The 100th Glenolden Christmas Bird Count part of the 120th National Audubon Society CBC was held Saturday December 14, 2019. Our field teams and feeder watchers covered a 15 mile diameter circle centered in Media, Delaware County, PA.

The weather this year was very similar to last year, overcast with intermittent light rain. It was warm. The temperature ranged from 45° to 54° Fahrenheit. Wind was not a factor but fog on the open waters of the Delaware River, Heinz impoundments, Crum Reservoir and Springton Reservoir frustrated waterfowl viewers.

The forecast for heavier steady rain, which never materialized, kept some folks home but turnout was still pretty good. We had 63 field observers in 27 daytime parties and 5 folks kept an eye on 3 feeders for a grand total of 68 participants. These totals are all lower than last year's totals of 77 participants, 29 parties and 8 feeders. We welcomed 12 new field observers participating in their first Glenolden CBC.

Most likely the weather also explains the reduced total of 140 daytime party hours, a level of participation similar to last year's effort. This is lower than our previous 10 year average of 156 party hours. Owling effort however was improved over last year. Nine parties covered 42.25 miles in 12 nocturnal party-hours, a very good effort.

The total number of birds tallied was 22,556 individuals. We had a high number of geese this year including a record high of 4500 snow geese. The number of geese, especially snows, is very variable so for year to year comparison of overall abundance of birds I like to look at the totals minus the geese. This year we counted 13,399 "non-geese" which is better than last year's 10,678 but lower than the previous 10 yr average of 17,424 "non-geese" individuals. A more nuanced way to compare abundance of birds year to year is to look at individuals per party hour. This year we found 95.7 non-geese per hour of effort. This was much improved over last year's 78 non-geese per hour which was the lowest in the previous 10 years. As would be expected on rainy days both this and last year's totals were lower than the previous 10 year average of 109 non-geese per hour.

Where we excelled was in our species count! We were hoping for 100 species on the 100th Glenolden CBC and we ended up with 97 species on count day plus 8 count-week species for a grand total of 105 species. (Count week is the 3 days before and the 3 days after count day. Only species are tallied on count-week days, not the number of individuals.) Our count day species total was well above our previous 10 year count day average of 88 species. Our highest count day total over the past 10 years was 99 species in 2012. Low count in the past 10 years was the "2009" count of 82 species which was held 1/2/2010 due to a major snowstorm on the scheduled day in December. Unfortunately that January 2nd turned out to be very cold and windy so numbers were low. For comparison in 1992 the Glenolden CBC count day tally was 111. The record high count day total for our circle was 117 species on the 1978 CBC according to a study done by Nick Pulcinella.

As mentioned we had 8 count-week species: tundra swan, red-breasted merganser, pied-billed grebe, American kestrel, peregrine falcon, eastern phoebe, palm warbler and pine warbler. Special thanks to everyone who went out scouting for count-week birds this year.

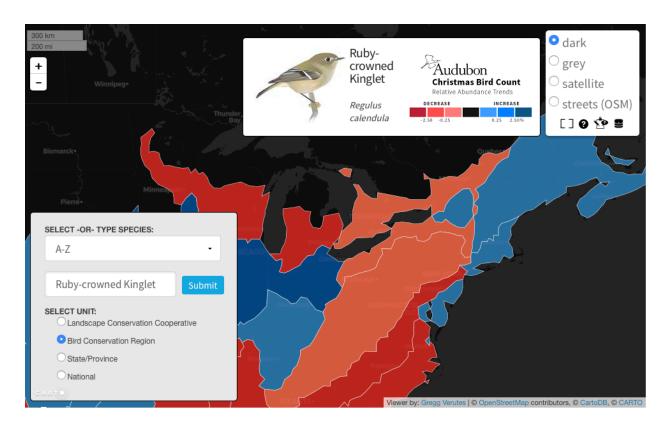
We added no new species to our all time species list. Our grand total for the Glenolden CBC remains at 193 species.

We had high counts for two species. The total of 4503 **snow geese** eclipsed the previous high of 2115 set on the 2011 CBC. This year 4000 snow geese on the Delaware River near the Commodore Barry Bridge and another 500 on the river at Marcus Hook were tallied. On a scouting expedition the day before the count an estimated 8000 snow geese at the Barry Bridge were seen. **Snow geese** are a relatively late phenomenon to our CBC. The first **snow goose** reported on the Glenolden CBC was a single bird in 1966 and counts higher than the single digits did not occur until the late 1990s.

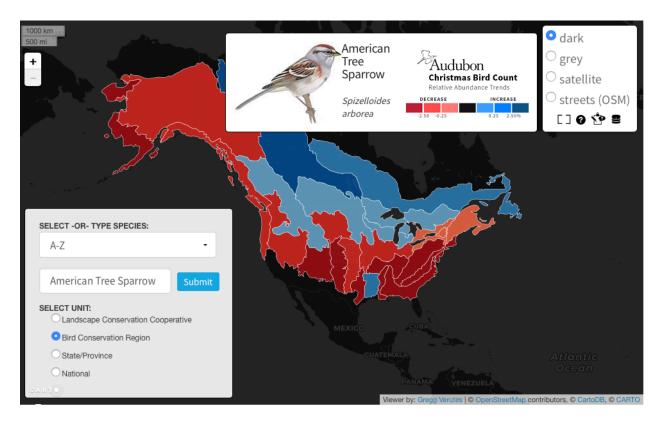
The other high count this year was our total of 7 **Common Ravens.** This is no surprise as sightings of this species have become increasingly regular in our area since the first nesting of ravens in Delaware County was documented in Glen Mills in 2013.

Despite the fog representatives of pretty much all of the expected waterfowl were found, albeit in low numbers. Missed were **American wigeon** and **common goldeneye**. Kudos to the waterfowl counters for their efforts under difficult conditions!

We had the second highest count ever of **ruby-crowned kinglet**. Our tally of 25 individuals is surpassed only by a count of 33 in 1972. We have averaged 7 individuals per year in the previous 10 years. **Ruby-crowned kinglet** is a bird that doesn't like cold winters. According to Birds of North America Online studies have confirmed that the local winter abundance of this species correlates positively with warmer winter temperatures and the number of frost free days. The CBC trends map below (generated from <u>christmasbirdcount.org</u>) shows that the relative abundance of this species on CBCs is increasing (blue areas) along the northeast coastal plain and in much of New England while decreasing (red areas) to our south consistent with the species not needing to travel as far to find few enough frost free days to survive the winter.



Another perhaps stronger indicator of how warmer winters affect the abundance of our winter visitors is the **American tree sparrow**. Last year we missed **American tree sparrow** for the first time since the 1930s. Our counts of this species, once abundant on our CBC, have declined significantly. Although we didn't strike out this year, only 3 **American tree sparrows** were found. All three in the Delco portion of Heinz Refuge. Tree sparrows are cold tolerant and historically migrate mostly to the northern latitudes of the U.S. from their breeding grounds in far northern Canada. One certain explanation for our low counts is that the overall population of **American tree sparrow** is down. It has been estimated to have declined by 53% from 1970-2014 for undetermined reasons (Birds of North America Online). Another factor is indicated by the CBC trends map. It seems many of the remaining tree sparrows do not have to bother migrating this far. The map shows relative winter abundance increasing in the interior north of the U.S. and Canada and decreasing to the south and along the coasts. This is consistent with tree sparrows either staying put on their wintering grounds or migrating shorter distances presumably due to warmer temperatures.*



* This is my interpretation of the data. Take it for what it's worth.

A reflection of our current warm winter is the presence of 3 uncommonly found warbler species in one year on our CBC. **Yellow-rumped Warbler** is more or less expected but the presence of **Common Yellowthroat**, **Pine Warbler** and **Palm Warbler** in one count-week is unusual.

As always I like to list all of our participants and their years of service as a thank you. For special recognition those in their first year, 5 year anniversaries, and those who have contributed 25 years or more are listed in bold type (as always, corrections are welcome):

Mike Barber (1), Gary Becker (16), Natalie Berry (4), Rob Bierregaard (7), Jim Bodine (27), Sarah Boucas-Neto (13), Tom Bush (7), Brian Byrnes (11), Mike Cassidy (1), Bruce Childs (8), Bill Cranny (9), Alan Crawford III (11), Nick Crocetto (45), Cynthia Curry (18), Ellen Dearborn (2), Dick Eales (6), David Eberly (29), Rob Fergus (2), Kevin Fryberger (11), Stephanie Gaboriault (9), Blake Goll (4), Susan Haidar (1), Linda Healy (1), Rich Horwitz (31), Lois Hunn (21), Letitia Jeavons (9), Kristen Johnson (9), Sheryl Johnson (24), Steve Kapski (25), Bob Kelly (11), Noel Kelly (6), Brian Kirk (2), Dan Kobza (8), Ann Lane (2), Sue Lucas (12), Laura Matika (1), Dave McDonald (8), Doris McGovern (36), Pat McGovern (5), Art McMorris (8), Rob Megraw (26), Roberta Menapace (2), Alison Mostrom (28), Damon Orsetti (7), Peter Patton (1), Andy Pesthy (3), Mariana Pesthy (3), Jason Porter (8), Chris Pugliese (11), Brian Quindlen (13), Frank Roman (2), Lynn Roman (5), Chuck Root (1), Katherine Rossbach (1), Karen Serwatka (3), Win Shafer (14), Alan Simon (2), Marilyn Smith (1), Carol Storey (14), Don Storey (5), Marcia Tate (9), Gloria Todor (14), Pat Trevelino (14), Geoff Veith (4), Mark Wallace (5), Zoe Warner (1), Garrett White (1), John Zygmunt (1).

Current and historical results for our count and all CBCs are available on the CBC website **christmasbirdcount.org**. The reports of all CBCs in North America are published in the online version of **American Birds** magazine. This is available on the National Audubon website. Voluntary donations to help keep the CBC running are always welcome. Information is on the website.

Once again thank you one and all for your participation. Mark your calendars! **The 101st Glenolden Christmas Bird Count will be held on Saturday December 19, 2020.** This is as late in the month as our CBC is scheduled. The official count period starts on or before Dec 14 of every year. Our CBC is traditionally scheduled on the first Saturday of the count period.

Below is the report I submitted to Audubon. Please let me know if you have any corrections or questions. I have also attached our all time historical species list for your interest.

Dave

David Eberly 112 S Princeton Ave Swarthmore, PA 19081

david.eberly@gmail.com

Printout Date: 1/5/2020

Count Name:	Delaware County (Glenolden)	Count Code:	PAGL	Count Date:	12/14/2019
Organizations &		# of Party Hours:	140.00	Species reported on	97
Sponsors:				count date:	

Compiler(s)

First Name	Last Name	Email	Is Primary Compiler
David	Eberly	david.eberly@gmail.com	Yes

Start & End Times

Start time	End time
04:30 AM	05:15 PM
06:00 PM	08:00 PM

Effort

	Observers	
In Field	Total Number:	63
	Minimum Number of Parties (daylight):	22
	Maximum Number of Parties (daylight):	27
At Feeders	Total Number:	5

Party Hours and Distance (excludes viewing at feeders and nocturnal birding)				
Ву	Hours	Distance	Units	
Foot	106.00	87.00	Miles	
Car	34.00	276.25	Miles	
Air				
All-Terrain Vehicle				
Bicycle				
Dog Sled				
Golfcart				
Horseback				
Motorized Boat				
Non-Motorized Boat				
Skis/Xc-Skis				
Snowmachine				
Snowshoe				
Wheelchair				

Other Time and	d Distance	
Hours	Distance	Units

Printout Date: 1/5/2020

At Feeders	15.50		
Nocturnal Birding	12.00	42.25	Miles
Total Party	140.00	363.25	Miles

Weather

Temperature	Minimum	: 45.0 Fahrenheit	Maximum:	54.0 Fahrenheit
Wind Direction	Variable			
Wind Velocity	Minimum	: 5.00 Miles/hour	Maximum:	21.00 Miles/hour
Snow Depth	Minimum	: 0.00 Inches	Maximum:	Inches
Still Water	Open			
Moving Water	Open			
		AM and PM Conditions		
Cloud Cover	AM	: Local Fog	PM:	Local Fog
AM Rain	Light			
AM Snow	None			
PM Rain	Light			
PM Snow	None			

Checklist

Species	Number or cw	Flags	Max Number	# Of Counts Editor Comm.
Snow Goose	4503	HC,	4503/120	42
Canada Goose	4654		15880/109	72
Mute Swan	17		17/120	29
Tundra Swan	cw		172/114	47
Wood Duck	5		13/102	45
Gadwall	50		82/102	47
American Black Duck	38		13007/39	90
Mallard	353		2245/76	88
Northern Shoveler	133		314/115	57
Northern Pintail	20		107537/52	82
Green-winged Teal	4		2000/76	45
Green-winged Teal (Eurasian)	cw		2/62	6
Ring-necked Duck	4		105/80	61
Lesser Scaup	1		1627/80	39
Bufflehead	14		85/79	73
Hooded Merganser	51		95/114	57

Printout Date: 1/5/2020

Common Merganser	35	335/90	88	
Red-breasted Merganser	cw	11/89	32	
Ruddy Duck	1	20188/57	76	
duck sp.	200	200/120	4	
Wild Turkey	1	22/116	11	
Pied-billed Grebe	cw	24/80	60	
Double-crested Cormorant	16	90/115	38	
Great Blue Heron (Blue form)	31	96/93	80	
Black Vulture	13	191/111	33	
Turkey Vulture	53	322/111	76	
Northern Harrier	3	34/51	89	
Sharp-shinned Hawk	5	45/102	68	
Cooper's Hawk	18	26/108	78	
Sharp-shinned/Cooper's Hawk	1	1/120	2	
Bald Eagle	14	20/116	40	
Red-shouldered Hawk	9	15/52	87	
Red-tailed Hawk	31	117/102	100	
Common Gallinule	1	10/67	21	
American Coot	90	241/88	67	
Wilson's Snipe	1	11/105	6	
Ring-billed Gull	704	4003/84	88	
Herring Gull	14	10000/71	94	
Great Black-backed Gull	62	220/93	71	
Rock Pigeon (Feral Pigeon)	166	1521/93	52	
Mourning Dove	321	1743/93	84	
Eastern Screech-Owl	16	66/83	38	
Great Horned Owl	1	44/89	69	
Belted Kingfisher	13	41/99	79	
Red-bellied Woodpecker	157	205/112	63	
Yellow-bellied Sapsucker	25	40/118	59	
Downy Woodpecker	125	262/82	99	
Hairy Woodpecker	32	50/108	96	
Northern Flicker	90	134/85	30	
Pileated Woodpecker	12	17/108	54	
American Kestrel	cw	66/78	95	
Merlin	1	3/117	27	
Peregrine Falcon	cw	3/112	37	

Printout Date: 1/5/2020

Eastern Phoebe	cw		2/93	29	
Blue Jay	361		1158/82	94	
American Crow	206		4164/93	76	
Fish Crow	21		261/118	78	
crow sp.	1		1500/31	31	
Common Raven	7	HC,	7/120	9	
Carolina Chickadee	232	,	1045/82	79	
Tufted Titmouse	146		605/83	95	
Red-breasted Nuthatch	2		325/82	72	
White-breasted Nuthatch	89		242/83	96	
Brown Creeper	13		45/83	93	
House Wren	3		7/58	39	
Winter Wren	20		40/113	11	
Marsh Wren	2		14/67	28	
Carolina Wren	249		401/93	97	
Golden-crowned Kinglet	13		123/93	89	
Ruby-crowned Kinglet	25		33/73	72	
kinglet sp.	1		2/119	2	
Eastern Bluebird	37		132/106	74	
Hermit Thrush	7		29/108	78	
American Robin	1811		9867/102	85	
Gray Catbird	7		23/85	72	
Brown Thrasher	1		10/71	48	
Northern Mockingbird	35		284/83	74	
European Starling	2126		19000/71	99	
Cedar Waxwing	42		4649/86	74	
Common Yellowthroat	1		9/85	34	
Palm Warbler	cw		13/100	15	
Pine Warbler	cw		3/111	16	
Yellow-rumped Warbler	2		63/85	11	
American Tree Sparrow	3		3700/66	99	
Chipping Sparrow	1		19/114	47	
Field Sparrow	69		320/67	96	
Fox Sparrow	19		248/59	90	
Dark-eyed Junco	492		1604/85	9	
White-crowned Sparrow	2		87/75	58	
White-throated Sparrow	1652		2926/58	99	
Savannah Sparrow	2		68/59	76	
Song Sparrow	525		3600/67	99	
Swamp Sparrow	27		520/66	92	

Printout Date: 1/5/2020

Eastern Towhee	78	136/112	45	
Northern Cardinal	262	967/89	100	
Red-winged Blackbird	429	6300/66	96	
Rusty Blackbird	83	400/41	73	
Common Grackle	709	9377/95	61	
Brown-headed Cowbird	137	1500/71	66	
blackbird sp.	13	90/118	9	
House Finch	149	2673/94	62	
Purple Finch	1	557/78	88	
American Goldfinch	151	1400/62	73	
House Sparrow	183	1600/72	90	
Total Individuals	22556			
Total Species Reported	97			

cw = Reported count week

US = Flagged as an unusual species

HC = Flagged as an unusually high count

LC = Flagged as an unusually low count

Species Requiring Rare Bird Reports to be Submitted to Regional Editor

Special Aspects

Species

Historical Species List Glenolden CBC

Region: Pennsylvania	
Circle: Delaware County (Glenolden)	
Species Total=193	
Snow Goose	
Ross's Goose	
Brant	
Cackling Goose	
Canada Goose	
Mute Swan	
Tundra Swan	
Wood Duck	
Gadwall	
American Wigeon	
American Black Duck	
Mallard	
Blue-winged Teal	
Northern Shoveler	
Northern Pintail	
Green-winged Teal	
Canvasback	
Redhead	
Ring-necked Duck	
Greater Scaup	
Lesser Scaup	
Surf Scoter	
White-winged Scoter	
Black Scoter	
Long-tailed Duck	
Bufflehead	

Common Goldeneye	
Hooded Merganser	
Common Merganser	
Red-breasted Merganser	
Ruddy Duck	
Northern Bobwhite	
Ring-necked Pheasant	
Ruffed Grouse	
Wild Turkey	
Red-throated Loon	
Common Loon	
Pied-billed Grebe	
Horned Grebe	
Red-necked Grebe	
Double-crested Cormorant	
Great Cormorant	
American Bittern	
Great Blue Heron (Blue form)	
Great Egret	
Green Heron	
Black-crowned Night-Heron	
Glossy Ibis	
Black Vulture	
Turkey Vulture	
Osprey	
Northern Harrier	
Sharp-shinned Hawk	
Cooper's Hawk	
Northern Goshawk	
Bald Eagle	
Red-shouldered Hawk	

Broad-winged Hawk	
Red-tailed Hawk	
Rough-legged Hawk	
King Rail	
Virginia Rail	
Common Gallinule	
American Coot	
Black-bellied Plover	
Killdeer	
Greater Yellowlegs	
Lesser Yellowlegs	
Ruddy Turnstone	
Ruff	
Dunlin	
Pectoral Sandpiper	
Semipalmated Sandpiper	
Western Sandpiper	
Long-billed Dowitcher	
Wilson's Snipe	
American Woodcock	
Bonaparte's Gull	
Black-headed Gull	
Laughing Gull	
Ring-billed Gull	
Herring Gull	
Iceland Gull	
Lesser Black-backed Gull	
Glaucous Gull	
Great Black-backed Gull	
Rock Pigeon (Feral Pigeon)	
Mourning Dove	

Barn Owl	
Eastern Screech-Owl	
Great Horned Owl	
Snowy Owl	
Barred Owl	
Long-eared Owl	
Short-eared Owl	
Northern Saw-whet Owl	
Rufous Hummingbird	
Belted Kingfisher	
Red-headed Woodpecker	
Red-bellied Woodpecker	
Yellow-bellied Sapsucker	
Downy Woodpecker	
Hairy Woodpecker	
Black-backed Woodpecker	
Northern Flicker	
Pileated Woodpecker	
American Kestrel	
Merlin	
Peregrine Falcon	
Eastern Phoebe	
Loggerhead Shrike	
Northern Shrike	
Blue-headed Vireo	
Blue Jay	
American Crow	
Fish Crow	
Common Raven	
Horned Lark	
Carolina Chickadee	

Black-capped Chickadee	
Boreal Chickadee	
Tufted Titmouse	
Red-breasted Nuthatch	
White-breasted Nuthatch	
Brown Creeper	
House Wren	
Winter Wren	
Marsh Wren	
Carolina Wren	
Blue-gray Gnatcatcher	
Golden-crowned Kinglet	
Ruby-crowned Kinglet	
Eastern Bluebird	
Hermit Thrush	
Wood Thrush	
American Robin	
Gray Catbird	
Brown Thrasher	
Northern Mockingbird	
European Starling	
American Pipit	
Cedar Waxwing	
Lapland Longspur	
Snow Bunting	
Ovenbird	
Black-and-white Warbler	
Orange-crowned Warbler	
Nashville Warbler	
Common Yellowthroat	
American Redstart	

Northern Parula	
Palm Warbler	
Pine Warbler	
Yellow-rumped Warbler	
Black-throated Green Warbler	
Wilson's Warbler	
Yellow-breasted Chat	
Le Conte's Sparrow	
American Tree Sparrow	
Chipping Sparrow	
Clay-colored Sparrow	
Field Sparrow	
Fox Sparrow	
Dark-eyed Junco	
White-crowned Sparrow	
White-throated Sparrow	
Vesper Sparrow	
Savannah Sparrow	
Song Sparrow	
Lincoln's Sparrow	
Swamp Sparrow	
Eastern Towhee	
Northern Cardinal	
Dickcissel	
Bobolink	
Red-winged Blackbird	
Eastern Meadowlark	
Yellow-headed Blackbird	
Rusty Blackbird	
Brewer's Blackbird	
Common Grackle	

Brown-headed Cowbird	
Baltimore Oriole	
Pine Grosbeak	
House Finch	
Purple Finch	
Red Crossbill	
White-winged Crossbill	
Common Redpoll	
Pine Siskin	
American Goldfinch	
Evening Grosbeak	
House Sparrow	
Total species= 193	