks of up to 25 were found through the period. One to 3 **Common Loons** lingered late up to 1/9 at QR. **Pied-billed Grebes** were found all season and one to 4 **Horned Grebes** were reported through 1/16. The only **Great Blue Heron** was 2/12 in CA (CT). Wintering **Black Vultures** near Davidsville included 4 on 1/28 (MS) and 3 on 12/15 (LG). **Turkey Vultures** lingered until 12/28, and then returned 2/5 somewhat early. Both **Bald Eagles** and **Northern Harriers** were reported in ones and twos throughout the period. Only one **Sharp-shinned Hawk** was found near Holsopple 12/20 (LG). As expected, **Cooper's Hawks** were seen throughout. Less expected were 7 **Red-shouldered Hawks.** There was only one **Rough-legged Hawk** this season 12/18 on Shaffer Road (CP, JP, MM). An excellent find was a 2/4 **Golden Eagle** at FLT 93 (T&JK).

American Coots stayed at QR at least through 1/6 with a high of 22 on 12/27 (SE). An early Killdeer returned by 2/9. A late Wilson's Snipe 1/6 was at QR (LG). Bonaparte's Gulls were found 12/12 with 3 at SL (ER), and one was at QR 1/5 (LG). Ring-billed Gulls were more widely found with a high of 51 on 2/24 at SCL (JP). Eastern Screech-Owl was seen 12/28- 29 near QR (AR). The only live Barred Owl was 2/19 at FLT 93 (MC), with one road-killed near PP in Feb. Belted Kingfishers wintered, yielding 15 reports. The less common woodpeckers reported are usually Yellow-bellied Sapsuckers, which had three records of singles in Dec and Jan, and Northern Flickers which, surprisingly, were reported throughout the period. American Kestrels were seen singly and in twos throughout the period while Merlin was found 12/7 in BA (CP, RP) and 12/13 at FLT 93 (CN, MMa). A late season Peregrine Falcon was a flyover in Boswell 12/31 (SB, JB).

Flight 93 National Memorial has hosted a **Northern Shrike** for the past six winters, and the bird species found by many through this season. It is possible that the same individual returns every winter, as shrikes are not being found in other areas of the county at this southern extent of the species' normal winter range. Horned Larks were found throughout the period in modest numbers. Both Red-breasted Nuthatches and Brown Creepers were reported three times. Golden-crowned Kinglets wintered in low numbers at many sites. Eastern Bluebirds, up to 15 at FLT 93 on 1/7 (EB,TMo), and American Robins, in flocks up to 80, were in higher-than-normal numbers in this mild winter season. Northern Mockingbird, an uncommon county resident, was found only twice, 2/7 at Meyersdale H. S. (TM) and south of Addison near the Maryland line 12/14 (BB). One American Pipit was spotted 12/29 at New Centerville (PhL).Cedar Waxwings were only found on four occasions with 45 in the largest flock. No warblers were mentioned all season.

Eastern Towhee was only reported twice, 1/23 in the SE portion of the county and 12/19 north of QR (SCo). **American Tree Sparrows** were somewhat more numerous than in recent years, with 70 found on the APAS CBC 12/18. There was one well-described **Chipping Sparrow** at Hidden Valley 2/21 (SC). A **Savannah Sparrow** was a nice seasonal find near Brotherton 12/18 (CP, JP, MM). **Swamp Sparrows** were reported in low numbers throughout the season except for 15 at SL 12/18 for the APAS CBC. Both **White-throated** and **White-crowned Sparrows** were thinly distributed. **Red-winged Blackbirds** were reported up to 12/18 then not until 2/9. A single **Eastern Meadowlark** 2/19 at FLT 93 (DE) was the only report. **Common Grackles** usually desert the county in mid-winter, so one 1/26 at PP was unexpected (JP). Three widely separated reports of **Purple Finch** in Dec and Jan were received.

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Sullivan County

Locations: Beech Glen (BG), Cherry Township (CT), Forksville (FV), Grouse Woods (GW), Muncy Valley (MV).

The winter season in Sullivan County was rather uneventful in terms of weather. The author made only two trips to the county during the period. There were fewer than ten reports entered in eBird with several listing only a single species. Observations not attributed directly were made by the author.

There was still waterfowl movement early in Dec. Several flocks of **Canada Geese** totaling about 325 individuals were seen flying high on 12/10 in CT. One flock of **Snow Geese** in the same area had roughly 150 individuals and was also seen 12/10.

Two winter raptor surveys were conducted in *Sullivan* on 1/21. The two routes yielded one **Northern Harrier**, 2 **Cooper's Hawks**, 2 **Red-shouldered Hawks**, 10 **Red-tailed Hawks** and one **American Kestrel**. Two **Golden Eagles** were reported at BG 2/27 (SS). Two **Great Horned Owls** were reported in CT 2/19 (Anon). An **Eastern Screech-Owl** was seen in MV 12/25 (MG).

Passerine observations were mostly typical for the time of year. Highlights include 5 **Purple Finch** observed in FV 2/19 (BF). A **Pine Siskin** was seen at GW 2/4 (SS). One **White-crowned Sparrow** was reported in MV 2/29 (Anon).

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Susquehanna County

Location: State Game Lands 35 (SGL35).

Ice on. Ice off. (Repeat, repeat, and repeat.) This was the scenario at our region's lakes, ponds, and wetlands. Despite the frequent and sometimes prolonged limitation of open water, birders were able to see some of the expected waterfowl feeding and resting during their migration through the area. Quaker Lake claimed the top spot for reported species and a few of these include a **Cackling Goose** 12/20 (JC), 3 **Bufflehead** 1/12 (JC), a **Common Goldeneye** also on 1/12 (JC), and 4 **Ruddy Ducks** 12/26 (WS). One of our CBC teams was pleasantly surprised to find a **Common Loon** at a wetland near New Milford 12/14 (NV, SF, LN). The loon remained at that location for over a week and was last reported on 12/23 (TN).

A **Golden Eagle** was nominated for "Best Bird of our CBC" when it was seen and photographed as it flew over State Game Lands 175 near New Milford 12/14 (TD). In addition to the CBC, local birders also participated in WRS routes. We realize the value of the data from WRS routes, and we are working on expanding the coverage in our area. A **Red-shouldered Hawk** near Tingley Lake was an unexpected find on a proposed WRS route 2/8 (NV, EM, BS). An established WRS route boasted two **Rough-legged Hawks** 1/16 (NV, EM, JM), but the hawks were upstaged several days later by a **Peregrine Falcon** that was seen and photographed on Philips Road while a group was driving to a WRS starting point 1/21 (NV, EM, JM, RS). Sadly, landowners found a dead Peregrine Falcon in this location 1/30. The PGC took possession of the bird to determine the cause of its death.

The anticipation of finding several of our seasonal species keeps local birders alert to movement in and over the fields and forests. One of these species is the **Short-eared Owl**, and unfortunately, there were none reported. It is believed that the increase in natural gas drilling activity near the bird's winter habitat discouraged their presence.

Two members of the woodpecker family were uncommon winter visitors. A **Yellow-bellied Sapsucker** was seen in SGL35 2/6 (BS). Almost two weeks later, a **Northern Flicker** was seen at Manlove Farm 2/19 (NB). Typically, the presence of **Fish Crows** is limited to the area around a shopping plaza adjacent to the Susquehanna River near Great Bend. However, one was reported at Big Elk Lake 2/14 (JS).

There was just one report each for two of our other winter avian guests. Seven **Horned Larks** were seen flying toward an open field on Zick Hill Road 2/11 (BH), and a female **Snow Bunting** was seen and several more were heard at a farm near Friendsville 12/20 (MM).

One of our CBC teams came upon a flock of **European Starlings** on the edge of a side street in Great Bend. A member of the team encouraged his teammates to stop and look the flock over and "then what to their wondering eyes should appear" but a **Savannah Sparrow!** This was a new late date for this species in *Susquehanna* 12/14 (TB, GS, BS)

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Tioga County

Locations: Cowanesque Lake (COWL), Hills Creek Lake Road (HCLR), Hills Creek State Park (HCSP), State Game Lands 313 "The Muck" (MSGL), Nessmuk Lake (NELA); Tioga-Hammond Lakes: Channel Overlook/Dam Area (CO/DA), Ives Run Rec. Area (IRRA): Campground (CM), Railroad Grade Trail (RGT), West Boat Launch (WBL); Tioga State Forest-Cavanaugh Nature Trail/Pine Creek Rail Trail-Cavanaugh Access (CAV), Wellsboro (WEL).

As we all know, this was a warm winter. When there was a snowstorm, the snow often melted within a day. Many storms were rain or ice rather than snow. Periods of frigid temperatures occurred but did not last long.

However, it was very cold long enough for ice to form and last for about a month on smaller lakes and ponds. The ice was safe for about a month of ice fishing on at least one lake here. A look at historical data on Weather Underground shows that this pattern has happened before, although it was a little cooler. In 1998, the average Jan temperature at the Elmira/Corning Regional Station (closest location with data) was 31.2 F. The Feb average temperature for the same year was 32.4 F, which is less than a degree lower than 33.0 F, the average for Feb of this year. In Jan 2023, the average temperature was 34.0 F, close to three degrees warmer than in 1998. A look at the data from Williamsport Station, the nearest Pennsylvania location, shows a similar but warmer pattern for both years, which is typical. Williamsport is south of the Allegheny Front and usually a few degrees warmer than *Tioga* during the winter.

In response to the mild weather, some winter species did not move into the county. Others were present in smaller numbers or in fewer locations. Some geese and duck species may have never left the area, while others may have migrated into and spent the winter in the county. Some duck species stopped in the area on the way north in Feb. Observers participated in two CBC counts and several WRS routes. Data for this report were primarily obtained from eBird bar charts and species maps' features.

A single **Snow Goose** was observed flying with a flock of **Canada Geese** at RGT 12/18 (LD). Four **Cackling Geese** were observed and photographed on 12/30 and observed again at CO/DA 1/1 (MS, SS). One was sighted with a flock of **Tundra Swans** at CMP 2/24 (MS). **Canada Geese** were present throughout the county all season (m.ob.). The large flocks that often stop at MSGL during spring migration were not reported this year. It is unknown whether this is because observers missed flocks that did not linger long or if these flocks stopped at other locations instead. This observer did notice pairs of **Canada Geese** at MSGL 2/11 (LD). **Tundra Swans** arrived mid-Feb with the first flock observed at private residence in WEL 2/12 (MS).

Wood Ducks were reported one or 2 at a time from late Jan at Marsh Cr.'s Ansonia Area 1/30 (MS) through the last week of Feb at RGT (LD). Three **Gadwall** were observed at HCSP 12/8 (LD). Then none were observed until Feb when 6 were found at CMP 2/9 (MS). This was followed by observations of lone birds at two other locations with the last reported at NELA 2/21 (LD, MS).

Five American Wigeons observed at HCSP 2/18 (KR) were the first reported arrivals. They continued to be reported at HCSP through the end of the month (m.ob.). Additional observations were at Hamilton L. 2/23 (MS) and NELA 2/24 (LD, MS). Mallards were present throughout the county in good numbers during the entire season (m.ob.) American Black Duck observations were at more locations than in the previous two years; especially compared to winter 2020 to 2021 (m.ob.). Perhaps the mild winter weather was a factor. Northern Pintails were observed at CO/DA 12/30 (MS, SS). Then none were observed until Feb when 4 were at CMP 2/9 (MS). Green-winged Teals were first observed in Feb when 2 were found at Cowanesque L. Northwest 2/18 (MS, SS) and 4 were found at MSGL 2/18 (KR).

Canvasbacks were reported at CMP 12/25 (JG) and 12/26 (SM), CO/DA 12/30 (MS, SS) and 1/1 (JH), and WBL 1/10 (MS, SM). Up to 6 Redheads were found in various parts of the Tioga-Hammond L., primarily on the Hammond side, from the end of Dec into Feb (m.ob.). Following the same pattern as several other duck species, Ring-necked Ducks were seen at COWL 12/29 (MS) and CO/DA 12/30 (MS, SS). Then none were observed until early Feb when five were spotted at the IRRA 2/5 (GT). A Greater Scaup hen and a Bufflehead drake were observed in the Tioga R. in Mansfield 12/25 (JG). This is surprising because the river is acid impaired. The mouth of Ellen Run, a small stream, is in this area so it may be providing an inflow of healthier water and some small fish to sustain a brief migration stopover. Bufflehead were also observed at Cowanesque L. 12/28 (MW) and HCSP 12/1 -12/8 (LD), but none in Jan. They were once again observed in Feb as spring migration apparently began (m.ob.). The larger lakes never completely froze so both Common Mergansers and Hooded Mergansers were

present throughout the season (m.ob.). Two **Red-breasted Mergansers** were recorded at IRRA 2/19 (MS, SS, SM). A **Ruddy Duck** was at COWL 12/18 (JC) during the Cowanesque CBC. One was seen at COWL again 12/28 (MW).

As many as 2 **Ruffed Grouse** were flushed several times during the season on private property near HCLR (LD), one at a nearby location to SGL 37 on 2/4 (LD). Four cock **Ring-necked Pheasants** were seen along Elbridge Road 2/6 (SM, RM). Reports at other locations stopped by mid-Jan.

The mild weather apparently prompted a couple of **Pied-billed Grebes** to stay late or return early. One was at NELA 12/2 (SM), then one was found at CMP 1/8 (JC) and WBL 1/13 (SM). This may have been the same bird visiting different parts of the lake. **Horned Grebes** followed a similar pattern and were observed at COWL 12/28 (MW), CMP 2/19 (MS, SS), NELA 2/24 (LD), and HCSP 2/26 GT). **Killdeer** also seemed to return earlier than usual with the first report on the Stokesdale end of Marsh Cr. Road 1/27 (SS).

As many as 5 **Bonaparte's Gulls**, later decreasing to reports of just one, entertained observers at Cowanesque L. or Tioga-Hammond L. from the end of Dec through the end of Feb, when they appeared with the usual **Ring-billed Gulls** and **Herring Gulls** (m.ob.). It is unknown whether any were the same bird flying between the lakes. A **Lesser Black-backed Gull** was reported at CMP 1/8 (JC). Late **Double-crested Cormorants** were at NELA 12/2 (SM) and COWL-TC 12/9 (SM).

One or sometimes 2 **Black Vultures** were in or near WEL throughout the season. Then in Feb they were spotted north or east of town (m.ob.). **Turkey Vultures** were seen throughout the county from the beginning of Jan, although most reports are from Feb (m.ob). A **Golden Eagle** was seen flying over a field near Horse Thief Run 12/26 (MS, SS), then there were no reports until 1/23 when one was seen flying over Rte 6 between WEL and Whitneyville (MS, SS). Two were spotted at IRRA 2/26 (D&KP, MS, SS). **Northern Harriers** were observed throughout the county during the season (m.ob.) A **Red-shouldered Hawk** was reported at CAV 12/29 (MS), then there were no reports until one was seen from Rte. 287 between Oregon Hill and Morris 2/2 (MS). **Rough-legged Hawks** were seen at scattered locations during the season, starting with one that this observer admired in a field by Cummings Cr. Rd during the Cowanesque CBC 12/17.

Four species of owls were seen or heard during the season. **Eastern Screech-Owls** were recorded at four locations: one near Shaw Road 12/26 (JTi), the call of another in WEL 1/21 (MS), one near HCLR three times 1/3-2/18 (LD), and a final bird near Rexford 2/6-25 (KR). **Great Horned Owls** were recorded at five locations (m.ob.). Reports of a bird near Marsh Creek Road occurred once each month of the season (JC). A **Barred Owl** was reported near Brace Hollow Road 1/1 (AG, MG); another was heard on SGL 37 near HCLR 12/10 and 2/23 (LD). A **Northern Saw-whet Owl** surprised this observer and her husband several times in Jan when it flew out of bushes near the creek while they were taking the dog out near HCLR 1/6, 1/12 and 1/20 (LD).

Three **Yellow-bellied Sapsuckers** either lingered through the season or left late and returned early. The Dec birds were in Roseville 12/22 (BS) and WEL 12/23 (AP). The final bird was at IRRA 2/25 (LD). This is the same park where one wintered the previous year. Two **Northern Flickers** were observed. One was between Ansonia and Gaines 12/17 (MS, SS), the other at CAV 1/7 (MS, SS).

Three falcon spp. spent time in the county. **American Kestrels** were well represented, although most reports were from Feb (m.ob.). Reported sightings in Dec and then in Jan led this observer to wonder if some birds spent the winter and moved around the county. Most birds were only reported one time at a given location. **Merlins** were reported at four locations during the season. One was along the Rte 49 corridor between Elkland and Knoxville 1/29 (MS, SS). A **Merlin** entertained observers four times at HCSP, IRRA, and GT. These may have been separate birds, or it may have been a single bird moving between the lakes (LD, MS, SS, SM). One had been moving around the Hills Creek Area during the previous season. A **Peregrine Falcon** was admired by

three observers at CO/DA 2/13 (MS, SS, GT). Another observer saw the same or another bird at the western end of Hammond L. on 2/27 (JC).

The mild winter and downswing of the finch irruption cycle made winter-irrupting species and some other species hard to locate this winter. For example, Snow Buntings and American Pipits were absent this year. A lone Northern Shrike was reported and posed for a portrait in the northern part of the county along Croft Hollow Road 2/7 (MS). An attempt by this observer to relocate it five days later was unsuccessful. A look at the previous four years shows that one or 2 Northern Shrikes reported during the season have been typical; one year, none were observed. Horned Larks were seen at three locations. The most notable report was a large flock with up to 75 members from 2/16 (LD) to 2/25 (MS) in fields on either side of Mills Hill Road. Winter Wrens popped up at three locations: Bungi 12/25 (JG), RGT 1/4 (SM), and HCSP 1/26 (SS). Northern Mockingbirds reversed the pattern by showing up in more locations than usual throughout the season (m.ob.). At least one was repeatedly reported in the same area. During the previous two winter seasons, there were only a handful of reports of this species.

Evening Grosbeaks visited a feeder near Knapp on Christmas Eve (D&KP). Then in Feb they were visiting feeders south and east of Morris where an anonymous observer reported seeing them for about a month starting 2/19. A nearby observer took a picture of them at their feeder 2/20 (NY). The earliest **Purple Finch** was observed at RGT 12/10 (SM). Ten were in WEL 12/22 (MS), and the last report was a single bird at Knapp 2/23 (D&KP). Lone **Pine Siskins** appeared at WEL 12/22 (MS) then at RGT 12/25 (SM). One fortunate observer found a **Lapland Longspur** feeding with the flock of **Horned Larks** on Mills Hill Road 2/23 (MS).

Two **Field Sparrows** were located at CAV 2/17 (LD). An apparently hardy **Swamp Sparrow** was seen at MSGL during WEL CBC (LD), then another was located at RGT 1/14 (MS, SS).

Members of the blackbird family spent the winter in the county or returned in Feb. An anonymous observer reported an **Eastern Meadowlark** near Bottom Hill Road on 2/18. At least one **Red-winged Blackbird** was reported in the county every month of the season, although most reports are in Feb when they returned from winter migration (m.ob.). **Brown-headed Cowbirds** opted to spend Dec and Jan somewhere else. The earliest report was in Wel 2/5 (KB). A **Rusty Blackbird** was at MSGL on 12/26 (MS, SS), then one was seen on the northern end of MSGL during WEL CBC 1/1 (LD). In Feb there were 9 at Marsh Cr.'s Straight Run Area 2/4 (JC); the last was of one at CAV 2/27 (MS). A **Common Grackle** was seen east of Mainesburg 12/12 (LS). Starting the New Year, one was observed during WEL CBC in the Mills Hill Road area (RM, SM). In Feb, they returned in good numbers and were observed throughout the county (m.ob.).

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Venango County

Locations: Allegheny River (AR), Big Bend Road (BBR), Buttermilk Hill Nature Sanctuary (BHNS), Franklin area (FA), Franklin (FR), Kennerdell (KEN), Kahle Lake (KL), Oil City area (OCA), Oil Creek State Park (OCSP), President (PRES), Sandy Creek bike Trail (SCBT), Two Mile Run Park (TMRP), Venus (VE), Wyattville Pond (WP).

It was a mostly mild winter, with a few days of bitter cold and a few snowstorms, though most of the winter saw above-average temperatures with snowless ground. Except for a short period in December, the Allegheny River remained open through the season, and ponds and lakes had only short periods of being frozen over. Expected winter species like **Common Goldeneye** are scarce in winters like this, while **Green-winged Teal** and **Hooded Merganser** can be found all

winter. Winter finches were a bust this year, and a poor berry crop left us mostly without waxwings and with low numbers of robins.

Waterfowl found included Tundra Swan 12/26 at BHNS (KG, JS) and 16 from 2/22-28 at KL (JS), while a flyover at BHNS yielded 50 on 2/22 (KG), and WP held 15 on 2/24 (JH). Gadwall were found 2/12 and 2/23-24 at WP (JS), with 12 at WP on 2/17 (JS). American Wigeon were also at WP Jan-Feb (JS). The only American Black Duck sighting was on 12/26 at AR (JS). Seventeen Northern Pintail were at WP 2/9, with others reported 2/23-24 (JS). Green-winged Teal were noted at AR 12/26 and 2/23 (JS) and at WP 2/17 WP (JS). Redhead were also found at AR on those same dates (JS), and two were at Moody Pond 2/24 (JH). Ring-necked Ducks were at KL 12/16 and 2/21-28 when there were 20 (JS) and at AR 12/26 and WP 2/24 when there were 7 (JH). The only Greater Scaup report was on 2/23 at KL (JS). Seven Lesser Scaup were seen at KL 2/24 (JH). Bufflehead were at AR 1/5 (JS) and 2/8 (NB) and KL 2/23 (JS). Common Goldeneye were noted at AR 12/26 (JS), and 2 were at OCSP 2/12 (MK, NK). Hooded Mergansers were reported from five locations: 12/26 AR, 2/10 TMRP (JH), 2/12 OCSP (MK, NK), 2/16 SP (RS), and 2/23 KL (JS). Common Merganser was seen throughout the season (m.ob.) with a high of 55 on 1/17 at WP (JS). Ruddy Duck was found 2/23 at KL (JS).

Wild Turkeys were a little scarcer this winter with only one report 1/14 FA (NB). Ruffed Grouse are still hard to come by in the county. One was heard drumming on 1/1 at PRES (RS, JS) and another on 2/28 at BHNS (JS, KG). The only **Pied-billed Grebe** sightings were on 2/21 and 2/23 at KL (JS). One Horned Grebe was sighted at KL 2/23-24 (JS, JH). One American Coot was reported 2/20 at KL (ES).

Killdeer returned to FR 2/16 (JH), and there were many reports after that date. **Ring-billed Gull**, usually not common in *Venango*, had several reports (m.ob.) from KL, WP, and AR, including a high of 400 at KL 2/23 (JS). One **Herring Gull** sighted on 2/28 was a single bird over AR (RS).

Turkey Vultures were first reported at BHNS 2/10, at FR and OCA 2/13, and there were many sightings after that date. **Northern Harrier** reports came from KL 12/16 and 2/23 (JS). There were several **Sharpshinned Hawk** observations: 12/8 at OCA (RS), 1/30 at FR (JH), and 2/17 at SE (MK, NK). **Bald Eagle** numbers and sightings continue to increase. **Red-shouldered Hawk** had numerous sightings from 12/22-2/19 in various locations (m.ob.). **Barred Owl** was reported from KEN 1/1 (BB) and BHNS 2/9-20 (JS, KG).

Belted Kingfisher was observed at OCSP 1/1 (JH), and then not seen until 2/12 in OCSP (MK, NK). Yellow-bellied Sapsucker were present at FA from 12/24-29 (NB), and then reported again from 2/4 at SEN (SA) to 2/18 at FA (NB). American Kestrel was noted 12/16 at KL (JS) and 2/11 at CR (DS).

Common Raven sightings remain up, seen in every month of the period at various locations (m.ob.). There were only two reports of **Golden-crowned Kinglet**, 1/1 at OCSP (JH) and 2/15 at SCBT (SA). **Red-breasted Nuthatch** remained at a FA feeder through the winter period (NB), yet there was only one other report on 2/17 at VE (RH). Only one **Brown Creeper** observation was made on 2/17 at BBR (DM). **Carolina Wrens** survived the cold snap in Dec and remained throughout the winter at various locations (m.ob.).

Eastern Bluebird was seen 1/1 at OCSP (NB) and then from 1/22 to the end of the period at various locations (m.ob.). The only **Hermit Thrush** report was on 1/1 at OCSP (JH). **American Robin** was reported during the whole period in low numbers.

House Finch and American Goldfinch were reported all season.

American Tree Sparrow had very few reports this winter, all of single birds or small flocks, at FA 12/26(NB), BHNS 12/28 (JS, KG), VEN 2/17 (RH), TMRP 2/19 (RS). White-throated Sparrows were in low numbers, but there were many reports of them throughout the winter period (m.ob.) at various locations. Song Sparrows were only reported from a couple of feeders this season, but they were observed every month at OCA (RS).

Red-winged Blackbird returned 2/22 to VE (RH), and then there

were multiple sightings from 2/24 onward. **Common Grackle** was first seen 2/16 at BHNS (JS, KG) and then from 2/24-28 in FR (JS). One **Brown-headed Cowbird** was sighted 2/17 BBR (DM).

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Warren County

Locations: Akeley Swamp (AS), City of Warren (CW), Columbus (CO), Crescent Park (CP), Economite Rd (ER), Hillside Acres Tidioute (HA), Kinzua Dam (KD), Minister Road (MR), Peterson Rd, Clarendon (PR), River Road in Starbrick (RR), Selkirk (SK), Sheffield, (SH), Tidioute Boat Launch (TBL), North Warren Mall (NW).

Warren enjoyed a protracted and mild late fall, straight through until late February, when winter finally showed up. As a result, winter birds seemed rather sparse, as migrants had fled south but winter visitors apparently didn't feel compelled to come down this far.

Birds of note included up to 48 **Tundra Swans** seen on 12/27 at TBL (EN). A single lingering **Wood Duck** was spotted during the Warren CBC on 12/17 at CW (m.ob.); they tend to leave the county for winter. On the same CBC, a group of 75 **Mallards** was also seen in CW (m.ob.). A maximum count of just eight **Lesser Scaup** were seen from RR 2/16 (SHS). Although **Bufflehead** are always a common winter visitor in Warren, a flock of 32 seen 2/11 at KD was impressive (JF, PF). A maximum count of 25 **Hooded Mergansers** were seen at AS 2/16 (RRD). **Ruddy Ducks** tend to be rather rare here, so one CBC team was fortunate to find two at CP 2/17 (m.ob.). The 2/17 CBC tallied a grand total of 127 **Wild Turkeys**, a record high count and almost quadruple the average (m.ob.). Though always common, a flock of 53 **Mourning Doves** sitting on power lines in CW for the CBC (2/17) was a rather large grouping (m.ob.).

Sandhill Cranes seem to be increasing slowly in Warren: a group of three was seen at AS 2/16 (RRD), and five were flying over CO 2/23 (JeF). A large group of 38 Ring-billed Gulls was seen during the CBC in CW 2/17 (SG). Turkey Vultures typically start arriving in Warren about mid-March, but apparently the mild temperatures this year caused them to show up quite early, with 2 over CW 2/13 (TS) and another over ER 2/15 (CW). The county seemed to have been saturated with Bald Eagles with nesting pairs about every two miles along every major waterway. A new nest was found on 2/25 in a mid-sized white pine in a backyard just north of SH, far from any major stream (DW). The sole report of Roughlegged Hawk in Warren this winter came from SK 2/2 (EN, KN). Of note were 4 Pileated Woodpeckers seen 1/21 at feeders at PR (RK). Merlins have become relatively common breeders in the area, and as reported elsewhere with the growing non-boreal, urban-breeding population, they seem not to migrate. Two were reported this winter: one on 12/5 in CW, another 12/19 in NW (both TS).

Despite their name, **Winter Wrens** tend to find *Warren*'s winters a bit too much and flee southward, so one reported 1/21 from PR is further evidence of our mild winter (RK). **Northern Mockingbirds** are still considered mostly vagrants here, so one seen 1/22 in CW suggests they may be moving northward, like many other species (TS). We did not have quite the irruption of **Evening Grosbeaks** that others did this winter, but there were some, including flocks of up to 7 over many weeks at HA (EN, KN) and 10 along MR 1/14 (DM).

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Washington County

Locations: AMD pond on Hahn Road (AMD), Boone Reservoir (BR), Cross Creek County Park (CC), Ginger Hill Ponds (GHP), Washington Reservoir #4 (R4).

This winter was not quite as exciting as last, at least in terms of rarities, but several nice birds were found once again, including another county first. As is often the case in winter, waterfowl dominated birders' attention and much of this report as well, and indeed, there were a number of unusual geese and swans found. A Greater White-fronted Goose was photographed at Frosty Valley Golf Course 1/25 (DM fide RR), the 8th record for Washington. Also notable was a Cackling Goose at BR 2/12-18 (MV), the 11th for the county and first since 2019. A long overdue first for the county was a Trumpeter Swan at R4 on 1/2 (ph. DM). It was seen only that day. This species remains stubbornly accidental in the southwestern corner of the state despite its exploding population in the marshes of western Lake Erie, and its increasing frequency in most other regions of Pennsylvania. Three Northern Shovelers were at the Chippewa Golf Course 2/23 (JL), the only ones reported. An early Gadwall was at Morganza Res. 1/22 (MV), and 2 American Wigeons were at GHP 2/26 (JF, LF). A nice count of 204 Mallards was made at AMD 12/26 (RG). AMD hasn't been heard from much in the past few winters, but it did get some attention this season. Other sightings there included three Redhead 2/5-8 (AN), a Greater Scaup 2/1-8 (AN, et al.), and a Common Goldeneye 2/11 (JP). A Northern Pintail at Ciaffoni Rd. 1/4 (FK) was the first of a handful of reports there and elsewhere thereafter. A nice count of 13 Redheads was made on the Monongahela R. at Fredericktown 12/30 (JF). The top count of Ring-necked Ducks was just 22 at GSP 2/21 (JF). Six Greater Scaup were also at Fredericktown 2/5 (JL), the same time that the single was at AMD. Top counts of Common Merganser came from BR around the time the Cackling Goose was present; the highest were 57 on 2/12 (MV) and 55 on 2/22 (GG). Two Common Mergansers were seen mating at R4 on 1/3 (RI).

Eight **Ring-billed Gulls**, unusual in winter away from the Monongahela, were at CC 1/11 (RI). Also notable were 3 **Herring Gulls** at BR 2/20 (RI). **Black Vulture** again appeared randomly in the county when one was found near West Middletown during a snow-free WRS 1/28 (RT). A **Turkey Vulture** at Trax Farm 1/8 (AK) was the first of several early reports. **Short-eared Owls** were a fixture along the Panhandle Trail near Midway throughout the winter. At least 5 were present (m.ob.). Very interesting was a **Northern Saw-whet Owl** giving toot calls in a Washington yard many nights from 1/30-2/11 (JPo). It was hoped that it might remain into the spring, but it apparently did not, or at least it quieted down for the last half of Feb. **Merlin** was reported from the Queen of Heaven Cemetery in Peters Twp. 1/31 (JF) and at Canonsburg 2/1 (ST), possibly the same bird. **Peregrine Falcon** was reported from Speers only on 12/30 (TB).

A total of 47 *Washington* eBird checklists included **Common Raven** this season. Four **Red-breasted Nuthatches** were noted at Washington Cemetery 12/13 (PB), but the cemetery was visited only two other times from then to the end of Feb (judging by eBird checklists), so Merlin, annual or nearly so there in winter, was not reported. The only report of **Red-breasted Nuthatch** at Hillman State Park, where they are year-round residents, was one on 1/29 (MK). A **Ruby-crowned Kinglet** at Plum Run Rd. 12/30 (FK) was rare for the date, and early was an **American Pipit** at Parkview Road near CC 2/19 (JO). Short-eared Owl searchers on the Panhandle Trail also submitted many reports of **Eastern Meadowlark**, including a great count of seven on the early date of 2/5 (FK, AN). The max count by season's end was 10.

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Wayne County

Location: Lake Wallenpaupack (LW).

Waterfowl highlights included two **American Wigeon** 1/29 (RJ, TN) and a **Canvasback** 1/1 (JDL) at LW. The lake also hosted two adult **Lesser Black-backed Gulls**, a county rarity, which were nicely photographed 2/19 (RJ). A **Barn Owl** was photographed midday 12/17, perched on a utility wire near Honesdale (CF, JH). This sighting marks the first county eBird record of this species.

Observers: Josh Jones, unclechu76@gmail.com, Jonathan Drescher-Lehman, Chris Fischer, John Harvey, Ryan Johnson, Ted Nichols.

Westmoreland County

Locations: Beaver Run Reservoir: Route 380 Overlook (OV), Route 286 Causeway (CAU); Bushy Run (BUR), Crabtree Farm Area (CFA), Donegal Lake (DL), Kuehl Property - Murrysville (KP), Morosini Reserve (MR), St. Vincent Lake/Wetlands (SVL), Westmoreland Heritage Trail through the MAWC property (WHT).

Two Christmas Bird Counts were conducted during the season: Bushy Run 12/31, compiled by Steve Manns, and the Rector Count 12/17, compiled by Annie Lindsay. The effort from these CBCs provided several reports of rare species for the season. Eight Winter Raptor Survey routes (one new route was added this season) were run during the season: seven by Tom and Janet Kuehl, who were joined by Mark McConaughy, Sharon Gewecke, and Dr. Jim Kellam on several of the routes, and one by Georgia Shalek and Mike Smith. New high WRS counts for this season in *Westmoreland* were for 16 **Red-shouldered Hawks**, 220 **Redtailed Hawks** and 35 **American Kestrels**. The high count of 34 **Turkey Vultures** was equal to the previous record high. While these totals were positively impacted by an additional route, of note is that the hourly rates for **Red-shouldered Hawk** and **American Kestrel** were new highs for *Westmoreland* WRS results, and that hourly rates for **Red-tailed Hawk** were comparable to results of recent years.

Minus the one brief cold snap at Christmas, this was a warm winter, and that likely contributed to the modest reporting of waterfowl, robust WRS results for **Turkey Vulture** and **American Kestrel**, and the lack of species that are associated with moving farther south in colder winters.

One **Snow Goose** was first reported at SVL 12/18 (JP) and continued at that location as documented by several more eBird checklists until a last report on 12/21 of 7 that included 2 white, 4 blue, and one intermediate morph (SMi). There were no other reports of **Snow Goose** for the season. A flock of **Tundra Swans** with the highest count from several parties of 53 was tallied for the BUR CBC at OV 12/18, and 3 were also reported that day at the Bush Recreation Area at Loyalhanna L. (RH, SM). **Wood Ducks** were, in general, lightly reported this season, although SVL was modestly productive with almost a dozen reports, with no more than 3 ever reported, beginning with 2 on 12/1 (RC) and ending with one on 2/22 (JK). There were no reports for Northern Shoveler for the season.

Gadwall was reported at just two locations. Early in the season at WHT there were 13 on 12/1 (KBy), 13 on 12/13 (PF) and 10 on 12/16 (KBy); and there were 8 at SVL 12/5 (RC). Late in the season there were 6 **Gadwall** at SVL 2/18 (JLK, TK, MM). Just one **American Wigeon** was reported this season in an eBird checklist for SVL 2/5 with an excellent photo (RC). There was more widespread reporting for **American Black Ducks**, though never higher than 4 on any eBird checklist at SVL; however, there were many reports beginning with 2 on 12/1 (RC) and continuing to 2/28 with 2 (RC). The high count of 28 at Beaver Run Res. was tallied for the BR CBC 12/18 (RH, SM). Two of the few **Northern Pintail** reports for the season included one at Mannitto GC 12/31 (RH, SM) and the high count of 4 at SVL 2/11 (RC). There was never more than one **Green-winged Teal** – one of just four of these reports for the

season was at DL 2/11 (AM). No Canvasbacks were reported for the season, with just two reports for **Redheads:** 2 at OV 1/18 (JLK, TK, MM) and 3 at DL 2/27 (EH).

Except for 100 at DL 2/27 (EH), reports of Ring-necked Ducks were in low numbers and from just several locations for the season. There were several reports for Lesser Scaup at scattered locations and all in lower numbers than the 4 at Hamilton Road Ponds 2/19 (JLK, TK, MM), and there were no reports of Greater Scaup. No Scoters or Goldeneye were reported. Four Buffleheads were tallied for the BR CBC at BRR-286 on 12/31 (TM), and the season high of several more reports for Buffleheads were of 7 at SVL 12/13 (RC). As expected, there were many well-scattered reports for Hooded Merganser, however mostly in single-digit numbers and with the high count of 10 (JLK, TK) and at BUR 1/1 (PF). Common Mergansers were widely reported for the season, and of significance was an estimated count of 400 in a distant raft at BRR-286 on 12/18 (RH, SM). There were no reports of Red-breasted Merganser for the season. Ruddy Duck was found only at SVL during the season with the first of around one dozen reports being of 3 (equal to the high) 1/5 (RC) and a final report of 2 on 2/19 (SW).

It was not unprecedented that large flocks of **Wild Turkeys** were found on Loyalhanna Dam Road: 226 were tallied for the BR CBC 12/31 (CH), and 215 were seen there 1/15 (JLK, TK, MM). There were no Ruffed Grouse reports for the season. There was very modest reporting of the normally common **Pied-billed Grebe**; the season-high count was just 3 at OV 1/7 (JLK, TK, MM). The only report for **Horned Grebe** for the season was of 6 in an eBird checklist for Allegheny R. Lock & Dam #4 at Natrona that placed them in *Westmoreland* (TR). A flyover flock of 7 or 8 **Sandhill Cranes** was near West Newton on 12/28 (MB) when honking birds alerted observers of the need to look up! And *say it ain't so*, however, there were no reports of American Coot for the season.

The warm winter provided reports of **Killdeer** during each month of the season and included a high count of 12 at WHT 12/10 (KBy), where reservoir water levels had been low. Also attributable to warm weather were two early reports for **American Woodcock** – several peents heard at KP on the warm evening of 2/23 (JLK), and 2 separate birds heard peenting at DL in the early morning of 2/27 (EH). **Wilson Snipe** were only reported in *Westmoreland* at the reliable Crabtree area at Helen Road with the earliest report of one on 1/1 (JK) and a later report of 5 on 1/7, confirmed by photo review (JLK, TK, MM).

An eBird checklist included several photos of one **Bonaparte's Gull** at MP 12/17 (AB). One **Bonaparte's Gull** was seen standing on the ice with 3 **Ring-billed Gulls** at the BRR-286 on 1/1 (MJS). There were few reports of both **Ring-billed Gull** and **Herring Gull**; however, both made the tally for the BR CBC; all reports at Beaver Run Res. included 4 **Ringbilled Gulls** (TM) and one (RH, SM), and one **Herring Gull** (RH, SM). Another unreported species this warm winter was Common Loon.

There were just a few reports for **Black Vultures**; however, a report in Wilpen 2/18 documented, at least for that day, a significant number of 34 **Black Vultures** and 25 **Turkey Vultures** in the Ligonier Valley this season (DM). Earlier in the season, 10 each of both **Black Vultures** and **Turkey Vultures** were tallied on the Ligonier Valley WRS 1/31 (JLK, TK). As mentioned in the opening, perhaps a result of the warm winter was that there were many reports for **Turkey Vultures** with many in the Ligonier Valley, including a report of 13 tallied for the Rector CBC 12/17 on McDowell Road (LD), and then a surprising concentration in the Herminie area that were part of the 23 recorded on the West/Central WRS 1/24 (JLK, TK, MM).

Notable among the reports for **Northern Harrier** was one tallied for the BR CBC 12/31 in the CFA (MM, LLB) and the 4 tallied on the Pleasant Unity WRS 1/27 (SG, JLK, TK). **Sharp-shinned Hawk, Cooper's Hawk,** and **Bald Eagle** were all widely reported this season and tallied on both CBCs. This warm winter provided for just a few reports and modest numbers of **Bald Eagles** at LD, with a high count of 6 on 12/8 (MM). The count week for the BUR CBC resulted in five likely nesting areas of **Redshouldered Hawks** – near KP, at the intersection of Kemerer Hollow/School/Cline Hollow, in the Mamont area, in the area along Hilty

Road between Kistler and Steele Roads, and at Shields Farm (JLK, TK). As noted in the opening, WRS results have documented the growing abundance of **Red-shouldered Hawks** and the continuing abundance of **Red-tailed Hawks** in *Westmoreland* during the winter season. Perhaps a result of a warm winter season, the only report for **Rough-legged Hawk** was the one dark morph that was found at Schramm's Farm near Harrison City while running a WRS 1/24 (JLK, TK, MM).

Effort for the 12/31 BUR CBC yieded a report of one **Eastern Screech-Owl** at MR (JLK, TK), reports of **Great Horned Owl** with 2 at MCP (JLK, TK), one in Sector 10 (AB) and one near Mannitto GC in Sector 9 (RH, SM), and a report of one **Barred Owl** at the Walters Reserve in Murrysville (JLK, TK). After departing the 12/17 Rector tally dinner at the PNR Visitor's Center, count participant Alex Busato encountered one **Saw-whet Owl. Yellow-bellied Sapsucker** was tallied for both CBCs, and CBC count effort accounted for the only reports of the season of **Red-headed Woodpecker** – 2 were tallied for the 2/17 Rector CBC at Penguin Court (JLK, TK, MM, SM) and one near there on Hall Road (AM).

One **Merlin** was tallied for the 12/31 BUR CBC – it was a flyover seen on the WHT (AB, CH). A stunning photo of one **Merlin** was included in a 1/28 eBird checklist for Manor Valley GC (JKn). Last reported in *Westmoreland* in 2018, and the only other report in the last ten years, was one **Northern Shrike** that was found and photographed at MP (SMi) and was last reported there 12/16 (SW). As it is now common, **Common Raven** was widely reported for the season. Unusual in winter, one **Eastern Phoebe** was both heard and seen near a stream on Main Street in Manor 1/1 (MJS). For this warm winter season, **Horned Lark** was found only in the CFA, and the only report with significant numbers was of the 150 resulting from party-effort for the 12/18 BUR CBC (LLB, MM).

Among several reports of **Ruby-crowned Kinglet** for the season was one on Bethel Church Road that was part of the 12/17 Rector CBC (NL). Of the several reports of **Red-breasted Nuthatch**, 2 were at WHT 12/13 (PF) and one was at the BUR SP feeders 1/7 (MJS). WHT produced both **Brown Creeper** and **Winter Wren** this season with multiple reports (KBy). Just a few reports for **Hermit Thrush** this season included 2 on Salem Drive from effort for the 12/18 BUR CBC (RH, SM). **Cedar Waxwings** were also lightly reported this season with 2 tallied on each of the two CBCs. **Purple Finch** was also lightly reported with 2 tallied for the 12/17 CBC including one near Wilpen (AM); it was missed on the BUR CBC.

Rare in the winter, however, both **Chipping Sparrow** with one on Salem Drive (RH, SM) and **Field Sparrow** with one on Bush Road (RH, SM) and one in CFA (LLB, MM) were tallied for the 12/31 BUR CBC. There were mixed results for winter-season sparrows associated with colder weather; however, there were many scattered reports of **American Tree Sparrows**, just one report of **Fox Sparrow** at SVL 12/7 (RC), and modest though well-scattered reporting of **White-crowned Sparrow**. Rare in all seasons, one **Savannah Sparrow** was at the St. Xavier Property of the Westmoreland Land Trust 2/5 (AM). Although expected, **Eastern Towhees** were hard to find this winter season – one male first visited the feeders at KP 12/24 during the single cold snap of the season and made around a dozen period visits to 2/23, and one found on Salem Drive was tallied for the 12/31 BUR CBC (RH, SM).

There were two reports for **Eastern Meadowlark** this season: 8 on HD 12/1 (JK), and one on Loyalhanna Dam Road for the 12/31 BUR CBC (CH). Low counts of **Brown-headed Cowbird** were reported at a few locations, and 2 were tallied for both CBCs. Of the several reports of **Rusty Blackbird** at two locations during the season, 6 were at Youngwood Swamp 2/21 (MMv). Both **Red-winged Blackbirds** and **Common Grackles** were widely reported this season.

Yellow-rumped Warblers were hard to find, and all reports were of singles. Of these was one resulting from Sector 10 effort for the 12/31 BUR CBC (AB). There were two reports during the season at TLP for 12/29 (KB) and 2/4 (MC).

A stunning photo of a leucistic female Northern Cardinal was shared with this observer 12/29. This bird visited a home feeder in

Murrysville daily 11/12-1/2 (DM).

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Wyoming County

Locations: Grist Flats (GF),Lake Carey (LC), Lake Winola (LW),Oxbow Lake (OL), Poppy Road (PR), Sordini's Farm (SF), Vosburg Neck State Park including the Howland Preserve and the Endless Mountains Nature Center (VN).

The Tunkhannock CBC was held Dec 18. Sixty-one species were recorded; the most interesting are included in this report. The *Wyoming* eBird total for the winter season was 79 species.

Among migratory waterfowl, 3 **Ring-necked Duck** were recorded 12/18 at LW (RK). A single **Lesser Scaup** was observed 12/16 at SF (RK), and 6 were there 12/24 (JS). **Bufflehead** were noted twice, 2 at LC 12/16, and a single bird on OL 1/28 (both MC). One **Red-breasted Merganser** made an appearance 12/18 at LC (JC). A single **Ruddy Duck** was recorded 12/2 at OL (TB); another, 12/17 at LC (TB).

Four **Herring Gulls** were spotted 12/12 near Meshoppen (DB, ST). Just wanderers, I suppose, as they don't regularly have any significant presence in *Wyoming*, though they do in one or two surrounding counties.

Black Vulture, a species that established a breeding location in *Wyoming* just a few years ago, may have a second breeding site. We'll wait and see. During this reporting period, BLVU has been observed by several birders on several dates from 1/28-2/19 (LJ, SP). A pair of **Golden Eagles** were spotted during the 12/18 CBC at VN (RL). The birds were soaring with three **Bald Eagles**. Single **Merlins** were reported at two locations: 12/18 at LC (SG, RH, RK) and 12/18 at Sky Haven airport by the same team.

A single **Ruby-crowned Kinglet** was reported at VN 12/18 (TB), and two were at the same location 2/11 (SP).

There were three reports of lone **Snow Buntings** during the period: 12/18 at GF (JH, SG, RK), 12/18 at Mason Road (same team), and 12/19 at Avery Station (JH).

Single **Fox Sparrows** were recorded 12/4 at VN (TP), 1/1 at PR (SP), and 2/1 at LC (MC). A single **White-crowned Sparrow** made an appearance 12/18 at VN (RL).

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York County

Locations: Codorus State Park (CSP), Gifford Pinchot State Park (GPSP), Hopewell Township Park (HTP), Lake Redman (LR), Long Arm Reservoir (LAR), York Springs (YS).

This winter's species count of 122 is consistent with the prior two winters. There were several good finds with a **Painted Bunting** in Jan leading the way. Rather remarkably, *York* is now involved in five CBCs. Portions of *York* are in the Harrisburg, Southern Lancaster County, and York Springs circles. The long-established York circle has a small portion of Maryland while this year's inaugural Southeast York circle, developed by Chuck Berthoud, is fully contained in *York*.

A Greater White-fronted Goose, a nice find, was at CSP 2/18-19 (JB, AS, EV). CSP held up to 4 Cackling Geese 12/3-2/10 (m.ob.), and

a single was spotted in a field adjacent to HTP 12/26 (TC). In a repeat of last winter, a pair of **Trumpeter Swans** was at GPSP 1/10-2/19 (m.ob.). The temperate winter produced six **Wood Duck** reports with 4 birds seen on a Pleasant Hill Rd pond 1/16 (DA) along with a **Northern Pintail**. The Lewisberry area also produced a pair of pintails 12/17 (EB).

The sole **Northern Shoveler** report was a single at Ponderosa Park 12/28 (VG). Six sites produced **American Black Duck** reports, and an impressive 44-count was tallied at LAR 12/27 (BR). As with *Adams*, all expected members of the *aythya* genus were in the county, but no individual counts jumped out as particularly strong. Six sites reporting **Common Goldeneye** were a strong showing, as was the high count of 11 at Spring Grove 2/14 (AS). Likewise, 94 **Hooded Mergansers** at LAR 12/26 (MH, SH) was an impressive count. A single **Red-breasted Merganser** at GPSP 1/7 (LM, NM) was the only report. The 12/28 YS CBC must have coincided with recent stocking efforts of the Pennsylvania Game Commission as 16 **Ring-necked Pheasants** were found. Forty **Wild Turkeys** along Hain Rd 12/2 (BR) paced the 15 reports. A **Sandhill Crane** put in a short stay at LR 2/17-18 (m.ob.).

Three reports of American Woodcock 2/18-28 (CB, BL, AS) included up to a 10 count at SGL 243. Wilson's Snipe reports were limited to Sunnyside Rd and HTP but were found in all months. A nice 20-count of Bonaparte's Gull came from LAR 1/4 (BF). The Riddle Rd landfill provided the bulk of the gull highlights, with an estimated 12,500 Ring-billed Gulls 12/28 (AP), 800 Herring Gulls 1/12 (SS), a pair of Iceland Gulls 12/21 and 1/12 (both SS), a Lesser Black-backed Gull 12/21 (SS), and 23 Great Black-backed Gulls 1/12 (SS). A Great Egret at LAR 12/26 (BP) was a rare winter-period find. An Osprey sighting in the York city area 12/1 (BR) was followed by a 12/5 sighting (DH) and yet another observation on the 12/17 YS CBC. New Bald Eagle nests are a regular occurrence, but a new one in the HTP area impressed a long-time birder by its already massive size (RP). Eastern Screech-Owl, Great Horned Owl, and Barred Owl enjoyed strong reporting. HTP held up to 3 Short-eared Owls throughout the period (m.ob.), and one was spotted in the New Freedom area 1/22 (MW).

Open water throughout the period produced over 25 **Belted Kingfisher** reports. As suggested in the Fall report, late fall trends suggested a likely low overwintering rate for **Red-headed Woodpecker**. That was true except for the northwest corner of the county captured in the YS CBC. That portion of the county produced 10 birds. Single **Merlins** were found at three sites 12/27-2/18 (BF, JH, ASd, CS). **Peregrine Falcon** one-upped its cousin with four reports 12/18-1/28 (EBk, FB, AP, BR). Single **Eastern Phoebes** were found in the Lewisberry area 12/17 (EB) and Glatfelter Station 1/21 (BR). The mild Feb brought early **Tree Swallows** to HTP and LR 2/23-27 (BF, BR, RS). The Fall report noted credible reporting of **Black-capped Chickadee** moving into the county. That was further supported by 18 winter reports. An impressive 15-count for **Red-breasted Nuthatch** came from LR 12/28 (CB). The observer noted they were ground feeding among fallen pinecones. **Brown Creeper, Winter Wren, Golden-crowned Kinglet**, and **Ruby-crowned Kinglet** all saw very strong reporting. Singles of **Gray Catbird** were at New Freedom 12/8 (LR), Spring Grove 2/19 (LW), and CSP 2/16-19 (LB, BR). Four **Brown Thrasher** reports spanned 1/11-2/20 (m.ob.).

The only **American Pipit** report was a 19-count on the YS CBC. **Purple Finches** were present all period but the high count was limited to 4. A lucky few reported **Pine Siskin** 1/14-2/5 (MB, JD, EG, TP) and max was a paltry 2 birds. **Chipping Sparrow** singles were found at Ponderosa Park 12/28 (VG), LR 1/7 (BR), and in Red Lion 12/17 and 1/22 (both PS). Bucking recent downtrends, a nice 17-count of **American Tree Sparrow** was tallied on the YS CBC. **Fox Sparrow**, **Savannah Sparrow**, **Swamp Sparrow**, and **Eastern Towhee** were found in all months but not in significant numbers. **Eastern Meadowlark** were found at six sites with HTP producing a 37-count 12/9 (AP). **Rusty Blackbirds** were in the Shrewsbury area 2/4 (MW) and at New Freedom 1/4 (LR). A mixed *icterid sp.* flock streamed over HTP for 10 to 15 minutes 1/16 (AP) with estimated count in the hundreds of thousands. A **Common Yellowthroat** was found in the Lewisberry area 12/17 (EB).

A male **Painted Bunting** was nicely photographed at a New Freedom backyard feeder 1/19 (ASc). This report's locale was near last Spring's 4/14 sighting in Shrewsbury Twp. This appeared to be the county's fourth record and first winter-period sighting.

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Issue	Sightings due to Compilers	Articles due to Editor	Publication Date
Dec-Feb (Vol. 1)	31 March	1 May	July
Mar-May (Vol. 2)	30 June	1 August	October
Jun-Jul (Vol. 3)	31 August	1 October	December
Aug-Nov (Vol. 4)	31 December	1 February	April

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IN FOCUS – WINTER BIRDS OF OPEN FIELDS



Juvenile **Northern Harrier** at Swissdale, *Clinton* 18 December. (*Wayne Laubscher*)



One of two **Short-eared Owls** at Hill School Rd., near Lewisburg, *Union* 26 (here 26) December – 15 January. (*Mike Anderson*)



This **Northern Shrike** was seen by many birders as it spent most of the season (here 1 January) at Rose Valley Lake, *Lycoming. (Bobby Brown)*



Snow Bunting at California, *Montour* 15 February. (*Wayne Laubscher*)



Dark morph **Rough-legged Hawk** hunting over Schramms Farm, *Westmoreland* 24 January; CBC and WRS numbers of this Arctic raptor were low in the mild season, allowing birds to stay north, a trend likely to continue. (*Mark McConaughy*)



Eastern Meadowlark found during the Great Backyard Bird Count in West Marlborough Twp., *Chester* 18 February; the CBC total was highest in ten years, perhaps an encouraging sign, or the result of the warm winter. (*Barry Blust*)