

The Philadelphia Breeding Bird Census of 2016

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How many species nested in Philadelphia in 2016? How were they distributed geographically? How many nests were found, and of which species? Which city parks had the most diverse breeding communities? It is easy to speculate about these questions, but they are surprisingly difficult to answer because Philadelphia is a big place – a city and a county – with many localities seldom visited during the breeding season, despite a growing community of enthusiastic birders and new technology for documenting breeding evidence. Patchy coverage by birders of city parks during the breeding season inevitably leads to foggy notions about the relative abundance and breeding status of various species in Philadelphia. Surely [insert species here] must have nested *somewhere* in the city last year!

Except for a few species that are particularly well-suited to life amidst skyscrapers, like the feral Rock Pigeon (*Columba livia*), House Sparrow (*Passer domesticus*), and surprisingly, Peregrine Falcon (*Falco peregrinus*), most of the city's breeding birds are found in its expansive, but fragmented, park system. Philadelphia parks are like a chain of islands, stretched out across a vast impermeable sea of concrete and asphalt. Like oceanic islands, they vary in their size and relative degree of isolation. Correspondingly, the floral communities of each island also differ in species composition, density and distribution. These factors influence the diversity and richness of each local bird community.

One of the earliest breeding bird censuses in Philadelphia took place in the summer of 1811, when Alexander Wilson (1766–1813) found 51 nests of 19 species in about 8 acres of land at Bartram's Garden. He reported his findings in the preface to the fourth volume of *American Ornithology* (1811: vii). Witmer Stone (1901: 100) later wrote, "About ninety species breed within ten miles of Philadelphia, but half that number is a fair average for one's immediate neighborhood." However, since the old days, many of the habitat islands have shrunk or vanished under the

encroaching pavement. Some have now even faded from the collective memory of the DVOC, and are only preserved in anecdotes in the pages of *Cassinia* and other periodicals. In the future, DVOC members will probably look back at our time too, and marvel at all the changes that have transpired.

Our objective was to take a city-wide census of Philadelphia's breeding birds, but to accomplish a thorough census of even the largest patches – East and West Fairmount Park (2,052 acres combined), Wissahickon Valley Park (2,042 acres), Pennypack Park (1,600 acres), and Cobbs Creek Park (851 acres) – would itself be a formidable task, and then there are more than 150 regional and neighborhood parks. A small army of volunteers would be needed. Fortunately, not only does Philadelphia have the oldest, and arguably most vibrant, urban birding community in the United States; it is also a place where rag-tag militias have been known to rally around a worthy cause!

Census Blocks and Methods

We identified 107 census blocks, each small enough to be surveyed thoroughly on foot in 2–4 hours, and recruited members of the birding community to sign up to survey one or more blocks (Table 1). Participants were asked to meander through their blocks in such a way that the probability of counting the same bird twice was lessened, while keeping a separate tally of detections made by sight and sound for each species. Additionally, they were asked to record direct (nest found, or fledgling observed) and indirect evidence of breeding (e.g., adult carrying food or nest material). We asked participants to choose a convenient day in June to conduct the survey, and on that day to begin before 7:00 am. A total of 58 of 78 (74%) surveys began before 7:15 am. Since our goal was to detect and count resident breeding birds, we included surveys that started later than 7:15, if no earlier survey from that block was available, rather than exclude the block from the count. Each survey was entered into eBird (Cornell University) by the volunteer, and

(text continues on page 9)

Table 1. Census Blocks for Philadelphia Breeding Bird Census 2016

List of 107 census blocks, the initials of the person(s) who surveyed the block (see text for legend), the number of species (#SPP.) and individuals regardless of species (#IND.) detected in that block during the June survey, and the percentage of species detected in that block for which breeding evidence was obtained (% EVID.). Blocks that were not surveyed are denoted as such (-).

#	BLOCK DESCRIPTION	SURVEYORS	# SPP.	# IND.	% EVID.
<i>Cobbs Creek</i>					
1	Morris Park (Lansdowne Ave. to City Ave.)	MRH, DK	34	263	24
2	Haddington Woods (Market to Golf Course)	MRH, DK	47	303	19
3	Cobbs Creek Central (Market to Mt. Moriah)	MRH, DK, NS	42	398	14
4	Mount Moriah Cemetery	MRH, DK, NS, ME	36	347	17
5	Mt Moriah to Woodland Ave.	MRH	31	165	13
<i>Pennypack Park</i>					
6	Fox Chase Farm	CA	37	283	0
7	Pine Rd. to Verree Rd. North Side	AR, CA, SA	50	417	24
8	Pine Rd. to Verree Rd. South Side	SK	42	398	15
9	Verree Rd. to Bustleton Ave. North Side	FW	25	93	0
10	Verree Rd. to Bustleton Ave. South Side	-	-	-	-
11	Bustleton Ave. to Roosevelt Blvd. North Side	PR	23	144	22
12	Bustleton Ave. to Roosevelt Boulevard South Side	PR	14	61	7
13	Roosevelt Boulevard to Holme Ave. North Side	-	-	-	-
14	Roosevelt Boulevard to Holme Ave. South Side	-	-	-	-
15	Trail parallel to Lexington Blvd. to Holme Ave.	-	-	-	-
16	Trail parallel to Winchester Ave.	-	-	-	-
17	Trail from Roosevelt Blvd. to Rhawn St.	-	-	-	-
18	Trail Rowland Ave. to Frankford Ave.	-	-	-	-
19	Trail Holme Ave. to Frankford Ave.	-	-	-	-
20	Frankford Ave. to State Rd.	RC	15	46	20
21	Pennypack on the Delaware	RC	34	166	0
22	Holme Ave. to Willits Rd.	-	-	-	-
23	Welsh Rd. to Grant Woods	-	-	-	-
24	Bloomfield Ave. to Welsh Rd. tributary	-	-	-	-
25	Bloomfield Ave. to Bustleton Ave. tributary	-	-	-	-
<i>Tacony Area</i>					
26	Rising Sun Ave. to Godfrey Ave.	RI	27	97	19
27	Rising Sun Ave. to Roosevelt Blvd.	RI	22	75	32
28	Friends Hospital	RI	30	100	7
29	Tacony Creek South (Roosevelt Blvd. to I St. and Ramona)	RI	40	206	18
30	Juniata Park	RI	14	31	7
31	Cayuga East	-	-	-	-

#	BLOCK DESCRIPTION	SURVEYOR	# SPP.	# IND.	% EVID.
<i>Wissahickon Park (Roxborough Side)</i>					
32	Andorra (Bells Mill Rd. to Northwestern Ave.)	TC	39	156	21
33	Houston Meadow	MS	32	195	66
34	Houston Woods (Bell's Mill Rd. to Summit)	MS	24	103	4
35	Summit to Wises Mill Rd.	–	–	–	–
36	Valley Green (Wises Mill Rd. to Livezey Ln.)	MS, PB	25	112	12
37	Livezey Ln. to Kitchen's Ln.	KJ	35	175	6
38	Kitchen's Ln. to Walnut Ln.	HP	19	46	16
39	Walnut Lane to Lincoln Ave.	HP	23	99	26
40	Hermit Lane (Lincoln Ave. to Ridge Ave.)	KeR	36	213	11
41	Saul High School Fields	JS	28	297	7
<i>Wissahickon Park (Mt. Airy Side)</i>					
42	Creek bend to Bell's Mill Rd.	CH	28	90	14
43	Bell's Mill Rd. to Rex Ave.	CH	22	63	14
44	Rex Ave. to Valley Green Rd.	CH	22	90	5
45	Lower Cresheim (Valley Green Rd. to Livezey Ln.)	MRH	30	288	23
46	Upper Cresheim (McCallum St. to Stenton Ave.)	MRH	35	211	17
47	Livezey Ln. to Mt. Pleasant Rd.	CH	22	94	9
48	Mt. Pleasant Rd. to Kitchen's Ln.	AB, EB, MiS	41	343	24
49	Kitchen's Ln. to Walnut Ln.	AB, EB, MiS	24	67	4
50	Carpenter's Woods	AB	29	142	21
51	Blue Bell (Walnut Ln. to Lincoln Ave.)	HP	35	213	34
52	Thomas Mansion	HP	22	90	27
53	Wissahickon Ave. to Ridge Ave.	HP	15	61	20
54	Saylor Grove Stormwater Wetlands	HP	7	30	29
<i>Poquessing</i>					
55	Roosevelt Blvd. to Philmont Ave.	–	–	–	–
56	Benjamin Rush State Park	RC	24	117	29
57	Dunksferry Rd.	–	–	–	–
58	Franklin Mills	–	–	–	–
<i>East Fairmount Park</i>					
59	East Park Reservoir	KeR	24	175	0
60	Boxer's Trail	MRH	40	296	23
61	Sedgley Woods	MRH	29	149	35
62	Kelly Dr./ Lemon Hill	LW	34	261	9
63	East Laurel Hill Cemetery	GG	33	315	12
<i>West Fairmount Park</i>					
64	Car Barn Trail/ Belmont Plateau	MRH	40	293	15
65	Horticulture Center	MRH	35	319	31

(continued)

Table 1. Census Blocks for Philadelphia Breeding Bird Census 2016 *(continued)*

#	BLOCK DESCRIPTION	SURVEYOR	# SPP.	# IND.	% EVID.
<i>West Fairmount Park (continued)</i>					
66	Belmont West (lakes/ Mann Center)	MRH	39	344	15
67	Chamounix (Ford Rd. to Neil Dr.)	MRH	35	294	20
<i>Miscellaneous</i>					
68	Awbury Arboretum	BR	32	296	22
69	Bartram's Garden	NS, SL	34	221	15
70	Burholme Park	CA, SA	25	242	60
71	Byberry Woods	–	–	–	–
72	Clearview (78th to 84th St.)	–	–	–	–
73	Cumberland St. No-man's-land	AR	34	289	18
74	Delaware River Trail	GA	36	379	11
75	Eastwick Meadows	MRH	20	197	20
76	Franklin D. Roosevelt (FDR) Park	SK	35	440	31
77	Fernhill Park	–	–	–	–
78	Fisher Park	RI, JoM, LM, ThD, TB	27	85	11
79	Fort Mifflin	–	–	–	–
80	Glen Foerd	RC	30	178	17
81	Hunting Park	–	–	–	–
82	Philadelphia International Airport	DB	28	86	4
83	Island Green Golf Course	AR	46	366	13
84	John Heinz National Wildlife Refuge	GV	45	564	87
85	Laudner's Point	RC	13	75	23
86	Manayunk Canal	KJ	38	253	24
87	Morris Arboretum	KJ	31	149	42
88	Navy Yard	GA	41	308	15
89	Northeast Philadelphia Airport	–	–	–	–
90	Northeast Water Pollution Control Plant	AR	39	236	23
91	Penn Treaty Park	–	–	–	–
92	Philadelphia Zoo	–	–	–	–
93	Pleasant Hill Park	HP	32	260	25
94	General Pulaski Park	HP	19	57	21
95	Rittenhouse Square	NS	5	85	60
96	Roxborough Reservoir	RW	28	37	7
97	Schuylkill Center	MM, SM, KJ, DoW, DC, JP, LA, GF	52	641	4
98	Southampton Woods	–	–	–	–
99	Southeast Water Pollution Control Plant	–	–	–	–
100	Southwest Water Pollution Control Plant	DeM	12	55	0
101	Spring Lane fields used by Saul School	–	–	–	–

#	BLOCK DESCRIPTION	SURVEYOR	# SPP.	# IND.	% EVID.
<i>Miscellaneous (continued)</i>					
102	Wissinoming Park	—	—	—	—
103	Wister Woods	MRH, KaR, RI, LP	28	103	14
104	Woodlands Cemetery	MRH	20	124	30
105	Clark Park	MRH	12	52	25
106	Fluehr Park	RC	19	98	21
107	Kemble Park	MRH, KaR, RI, LP	10	28	20

the checklists were sent to MRH to compile. Birds detected outside the boundaries of the survey block were not counted.

Contributors

A million thanks are due to all of the volunteers who completed morning Philadelphia Breeding Bird Census (PBBC) surveys in June 2016, and/or submitted breeding bird data to eBird during 2016. Surveyor anecdotes are hereafter referenced by the following alpha codes:

Cindy Ahern (CA), Scott Ahern (SA), Andrew Albright (AA), George Armistead (GA), Pamela Barton (PaB), Robert Baumander (RB), Alan Bedford (AlB), Anne Bekker (AB), Adrian Binns (AdB), Kerry Birnbaum (KB), Erica Brendel (EB), Denis Brennan (DB), Peter Burns (PB), Brian Byrnes (BB), Monica Carlson (MC), Debbie Carr (DC), Pete Carter (PC), Shereen Chang (SC), Rich Conroy (RC), Anthony Croasdale (TC), Martin Dellwo (MD), Thomas Doebel (TD), Gretchen Dowling (GD), Matthew Eisen-son (MaE), Bill Etter (BE), Morgan Evans (ME), Gail Farmer (GF), Todd Fellenbaum (TF), Sean Gallagher (SG), Kate Garchinsky (KG), Jean-Marie Gauthier (JG), Gregg Gorton (GG), Barbara Granger (BG), Matthew Halley (MRH), Cliff Hence (CH), Robin Irizarry (RI), Ken Januski (KJ), Tim Johnston (TJ), Robert Karchnyak (RK), Sandra Keller (SK), Daniel Kobza (DK), Peter Kurtz (PK), Chris Lituma (CL), Selah Lynch (SL), Jim McConnell (JM), Jan McFarlan (JaM), Lee McIlhinney (LM), Art McMorris (FAM), Dennis Mora (DeM), John Musselman (JoM), Anne Mytych (AM), Barbara Nevin (BN), Lindsey Nichols (LN), Jacob Norton (JN), Holger Pflücke (HP), Elizabeth Porter (EP), Katrina Rakowski (KaR), Bill Reaume (BR), Annie Reeves (AR), Tessa Rhinehart

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Summary Results

We recruited a total of 75 volunteers (including ourselves), and collectively surveyed 78 of 107 blocks (73%), walking a linear distance of 162.7 mi (261.8 km), during a cumulative 159.9 hours of birding. Eighteen surveys by MRH accounted for 44% of the total distance walked (72.2 mi).

We counted 15,168 individual birds, representing 101 species. Breeding evidence (both direct and indirect) was obtained for 70% of species (71/101) detected in PBBC blocks. The 7 most abundant species accounted for 47% of all birds counted. American Robin (*Turdus migratorius*) was the overall champion, accounting for 15% ($n = 2,221$) of all birds counted, followed by European Starling (*Sturnus vulgaris*, 9%, $n = 1,298$), Gray Catbird (*Dumetella carolinensis*, 8%, $n = 1,266$), House Sparrow (5%, $n = 827$), Canada Goose (*Branta canadensis*, 4%, $n = 628$), Common Grackle (*Quiscalus quiscula*, 3%, $n = 508$) and Red-winged Blackbird (*Agelaius phoeniceus*, 3%, $n = 508$).

A total of 231 nests were found, of 42 species, of which 77 (33%) were found by MRH. Seven species accounted for 142 (61%) of all nests found: 62 nests of the American Robin (27% of the total), 16 of the Barn Swallow (*Hirundo rustica*, 7%), 16 of the House Wren (*Troglodytes aedon*, 7%), 14 of the House Sparrow

The Philadelphia Bird Breeding Census of 2016

(6%), 12 of the Gray Catbird (5%), 12 of the Baltimore Oriole (*Icterus galbula*, 5%), and 10 of the European Starling (4%). A total of 913 recently fledged young were reported, of 54 species, including 206 juvenile European Starlings (23%), 97 Canada Geese (11%), 96 American Robins (11%), 68 Wood Ducks (*Aix sponsa*, 7%), 65 Common Grackles (7%), and 45 Mallards (*Anas platyrhynchos*, 5%).

The most birdy survey blocks, in terms of raw number of individuals counted, were the Schuylkill Center (4%, $n = 641/15,168$ birds), John Heinz National Wildlife Refuge (hereafter Heinz NWR) (4%, $n = 564$), Franklin D. Roosevelt (FDR) Park (3%, $n = 440$), Pennypack Park between Verree Rd. and Pine Rd., northside (3%, $n = 417$) and southside (3%, $n = 398$), Cobbs Creek Parkway from Market St. to Mt. Moriah Cemetery (3%, $n = 398$), Delaware River Trail (2%, $n = 379$), Island Green Golf Course (2%, $n = 366$), Mt. Moriah Cemetery (2%, $n = 347$), and West Fairmount Park west of Belmont Ave., near Mann Center and Concourse Lake (2%, $n = 344$).

The most species-rich survey blocks were the Schuylkill Center (52 species), Haddington Woods (47), Island Green Golf Course (46), Heinz NWR (45), Pennypack Park between Verree Rd. and Pine Rd. southside (43), Cobbs Creek Parkway from Market St. to Mt. Moriah Cemetery (42), Navy Yard (41), Wissahickon Park northside from Mt. Pleasant Ave. to Kitchen's Lane (41), Tacony Creek from Roosevelt Blvd. to I St. and Ramona (40), West Fairmount Park on the Belmont Plateau, Car Barn Trail, etc. (40), and East Fairmount Park on the Boxer's Trail (40).

The remainder of this paper is an annotated species list, replete with anecdotes and direct quotes from surveyors, describing the discovery of nests and other notable bird encounters. We have placed each species into one of four categories, denoting its breeding status based on all available data from 2016.

Annotated Species List

Breeding status:

- (*) *Confirmed*: Nest or offspring observed.
- (^) *Probable*: Material or food carry observed.
- (§) *Likely*: But no evidence during the PBBC.
- (x) *Unlikely*: No evidence during the PBBC.

* **CANADA GOOSE** (*Branta canadensis*) – Common, widespread breeder.

Detected in 38% of blocks (30/78), on all major waterways. A total of 628 individuals counted, of which 531 were adults and 97 were juveniles; 209 (33%) were seen in Wissahickon Park, where 21 offspring were counted; 103 (16%) in East Fairmount Park, where 20 young were counted; 72 (11%) on the Delaware River Trail, 4 young; and 60 (10%) on the Cobbs Creek, 23 young (4 broods). MRH found an adult sitting on a nest on April 1, on the southeast side of the impoundment at Heinz NWR, and the adult was still sitting when he returned on April 10.

* **WOOD DUCK** (*Aix sponsa*) – Common, widespread breeder.

Detected in 21% of blocks (16/78) on most major waterways. A total of 84 individuals were counted during June, including 68 juveniles; 27 (32%) were found in the Wissahickon, 21 (25%) on the Pennypack Creek, and 20 (24%) at Heinz NWR. The species was also confirmed as a breeder at Morris Arboretum and Manayunk Canal. Adults were detected without breeding evidence on Cobbs Creek, at FDR Park and at the Southwest Water Pollution Control Plant. SK saw a recently hatched group of 10 juveniles on July 26 at Heinz NWR, which were probably a second brood. No detections on Tacony Creek.

* **AMERICAN BLACK DUCK** (*Anas rubripes*) – Rare, local breeder.

Detected in 1% of blocks (1/78), at Heinz NWR only. JG saw 4 juveniles with 1 adult on June 4; and on June 20, GV saw an adult female with 8 new ducklings “in first horseshoe after double deck platform (walking counter clockwise).” GG saw the group again on June 25: “adult-dark w/ olive bill; 8 ducklings.” This may be the first evidence of this species breeding in Philadelphia.

* **MALLARD** (*Anas platyrhynchos*) – Common, widespread breeder.

Detected in 40% of blocks (31/78), on all major waterways. A total of 197 individuals were counted, of which 45 were juveniles. This species was especially numerous in Pennypack Park, where 68 birds (35%) were detected; at Island Green Golf Course, 34 birds (17%); and at the Manayunk Canal, 26 birds (13%).

RI & LR reported 3 ducklings at Heinz NWR on May 1, and JaM reported 6 ducklings with 2 adult pairs at Morris Arboretum on May 9.

* **WILD TURKEY** (*Meleagris gallopavo*) – Uncommon, local breeder.

Detected in 3% of blocks (2/78), at Bartram's Garden and Heinz NWR only. A total of 6 birds were counted, of which 3 (50%) were juvenile. RI saw a "Male displaying for female" on May 18 at Bartram's Garden. DB saw an "Adult female with 2 smallish chicks in tow. Behind visitors center" at Heinz NWR on July 10.

× **DOUBLE-CRESTED CORMORANT** (*Phalacrocorax auritus*) – Common, widespread.

No evidence of breeding. Detected in 12% of blocks (9/78), all on the Schuylkill or Delaware Rivers. A total of 102 individuals were counted, of which 46 (45%) were found at the Navy Yard, 25 (25%) at FDR Park, and 20 (20%) on the Delaware River Trail.

× **AMERICAN BITTERN** (*Botaurus lentiginosus*) – Rare, local.

Detected in 1% of blocks (1/78), at Heinz NWR only. AR found 1 on April 24. It was photographed, but apparently a migrant and did not remain to breed.

* **LEAST BITTERN** (*Ixobrychus exilis*) – Rare, local breeder.

Detected in 1% of blocks (1/78), at Heinz NWR only. First detected by AR and TF on April 23; 2 adults remained as breeders in subsequent weeks. On June 11, LR saw 1 "flying back and forth over the large impoundment boardwalk from different spadderdock 'islands,' Possibly nesting or planning to nest (but I didn't see nesting material on flights)." Eventually, on July 23, FW saw adult male, adult female and "2 free-flying young."

× **GREAT BLUE HERON** (*Ardea herodias*) – Common, widespread.

No evidence of breeding. Detected in 24% of blocks (19/78), on all major waterways. A total of 46 individuals were counted, mostly as pairs or solitary birds. The highest densities were 3 (7%) at the Navy Yard, and 3 (7%) at Heinz NWR.

^ **GREAT EGRET** (*Ardea alba*) – Uncommon, local, probable breeder.

Detected in 1% of blocks (1/78), at Heinz NWR only. A total of 27 individuals were counted. On June 13, RK saw 1 "picking up and dropping a stick several times before flying away without it."

× **SNOWY EGRET** (*Egretta thula*) – Rare, local.

No evidence of breeding. No breeding record in over 30 years. In 2016, there was 1 bird seen regularly in June at Heinz NWR, then 5 on July 12, and a high count of 7 on July 31. JM wrote, "Surprised to see so many suddenly, though a few seen earlier this year by others." This may have been the same group seen by TD at the Art Museum Waterworks on July 23.

^ **GREEN HERON** (*Butorides virescens*) – Rare, local breeder.

Detected in 6% of blocks (5/78). A total of 6 individuals were counted, including 2 (33%) at Heinz NWR, and 1 each at Island Green Golf Course, Manayunk Canal, Concourse Lake (West Belmont), and Morris Arboretum, where KJ was surprised to see it "gathering nesting material [on June 25]. Seems late and perhaps the first we've seen trying to nest here."

× **BLACK-CROWNED NIGHT-HERON** (*Nycticorax nycticorax*) – Rare, local.

No evidence of breeding. Detected in 1% of blocks (1/78), at Heinz NWR only. A group of 5 was seen at Heinz NWR by LR on April 9, "from Philly side of Darby Creek but coming to roost on Delaware side (fide Al Guarente). We watched one as the other 4 came in one by one around 9:30 as rain was still light, but increasing a bit. All adult plumage. An adult was seen at Heinz NWR on July 4."

× **YELLOW-CROWNED NIGHT-HERON** (*Nycticorax violacea*) – Rare, local.

No evidence of breeding. Detected in 1% of blocks (1/78), at Heinz NWR only. A molting immature bird was observed by AR, JZ & TF on May 10 at Heinz NWR. A juvenile was observed and photographed by AdB, DB *et al.* in early July at Heinz NWR. DB wrote on July 2: "Juvenile in cove near observation deck. Originally incorrectly identified as BCNH [Black-crowned Night-Heron]. Adrian [Binns] reviewed others' photos. Long legs distinctive. Spots with lines

The Philadelphia Bird Breeding Census of 2016

(versus large spots, no lines). Thick black bill had a hint of yellow on lower mandible – not enough for BCNH.” There is no evidence that this bird hatched in Philadelphia.

× **BLACK VULTURE** (*Coragyps atratus*) – Rare, non-breeder.

No evidence of breeding. Found in 3% of blocks (2/78). A total of 2 individuals were counted, 1 each at Manayunk Canal and Morris Arboretum.

× **TURKEY VULTURE** (*Cathartes aura*) – Uncommon, local.

No evidence of breeding. Detected in 14% of blocks (11/78). A total of 25 individuals were counted, of which 7 (28%) were seen at Manayunk Canal, and 3 (12%) at East Laurel Hill Cemetery. MRH saw an adult “perched on a high snag in the middle of the large forest fragment just west of Belmont Ave.” on June 6, but detected no breeding activity.

* **OSPREY** (*Pandion haliaetus*) – Uncommon, local breeder.

Detected in 12% of blocks (9/78). A total of 23 individuals were counted, including 4 (17%) at Pleasant Hill Park, and 3 (13%) each at the Navy Yard and General Pulaski Park. Five nests were found in Philadelphia: (1) Cumberland St. on the Delaware, found by AR on June 12, “I found a new nest. One [adult] was sitting on the nest and the other flew off to fish for food.” (2) Glen Foerd on a channel marker buoy, observed by RC; this nest was first reported by DB & AdB on July 14, 2013. (3) Philadelphia Navy Yard on April 24, reported by DB: “atop tall mast of ship #117. Docked in basin, next to road – easily visible. One adult flew in with a fish, joined its mate in the nest.” (4) RI found a nest at General Pulaski Park “on lamp post on opposite pier,” that was observed again by HP and AR on June 17 and 25, respectively; this is the second consecutive year of nesting at this site since RI reported it on June 1, 2015, (5) Heinz NWR, a nest that was occupied as early as May 14 and observed by MRH on July 2.

A sixth nest, on a channel marker on the NJ side of the river (RC) near Plum Point, was observed from Pennypack on the Delaware (from the west) and Pleasant Hill Park (from the north), but is not a Philadelphia record.

* **COOPER’S HAWK** (*Accipiter cooperii*) – Rare, local breeder.

Detected in 6% of blocks (5/78). A total of 6 individuals were counted, 1 (17%) each at Philadelphia International Airport, Awbury Arboretum, Haddington Woods, and Houston Meadow; and 2 (33%) at Heinz NWR. One nest was found by FW on April 13 at Heinz NWR, occupied by a sitting adult. DB & NS saw both adults at the nest on April 23: “Perhaps feeding young?” On May 11, GV wrote: “mating pair building new nest along Haul Rd.” Presumably this was a second attempt, because no fledgling was seen from the first nest. KB saw an adult sitting on the new nest on May 21, and again by GV on June 1. A “fuzzy white-headed” juvenile was seen by SC at Heinz NWR on July 7, accompanied by an adult. MS reported “Babies in nest identified by numerous other birders and Heinz NWR guide” on July 23, which may have been a different pair of adults.

* **BALD EAGLE** (*Haliaeetus leucocephalus*) – Rare, local breeder.

First breeding record was in 2007. In 2016, detected in 4% of blocks (3/78). A total of 2 individuals were counted during dawn surveys, 1 (50%) each at the Delaware River Trail and Pennypack Park (south side of the creek, Pine Rd. to Verree). Two nests of this species were reported: (1) Heinz NWR, on the south east end of the impoundment, active for 7 consecutive years, (2) Pennypack on the Delaware, active for 8 consecutive years; FW has been monitoring these beloved “Rhawn Eagles” since 2009. Heinz NWR: On April 1, MRH saw an adult sitting on the edge of its nest at Heinz NWR. On April 10, DeM wrote: “1 adult and two young in nest. Young were clearly visible as they raised their heads at the same time.” MRH, TC & NS observed an adult delivering food to the nest. On April 13, a group that included LR & GV “Watched 2 eagles coax osprey to drop a fish; fish was caught in mid air by Adult BE.” JG saw 2 juveniles at Heinz NWR on June 4. Pennypack on the Delaware: PK saw an adult sitting just above the nest on March 9, and TC observed 1 sitting on the nest on March 27.

× **RED-SHOULDERED HAWK** (*Buteo lineatus*) – Rare, local.

No evidence of breeding. Detected in 1% of blocks (1/78). A total of 2 individuals were counted at Island Green Golf Course by AR.

* **RED-TAILED HAWK** (*Buteo jamaicensis*) – Uncommon, local breeder.

Detected in 31% of blocks (24/78). A total of 30 individuals were counted, including 3 (10%) each at Wister Woods and on the southern Tacony Creek. Two nests were found: (1) MRH found a nest at Sedgley Woods on April 13: “Nest in the patch between the ball-golf driving range and Sedgley Woods disc golf hole #26 pin. Adult was perched on the rim of the nest when I arrived @1600, and then later was seen perched ~30 meters from the nest;” these birds are beloved by the disc golfers, and the Friends of Sedgley Woods group features a hawk in their logo. (2) DeM found a nest at Benjamin Rush State Park on April 26. Immature birds were also seen at Wister Woods, Island Green Golf Course, and the Manayunk Canal.

× **SORA** (*Porzana carolina*) – Rare, local.

No evidence of breeding. At Heinz NWR, 1–3 birds were observed from April to September, but no evidence of nesting was detected.

* **KILLDEER** (*Charadrius vociferus*) – Uncommon, local breeder.

Detected in 14% of blocks (11/78). A total of 33 individuals were counted, of which 10 (30%) were detected at the Cumberland St. ‘No-man’s Land’ on June 12, where AR took a photo of an (apparently) incubating adult: “They were acting very territorial, with loud alarm calls. A few circled me several times. One may have been on eggs.” At the Navy Yard, DB wrote on April 24: “A pair in one field – one bird walking around, its mate sitting amidst a graveled clearing in grass – surely on nest.” GA observed a copulation there on June 11. FW observed “3 tiny juvenals and a protective adult” at Pennypack on the Delaware on July 21.

× **AMERICAN WOODCOCK** (*Scolopax minor*) – Rare.

No evidence of breeding. Found in 1% of blocks (1/78). On June 12, MD saw 1 at Heinz NWR: “apparent daytime roosting in dry patch of woods between marshy areas on the back side of refuge (far trolley tracks, near original eagle nest viewing area).” On June 22 at the Morris Arboretum, AB “flushed [a woodcock] from trail through woods (along Wissahickon Creek) leading down to pond.”

^ **SPOTTED SANDPIPER** (*Actitis macularius*) – Rare, local breeder.

Detected in 3% of blocks (2/78). A probable nest site was discovered by AR, CA & SA on the Pennypack Creek on June 30: “flying low over the creek, obvious white wing stripe, landed on mud bank, taupe dorsal coloring, light underside with spotting, tail bobbing, then disappeared into vegetation along the side of the creek. First observed at 9 am, and noted again flying low over the water and disappearing into vegetation on return walk from opposite side of creek in same vicinity.”

× **LAUGHING GULL** (*Leucophaeus atricilla*) – Rare, local.

No evidence of breeding. A single bird was reported by GA on the Delaware River Trail.

× **RING-BILLED GULL** (*Larus delawarensis*) – Common, widespread.

No evidence of breeding. Found in 5% of blocks (4/78). A total of 67 individuals were counted, of which 63 (94%) were detected at the Delaware River Trail.

× **HERRING GULL** (*Larus argentatus*) – Rare, local.

No evidence of breeding. Found in 4% of blocks (3/78). A total of 4 individuals were counted, including 2 (50%) at the Northeast Water Pollution Control Plant, and 1 each at the Navy Yard and Delaware River Trail. AR saw 2 immature birds (i.e., not juvenile) at the NE Water Pollution Control Plant on June 25. These individuals are assumed to be late winter visitors.

× **GREAT BLACK-BACKED GULL** (*Larus marinus*) – Uncommon, local.

No evidence of breeding. Detected in 5% of blocks (4/78). Possible, but not confirmed as a breeder in Philadelphia. Found in 4% of blocks (3/78). A total of 10 individuals were counted, including 7 (70%) at the Navy Yard, 2 (20%) at Laudner’s Point, and 1 (10%) at Glen Foerd on the Delaware. These individuals are assumed to be late winter visitors; no evidence of breeding.

^ **ROCK PIGEON** (*Columba livia*) – Common, widespread breeder.

Detected in 29% of blocks (23/78). A total of 74 individuals were counted, of which 23 (31%) were

The Philadelphia Bird Breeding Census of 2016

detected in the Cobbs Creek corridor (4/5 blocks), 6 (8%) in Wister Woods, 5 (7%) in Pleasant Hill Park, and 4 (5%) each in the Tacony Creek corridor (2/4 blocks), East Fairmount Park (2/5 blocks), West Fairmount Park (2/4 blocks), Delaware River Trail, Fisher Park, and Rittenhouse Square. There was no evidence of breeding during the census, but this species undoubtedly breeds prolifically in the city.

* **MOORING DOVE** (*Zenaida macroura*) – Common, widespread breeder.

Detected in 78% of blocks (61/78). A total of 420 individuals were counted. The largest counts were 23 (5%) at Morris Park, 17 (4%) at Pleasant Hill Park, 17 (4%) at the Schuylkill Center, and 16 (4%) at Island Green Golf Course. MRH & DK photographed a nest along Cobbs Creek on Jun 19: “1 active nest found, with an adult incubating/brooding. The other adult was perched ~5 meters away from the nest during this time.” KaR observed a copulation near Blue Bell Park (Wissahickon) on June 19. During the PBBC, a total of 11 juveniles were observed, and 4 material carries. RK saw 2 fledglings at Heinz NWR on June 27.

^ **YELLOW-BILLED CUCKOO** (*Coccyzus americanus*) – Rare, local breeder.

Detected in 9% of blocks (7/78). A total of 8 individuals were counted, of which 5 (63%) were in Wissahickon Park. There were single detections at Haddington Woods and the Schuylkill Center. On May 11, SG saw a bird carrying food at Heinz NWR: “At small boardwalk, caterpillar in beak while flying, possibly carrying to nest?”

* **BLACK-BILLED CUCKOO** (*Coccyzus erythrophthalmus*) – Rare, local breeder.

Detected in 3% of blocks (2/78). Three birds were observed. MD encountered an adult and fledgling in the Houston Meadow (Wissahickon) on June 6: “Adult and fledgling observed near each other and calling softly...I observed for quite some time, hoping to see a nest or mate...Moving for a better view, I observed a young bird, which made the same call and flew short distances up to 10–20 ft. up into a tree. The bird was clearly a fledgling based on shape and feathering but able to fly. Tail feathers were short, maybe 2 inches long.” A solitary adult was reported by GA at the Navy Yard.

§ **EASTERN SCREECH-OWL** (*Megascops asio*) – Common, local breeder.

This species is seen frequently in the Wissahickon during the breeding season, and occasionally reported in Pennypack. There are no modern breeding season records from Tacony or Cobbs Creek, although the species has been detected at Cobbs Creek Golf Course during the winter. They have used nest boxes at Carpenter’s Woods in recent years (2013–15), and MD found a fledgling in Houston Meadow on Jun 25, 2013 (Wissahickon). Although J. Goschke reported a red morph there multiple times from April 17–19, AB reported on June 4, 2016, “unfortunately they don’t seem to be nesting in Carpenter’s Woods this year.” There was no evidence of breeding during the census, but probably because breeding pairs went undetected.

* **GREAT HORNED OWL** (*Bubo virginianus*) – Rare, local breeder.

Detected in 5% of blocks (4/78). A total of 6 birds were detected. A single bird was reported by RI on the upper Tacony Creek (Rising Sun to Godfrey). On June 5, DeM photographed a juvenile at Pennypack Park between Pine Rd. and Verree Rd. It was with an adult and both were “being harassed by 2 American crows.” MiW & PaB saw a pair of adults at Heinz NWR on June 4: “Pair in tree in middle of horseshoe. Later in the evening, just before sunset.” RI found a pair in Tacony Creek Park, that were subsequently observed multiple times by him and DeM (e.g., May 19, June 4): “First I’ve seen in this section north of the Boulevard.”

× **BARRED OWL** (*Strix varia*) – Rare, local.

No evidence of breeding. Detected in 1% of blocks (1/78). A pair was found by JM on April 28 near the Wissahickon Creek at Crefeld St., and subsequently heard/seen by many birders. Another pair was reported in East Falls near Lincoln Dr. To date, this species has only been detected in the Wissahickon.

§ **CHIMNEY SWIFT** (*Chaetura pelagica*) – Common, widespread breeder.

Detected in 59% of blocks (46/78). A total of 235 individuals were counted, of which 27 (12%) were detected on the Delaware River Trail, and 15 (6%) at East Park Reservoir. Undoubtedly a breeder, but evidence was hard to come by. There was no evidence of breeding during the census, but likely due to the diffi-

culty of observing and monitoring activity in chimney cavities.

* **RUBY-THROATED HUMMINGBIRD** (*Archilochus colubris*) – Uncommon, local breeder.

Detected in 17% of blocks (13/78). A total of 19 individuals were counted, of which 3 (16%) were detected at Heinz NWR and 3 (16%) at Pennypack Park (south side of the creek, Pine Rd. to Verree). TR saw a female gathering spider webs to use as nesting material on April 24 at Heinz NWR, and DO saw an adult sitting on a (probably the same) nest on May 10. On May 14, DB saw “one on nest near outdoor educational benches” and KS saw another female building behind the visitor center. GF reported 2 nests on June 1 at Heinz NWR. AB, EB & MS found a nest on June 4 at Carpenter’s Woods.

§ **BELTED KINGFISHER** (*Megaceryle alcyon*) – Rare, local.

Detected in 5% of blocks (4/78). A total of 6 individuals were counted, including 1 at Morris Arboretum, 1 at Pennypack Park (south side of the creek, Pine Rd. to Verree), and 1 observed by JM on July 31, “just past the poplar woods at the pool by the railroad tracks” at Heinz NWR. There was no evidence of breeding during the census.

* **RED-BELLIED WOODPECKER** (*Melanerpes carolinus*) – Common, widespread breeder.

Detected in 74% of blocks (58/78). A total of 228 individuals were counted, which brings it the distinction of being the most abundant woodpecker species in Philadelphia; 17 (7%) were seen at the Schuylkill Center, 11 (5%) on the south side of the Pennypack Creek between Pine Rd. and Verree, and 8 (4%) each in the Belmont Plateau and West Belmont blocks, and in the upper Cresheim Creek of Wissahickon Park. AB saw a pair at Carpenter’s Woods visiting a “probable” nest site on June 4, and recently fledged young were seen in 4 survey blocks in the Wissahickon, 2 in Pennypack Park, and at Morris Arboretum.

* **DOWNY WOODPECKER** (*Picoides pubescens*) – Common, widespread breeder.

Detected in 65% of blocks (51/78). A total of 147 individuals were counted, of which 10 were juveniles; 9 (6%) were detected in the lower Cresheim Creek area (Valley Green to Livezey Ln.), 7 (5%) at Awbury

Arboretum, and 7 (5%) at Burholme Park. Five juveniles were seen in the Wissahickon and 4 at Burholme Park. No nests were found.

* **HAIRY WOODPECKER** (*Picoides villosus*) – Uncommon, local breeder.

Detected in 24% of blocks (19/78). A total of 33 individuals were counted, of which 16 (48%) were detected in Wissahickon Park, and 4 (12%) at the Schuylkill Center. Clearly, Wissahickon Park is a stronghold for breeding populations of this species in Philadelphia. No nests were found, but on June 18, MS & PB watched adults feeding a fledgling on the west (Roxborough) side of the Wissahickon Creek.

* **NORTHERN FLICKER** (*Colaptes auratus*) – Common, widespread breeder.

Detected in 79% of blocks (62/78). A total of 188 individuals were counted, of which 8 were recently fledged young. Six nests were reported: (1) MRH found 1 on June 2 at Sedgley Woods, near hole #3: “Fresh nest cavity seen, with female entering,” (2) SK found 1 on June 7 at FDR Park: “In a nesting cavity. I heard the young.” (3) PR watched an adult “flying to and going in and out of nest hole” in Pennypack Park on June 8, (4) KJ found a nest at the Schuylkill Center on June 9: “Two were both going to hole in tree, I assume to feed young. I heard loud calls from this area before seeing them. Another bird, not calling shared a tree with a Pileated Woodpecker.” (5) GD found a pair “nesting near box 12” at Morris Arboretum on June 16, (6) CH found a nest on June 27 on the east (Mt. Airy) side of Wissahickon Creek between Livezey Ln. and Mt. Pleasant Ave.



Downy Woodpecker
Drawn by Katrina Rakowski

The Philadelphia Bird Breeding Census of 2016

* **PILEATED WOODPECKER** (*Dryocopus pileatus*) – Uncommon, local breeder.

Detected in 18% of blocks (14/78). A total of 21 individuals were counted city-wide, of which 12 (57%) were detected in Wissahickon Park, 7 (33%) in Pennypack Park, and 2 (10%) at the Schuylkill Center. TC found a nest at Andorra Meadow on June 23, where 2 adults were calling and 1 drumming.

× **AMERICAN KESTREL** (*Falco sparverius*) – Rare, local.

Detected in 4% of blocks (3/78). A total of 3 individuals were counted: KeR saw 1 at East Laurel Hill Cemetery on June 6, of which he wrote, “I have been seeing one kestrel at this location for several weeks now but have not seen any additional evidence of breeding.” KeR saw an adult female at the Hermit Lane woods (Wissahickon) on June 12. RI had 2 separate sightings on June 28 and 29, respectively, that may have been the same bird. The first was seen at the Globe Dye Works in Frankford, and the second sighting was at Godfrey Plaza (Front & Godfrey) in the Tacony Creek corridor. There was no evidence of breeding during the census.

* **PEREGRINE FALCON** (*Falco peregrinus*) – Rare, local breeder.

Detected in 6% of blocks (5/78). A total of 5 individuals were counted: 2 adults at the NE Water Pollution Control Plant; 1 adult at the Navy Yard, which GA “presumed [was a] member of [the] pair breeding under Girard Point Bridge (I-95)”;

and 2 birds that RC saw from Laudner’s Point on June 25, “One adult flying by Tacony/Palmyra bridge. One immature bird on power pole in park area. Young bird flew directly in front of us as well.” Currently, at least 7 nests are known within the city limits (FAM, pers. comm.): (1) Ben Franklin Bridge; (2) Girard Point Bridge; (3) steeple of St. John the Baptist Church in Manayunk; (4) City Hall tower; (5) 2400 Chestnut St.; (6) Walt Whitman Bridge; and (7) Tacony-Palmyra Bridge (nest box on top of bridge is managed by New Jersey but is actually on the Philadelphia PA side of the state line). The falcons at the Walt Whitman Bridge alternate between nest boxes on the PA and NJ side of the river, but they nested in PA (Philadelphia) in 2016. Two additional nest sites were used recently, and possibly into the present: (8) Hospital of the University of Pennsylvania, breeding confirmed in 2013 and 2014 and falcons still present in 2016 but nest site in 2016, if any, unknown; and (9) Temple University, nested

in 2013 but none confirmed since then (FAM, pers. comm.). A total of 46 nest sites were confirmed in PA in 2016; the 7 confirmed nests in Philadelphia in 2016 were 15% of the state total. Art McMorris (FAM) is currently the Peregrine Falcon Coordinator for the PA Game Commission.



Eastern Wood-Pewee
Drawn by Katrina Rakowski

§ **EASTERN WOOD-PEWEE** (*Contopus virens*) – Common, widespread breeder.

Detected in 54% of blocks (42/78). A total of 117 individuals were counted, including 8 (7%) along the Boxer Trail, 6 (5%) at Haddington Woods, and 5 (4%) each in the central Cobbs Creek block, and Houston Woods (Bell’s Mill to Summit Ave.). It is a testament to its secretive habits that no breeding evidence was found during the census; this widespread species undoubtedly nests in Philadelphia, but is very challenging to observe during the breeding season.

* **ACADIAN FLYCATCHER** (*Empidonax vireescens*) – Uncommon, local breeder.

Detected in 26% of blocks (20/78). A total of 66 individuals were counted, including 36 (55%) in Wissahickon Park. Three nests were found: (1) CH found 1 on June 10 between Bells Mill and Rex Ave. (E side Wissahickon), (2) CH found 1 on June 27 between Livezey Ln. and Mt. Pleasant Ave. (E side Wissahickon), (3) GG found 1 at Heinz NWR on June 25: “nest found and photographed [by J. Manning] with bird in it: 18-20’ up in Box Elder, in deciduous forest, nest overhanging the haul road; nest was raggedy looking, with a few long, thin strands of plant material hanging down over the side and extending below the nest, which was suspended between two small anchoring branches.”

* **WILLOW FLYCATCHER** (*Empidonax traillii*) – Uncommon, local breeder.

Detected in 21% of blocks (16/78). A total of 40 individuals were counted, of which 9 (23%) were detected at Island Green Golf Course, 6 (15%) at Bartram's Garden, 4 (10%) at Mt. Moriah Cemetery, and 3 (8%) at Morris Arboretum. Stone (1894:101) called it a "rare transient visitant" to eastern Pennsylvania, with no breeding records. AR saw 2 adults feeding a fledgling at Island Green Golf Course on June 26. At Heinz NWR, IR saw an adult gathering nest material on June 26, SG saw a pair of adults feeding a cowbird fledgling on July 24, and JM saw an adult feeding a fledgling on July 31.

* **EASTERN PHOEBE** (*Sayornis phoebe*) – Uncommon, local breeder.

Detected in 21% of blocks (16/78). A total of 19 individuals were counted. Four occupied nests were located: (1) MRH on June 4, in the eaves of the Ormstead Mansion, (2) MRH on June 10, in the rafters of the carriage house at Ridgeland Mansion, (3) MRH & NS on May 29 at the Heinz NWR, with 5 eggs, (4) a different nest at Heinz NWR found by GV. An immature bird was seen by RC on June 25 at Glen Foerd.

* **GREAT CRESTED FLYCATCHER** (*Myiarchus crinitus*) – Uncommon, widespread breeder.

Detected in 58% of blocks (45/78). A total of 90 individuals were counted, including 7 (8%) at Houston Woods, 6 (7%) on the Boxer's Trail, and 5 (6%) on the Belmont Plateau. On Jun 18, LW & BN saw an adult carrying food at Lemon Hill. On Jun 30, at Heinz NWR, JM wrote "Adult feeding mate or nestlings large dragonfly, nest in fairly large hole in willow tree at south dike across from fisherman pond dock trail." The same day, AR, CA & SA observed and heard 3 adults between Verree Rd. and Krewstown Rd. (Pennypack south side), "including a very curious juvenile."

* **EASTERN KINGBIRD** (*Tyrannus tyrannus*) – Uncommon, local breeder.

Detected in 37% of blocks (29/78). A total of 54 individuals were counted, including 6 (11%) at Pleasant Hill Park and 5 (9%) at the Navy Yard. Six nests were found: (1) GA found 1 nest on June 7 at Delaware River Trail, with a brooding/incubating adult, (2–3) GV found 2 nests with sitting adults at Heinz NWR on June 18, (4–5) HP found 2 nests at Pleasant

Hill Park on June 18, and (6) KJ found 1 nest "as usual in the sycamores" at Morris Arboretum on May 21, where he reported 2 fledglings on July 11 the previous year.

× **WHITE-EYED VIREO** (*Vireo griseus*) – Rare, local.

No detections in Philadelphia during June–July 2016, including at Heinz NWR, where 1–2 birds were reported during each of the breeding seasons of 2001–04, 2006, 2008, and 2012–15. It has also been absent from the Wissahickon for 5 years now, the most recent records being 2 birds at Houston Meadow in 2011 (KeR), and 2 birds in the northern Wissahickon in 2010 (FW). It has not been recorded by GF in the Schuylkill Center census since 2008, despite not having been missed from 2001–05. There are breeding season records from directly across the Schuylkill, 2014–16 at Rolling Hill Park in Gladwyne, but the species has vanished from Philadelphia. FW reported solitary singers in Pennypack Park (between Verree Rd. and Krewstown Rd.) in 2009–11 and 2013, but no records from Pennypack since. Similarly, there were a few reports of 1–2 birds at Benjamin Rush SP from 2009–14.

× **YELLOW-THROATED VIREO** (*Vireo flavifrons*) – Rare, local.

Detected in 3% of blocks (2/78). A total of 5 birds were counted. Two birds reported by HP on the Roxborough side of the Wissahickon Creek, between Lincoln Ave. and Walnut Ln. On June 15, KeR heard 3 birds singing from widely separate locations in the Houston Meadow area; these birds had not been detected by MS on June 5. There was no evidence of breeding during the census.

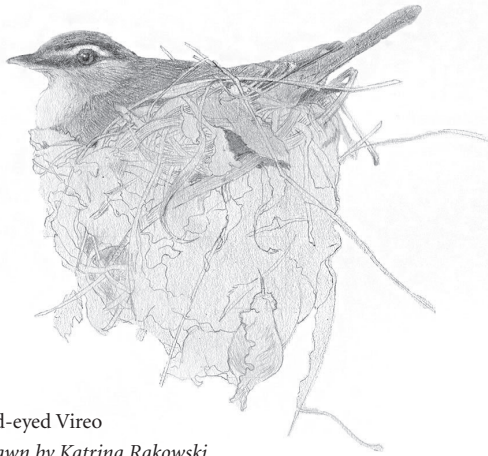
* **WARBLING VIREO** (*Vireo gilvus*) – Common, widespread breeder.

Detected in 53% of blocks (41/78). A total of 142 individuals were counted, including 12 (8%) at FDR Park, 8 (6%) in the central Cobbs Creek block, and 7 (5%) each in the southern Cobbs Creek block (Mt. Moriah to Woodland Ave.), Pleasant Hill Park, and West Belmont near the Mann Center. Only 5 (4%) detections were made in all of Wissahickon Park. MRH found a nest at Mt. Moriah Cemetery on June 4, with an incubating/brooding adult. On July 16, KJ saw 2 adults and "one young bird begging adult for tood. [sic]" at Morris Arboretum.

The Philadelphia Bird Breeding Census of 2016

* **RED-EYED VIREO** (*Vireo olivaceus*) – Common, widespread breeder.

Detected in 60% of blocks (47/78). A total of 168 individuals were counted, of which 79 (47%) were found in various blocks of Wissahickon Park, 9 (5%) in the Chamounix area of West Fairmount Park, and 7 (4%) at the Schuylkill Center. The species is also established along Cobbs Creek, with 17 (10%) detections in 4 of 5 blocks, and Tacony Creek with 7 (4%) detections in 4 of 4 blocks. Pennypack Park, where there were 6 (4%) detections at 2 of 2 blocks, undoubtedly harbors a large breeding population, perhaps comparable to the Wissahickon, but more data are needed. On June 7, SK saw an adult carrying nesting material. On June 19, KeR watched an adult feeding its nestlings at Houston Meadow, and HP watched an adult feed a fledgling in Blue Bell (Wissahickon).



Red-eyed Vireo

Drawn by Katrina Rakowski

* **BLUE JAY** (*Cyanocitta cristata*) – Common, widespread breeder.

Detected in 69% of blocks (54/78). A total of 362 individuals were counted, of which 22 were juveniles, including 72 (20%) in West Fairmount Park (4/4 blocks), 71 (20%) in Wissahickon Park (15/19 blocks), 35 (10%) at the Schuylkill Center, 29 (8%) in the Cobbs Creek corridor (5/5 blocks), 25 (7%) in Pennypack Park (2/2 blocks) despite poor survey coverage, and 9 (2%) in the Tacony Creek corridor (3/4 blocks). LN saw 4 fledglings on May 29 near the Horticultural Center, “sitting on stump, watched over by Mom.” BR encountered 2 “begging juvs” on June 24.

* **AMERICAN CROW** (*Corvus brachyrhynchos*) – Uncommon, local breeder.

Detected in 29% of blocks (23/78). A total of 69 individuals were counted, of which 28 (41%) were detected in the Cobbs Creek corridor (5/5 blocks), 12 (17%) in Wissahickon Park (3/19 blocks), and 2 (3%) in the Tacony Creek corridor (2/4 blocks). On June 25, AM observed “Two adults [that] were actively feeding 3 young chicks” at an apparent nest site on a light tower at the Northeast Philadelphia Water Treatment Plant. She also saw 2 juveniles at Heinz NWR on July 2.

* **FISH CROW** (*Corvus ossifragus*) – Uncommon, local breeder.

Detected in 18% of blocks (14/78). A total of 25 individuals were counted, of which 4 (16%) were detected at the Horticultural Center, 2 (8%) in Wissahickon Park (1/19 blocks, Creek bend to Bells Mill on the Mt. Airy side), and 2 (8%) at Benjamin Rush SP. CH heard and saw an adult feeding a fledgling near Bells Mill Rd. (Wissahickon) on June 6. MRH encountered an adult and 2 fledglings at Eastwick Meadows on June 29.

* **NORTHERN ROUGH-WINGED SWALLOW** (*Stelgidopteryx serripennis*) – Common, widespread breeder.

Detected in 44% of blocks (34/78). A total of 202 individuals were counted, of which 33 (16%) were seen in East Fairmount Park (4/5 blocks), 24 (12%) in Wissahickon Park (7/19 blocks), 20 (10%) at the Manayunk Canal, and 19 (9%) at the Navy Yard. A total of 25 juveniles, 1 food carry, and 1 material carry were observed, including 10 juveniles observed at Heinz NWR.

× **PURPLE MARTIN** (*Progne subis*) – Rare.

A single bird was reported by DB at the Philadelphia International Airport. The last time this species was documented nesting in Philadelphia was 1989, when FW found a colony at Academy Gardens (*Pennsylvania Birds* 3: 114). There was no evidence of breeding during the census.

* **TREE SWALLOW** (*Tachycineta bicolor*) – Common, local breeder.

Detected in 29% of blocks (23/78). A total of 244 individuals were counted, of which 32 (13%) were in Wissahickon Park (3/19 blocks), 28 (11%) were seen at the Schuylkill Center, and 22 (9%) on the Delaware

River. A total of 1 copulation, 11 nests, and 34 juveniles were counted, of which 3 nests and 6 juveniles were detected at Heinz NWR, where the swallows nest in artificial boxes as well as natural cavities. On May 14, GV & GG saw “1 [bird] in natural nest hole 14 ft. up in 5' wide snag” at Heinz NWR.

× **BANK SWALLOW** (*Riparia riparia*) – Rare, local.

No evidence of breeding. Detected in 1% of blocks (1/78).

* **BARN SWALLOW** (*Hirundo rustica*) – Common, widespread breeder.

Detected in 46% of blocks (36/78). A total of 312 individuals were counted, of which 33 (11%) were seen at Pennypack Park (south side of the creek, Pine Rd. to Verree), 25 (8%) at Glen Foerd on the Delaware, 22 (7%) at the NE Water Pollution Control Plant, and 18 (6%) Island Green Golf Course. A total of 16 nests and 18 juveniles were counted, of which 9 nests and 10 juveniles were detected at Heinz NWR. BB reported a nest at Heinz NWR on May 30. On June 12, RI, PC & TJ reported “7 [adults] under Wyoming Ave bridge visiting the girders, several mud nests were visible, at least 5, could not confirm if they were inhabited.” (We tallied 3 nests in this case, 1 per pair.)

* **CAROLINA CHICKADEE** (*Poecile carolinensis*) – Common, widespread breeder.

Detected in 65% of blocks (51/78). A total of 238 individuals were counted, of which 69 (29%) were detected in Wissahickon Park (12/19 blocks), 28 (12%) in West Fairmount Park (5/5 blocks), and 16 (7%) in the Cobbs Creek corridor (4/5 blocks). No nests were found, but a total of 9 fledglings were seen at Pennypack Park (2), Wissahickon Park (3), West Fairmount Park (1), Burholme Park (1), Heinz NWR (1), and Woodlands Cemetery (1).

* **TUFTED TITMOUSE** (*Baeolophus bicolor*) – Common, widespread breeder.

Detected in 59% of blocks (46/78). A total of 169 individuals were counted, of which 49 (29%) were detected in Wissahickon Park (15/19 blocks), 24 (14%) at the Schuylkill Center, and 15 (9%) in the Cobbs Creek corridor (5/5 blocks). No nests were found, but a total of 9 fledglings, 1 food carry, and 1 material carry were detected. On June 15, MRH & DK wrote: “1 fledgling seen begging for food, which

adult delivered.” On June 30, AR, CA & SA found this species abundant in the upper tracts of Pennypack Park: “multiple singing males – 6 heard between Pine and Verree (north side), 9 observed – families feeding fledglings between Verree and Krewstown (north side), 4 observed – family with fledglings between Verree and Krewstown (south side).”

* **WHITE-BREASTED NUTHATCH** (*Sitta carolinensis*) – Common, widespread breeder.

Detected in 56% of blocks (44/78). A total of 141 individuals were counted, of which 52 (37%) were detected in Wissahickon Park (16/19 blocks), 12 (9%) in East Fairmount Park (4/5 blocks), and 10 (7%) in the Cobbs Creek corridor (3/5 blocks). PK watched a “pair bring nesting material to hole in large white oak” at Glen Foerd on April 24. Two fledglings were observed on the lower Pennypack Creek on June 2; MS & PB saw 2 adults and 1 juvenile on June 18, on the Yellow Trail near Valley Green (Wissahickon). RC saw 1 adult with 1 fledgling at Fluehr Park (near Glen Foerd) on June 26.

* **HOUSE WREN** (*Troglodytes aedon*) – Common, widespread breeder.

Detected in 62% of blocks (48/78). A total of 248 individuals were counted, of which 48 (19%) were detected in West Fairmount Park (4/4 blocks), 43 (17%) in Wissahickon Park (10/19 blocks), 23 (9%) in the Cobbs Creek corridor (5/5 blocks), and 20 (8%) in East Fairmount Park (4/5 blocks). A total of 16 nests, 9 fledglings, and 2 material carries were detected. MRH saw a material carry at Heinz NWR on May 11. Nests and fledglings (N:F) were reported at Haddington Woods (2:0), Pennypack Park (1:2), Andorra Meadow (2:0), Houston Meadow (2:0), rest of Wissahickon (3:2), Awbury Arboretum (0:1), East Fairmount Park (1:0), West Fairmount Park (2:1), Heinz NWR (3:1), Eastwick Meadows (0:1).

* **MARSH WREN** (*Cistothorus palustris*) – Uncommon, local breeder.

Detected in 1% of blocks (1/78), at Heinz NWR only. A total of 22 individuals were counted. On July 16, BE found an active nest, and KaR saw a fledgling. AR counted 22 singing at Heinz NWR on June 5, writing “accurate estimate.”

The Philadelphia Bird Breeding Census of 2016

* **CAROLINA WREN** (*Thryothorus ludovicianus*) – Common, widespread breeder.

Detected in 76% of blocks (59/78). A total of 204 individuals were counted, of which 52 (25%) were detected in Wissahickon Park (16/19 blocks), 26 (13%) in the Cobbs Creek corridor (5/5 blocks), 17 (8%) were detected in West Fairmount Park (4/4 blocks), and 10 (5%) in East Fairmount Park (4/5 blocks). KJ saw a food carry at Houston Meadow (Wissahickon) on June 17. TC found a nest at Wissahickon Environmental Center on June 23. HP saw 2 fledglings with an adult in the lower Wissahickon on June 25. AR, CA & SA saw fledglings in Pennypack Park on June 30.

* **BLUE-GRAY GNATCATCHER** (*Poliotilta caerulea*) – Common, widespread breeder.

Detected in 40% of blocks (31/78). A total of 114 individuals were counted, including 7 (6%) in the West Belmont block (near the Mann Center), 6 (5%) each at Kelly Drive/Lemon Hill, Bartram's Garden, and Cumberland St. "No-man's-land." AB saw a material carry at Carpenter's Woods in mid-May. MRH found a nest with 3 nestlings on June 2 at Sedgley Woods, along the Hole #27 fairway. At Heinz NWR, MaE saw an adult feeding a cowbird fledgling on June 9, and JN found an occupied nest on June 18.

* **EASTERN BLUEBIRD** (*Sialia sialis*) – Rare, local breeder.

Detected in 3% of blocks (2/78). A total of 5 individuals were counted, including 3 (60%) at Andorra Meadow and 2 (40%) at the Schuylkill Center. KeR saw 3 fledglings at Houston Meadow (Wissahickon) on June 19. TC reported "2 singing 1 male sighted also singing" in Andorra Meadow on June 23, and also wrote that "3 nests [were] detected earlier in season by [Friends of the Wissahickon]."

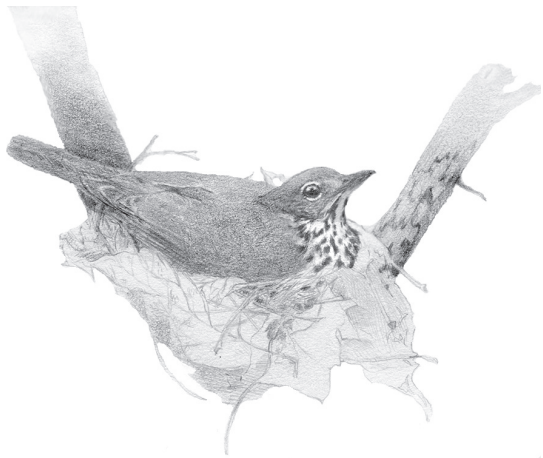
^ **VEERY** (*Catharus fuscescens*) – Common, local breeder.

Detected in 22% of blocks (17/78). A total of 99 individuals were counted, of which 58 (59%) were detected in Wissahickon Park. The highest density site was the lower Cresheim Creek area (Valley Green to Livezey Ln.), where MRH counted 19 (19%) individuals. Additionally, 11 (11%) were detected at the Schuylkill Center, 9 (9%) at Haddington Woods, and 1 each in the upper Tacony Creek and at the NE Water Treatment Control Plant. There were no eBird sight-

ings of this species in Pennypack Park during the 2016 breeding season, but numerous reports in the Wissahickon. On July 13, KJ saw an adult Veery feeding a cowbird fledgling in the lower Wissahickon.

* **WOOD THRUSH** (*Hylocichla mustelina*) – Common, widespread breeder.

Detected in 55% of blocks (43/78). A total of 207 individuals were counted, of which 87 (42%) were detected in Wissahickon Park, 12 (6%) in Pennypack Park (south side of the creek, Pine Rd. to Verree), and 11 (5%) in the Chamounix area of West Fairmount Park. DO saw an adult sitting on a nest at Heinz NWR on May 10, which may have been the same bird that KS saw "In her nest on Haul Road" on May 14; and GV saw an adult delivering food to a nest on June 1. At Sedgley Woods on June 2, MRH wrote: "2 birds detected by singing. 1 (incubating, and therefore probably female) bird detected by sight. The nest was found between the fairways of Holes #21 and #22." On June 10, MRH found a nest with 1 nestling on the Belmont Plateau, and on June 12 in the upper Cresheim Creek valley (Wissahickon): "1 active nest found with 4 eggs. Adult observed incubating (presumably female, as male incubation has not been documented in this species)." HP reported "2 singing, one calling, one female on nest" in the lower Wissahickon on June 25. A total of 9 juvenile birds were reported. MRH recorded the song repertoires of 47 individual males in Wissahickon Park in 2014–15 (unpubl. data).



Wood Thrush (*Hylocichla mustelina*)

Drawn by Katrina Rakowski

* **AMERICAN ROBIN** (*Turdus migratorius*) – Common, widespread breeder.

Detected in 97% of blocks (76/78), the most abundant and widespread species in the PBBC. A total of 2,221 individuals were counted, of which 355 (16%) were detected in Wissahickon Park (19/19 blocks), 271 (12%) were detected in West Fairmount Park (4/4), 221 (10%) in the Cobbs Creek corridor (5/5), 206 (9%) in East Fairmount Park (5/5), and 110 (5%) at FDR Park. A total of 61 nests, 96 fledglings, 25 food carries, and 14 material carries were detected. The earliest breeding records of 2016 were from the Navy Yard, where DE photographed a female sitting on the nest on April 7, and FDR Park, where MRH found a nest with 4 eggs on April 10. MRH & NS found 2 nests at Heinz NWR on April 23: “One was in a willow tree overhanging water, with the nest placed ~1 m from the water surface. The adult robin was incubating. The second nest was ~8 m from the ground and there were evidently nestlings because I saw a food delivery to the nest and no second (incubating) adult was seen.” KG found a nest at Woodlands Cemetery “on the McDaniel grave. One fledgling beyond the fence.” Fledglings were seen by MRH & NS on May 29 at Heinz NWR.

* **GRAY CATBIRD** (*Dumetella carolinensis*) – Common, widespread breeder.

Detected in 94% of blocks (73/78). A total of 1,266 individuals were counted, of which 236 (19%) were detected in Wissahickon Park (19/19 blocks), 166 (13%) in the Cobbs Creek corridor (5/5), 159 (13%) were detected in West Fairmount Park (4/4), 81 (6%) at the Schuylkill Center, and 77 (6%) in East Fairmount Park (5/5). A total of 12 nests, 16 fledglings, 20 food carries, and 6 material carries were detected. MRH found 10 (83%) of the nests, including 5 in the Cobbs Creek corridor, and GV found 2 at Heinz NWR.

* **BROWN THRASHER** (*Toxostoma rufum*) – Rare, local breeder.

Detected in 6% of blocks (5/78). A total of 6 individuals were counted, of which 2 (33%) were detected at Heinz NWR, and 1 (17%) each at Mt. Moriah Cemetery, West Belmont near Concourse Lake, on the Delaware River Trail, and at the Schuylkill Center. MRH found a nest at Heinz NWR on April 24: “Nest is in

holly tree along the road between the park office and I-95, placed ~1 m from the ground. This is the same nest that I saw a pair of thrashers near on 4/1, and when revisiting the site today I found an adult incubating.” The nest was still active on April 30, when it was observed by DB *et al.* On May 11, MRH wrote: “We heard from another birder on the trail that a BRTH was seen feeding a fledgling in the vicinity of the nest I found a few weeks ago (in the holly tree along the service road between the nature center and I-95) – found one adult near the nest site, but didn’t see the fledgling ourselves.” MRH watched an adult gather food in its bill, and then fly away with it along the edge of Concourse Lake (West Fairmount Park), on June 6.

* **NORTHERN MOCKINGBIRD** (*Mimus polyglottos*) – Common, widespread breeder.

Detected in 50% of blocks (39/78). A total of 115 individuals were counted, of which 14 (12%) were detected at Mt. Moriah Cemetery, 13 (11%) in West Fairmount Park, 11 (10%) in Wissahickon Park (3/19 blocks), 10 (9%) at East Laurel Hill Cemetery, and 10 (9%) at the Navy Yard. Two nests were found by MRH on June 9, “one ~50% built in the Memorial Arch rose bushes, and 1 occupied by an incubating/brooding adult in front of the Horticultural Center. 1 inactive nest was found in a small tree on the edge of a parking lot along Girard Ave. near the zoo, which appeared to have been used this year.” GM found a nest being built at the Navy Yard on June 11. MRH found a fourth nest near Chamounix Dr. (West Fairmount Park) on June 13: “1 bird detected by voice. 1 bird detected by sight, presumably the female because the other bird was still singing. I watched the silent bird deliver nest material to a nest site.”

* **EUROPEAN STARLING** (*Sturnus vulgaris*) – Common, widespread breeder.

Detected in 76% of blocks (59/78). A total of 1,298 individuals were counted, of which 206 (16%) were juveniles; 198 starlings (15%) were detected in the Cobbs Creek corridor (5/5 blocks), 180 (14%) in East Fairmount Park (5/5 blocks), 86 (7%) in West Fairmount Park (4/4 blocks), 81 (6%) at the Schuylkill Center, and 68 (5%) in Wissahickon Park (8/19 blocks). A total of 10 nests and 8 food carries were reported.

The Philadelphia Bird Breeding Census of 2016

* **CEDAR WAXWING** (*Bombycilla cedrorum*) – Common, widespread breeder.

Detected in 46% of blocks (36/78). A total of 183 individuals were counted, of which 22 (12%) were detected in the Tacony Creek corridor (3/4 blocks), 19 (10%) in East Fairmount Park (5/5 blocks), 13 (7%) at the NE Water Pollution Control Plant, and 12 (7%) at the Schuylkill Center. GV found 2 nests on May 31 at Heinz NWR: “One near end of large boardwalk on Darby Creek side of Dike Road and another farther up the Dike Road after the eagle bench but before the new marsh boardwalk.” SK saw an adult feed his/her mate, on June 7 at FDR Park. GV found another nest at Heinz NWR on June 25, “up dike road near eagle’s nest bench with bird in it; many hawking insects all around new boardwalk in the marsh.” RW saw a pair of adults and a fledgling at Roxborough Reservoir on June 22.

§ **OVENBIRD** (*Seiurus aurocapilla*) – Rare, local.

No evidence of breeding. Detected in 8% of blocks (6/78). A total of 10 individuals were counted, of which 4 (40%) were detected in Wissahickon Park (3/19 blocks), 3 (30%) at the Schuylkill Center, and 1 (10%) at Lemon Hill in East Fairmount Park.

× **WORM-EATING WARBLER** (*Helmitheros vermivorum*) – Rare.

No evidence of breeding. Detected in 1% of blocks (1/78). A single bird was reported by HP on the Roxborough side of Wissahickon Creek, between Kitchen’s and Walnut Lanes.

× **LOUISIANA WATERTHRUSH** (*Parkesia motacilla*) – Rare, local breeder.

Breeding evidence may have been missed for this species during June surveys, on account of it being an early breeder. However, there was no breeding evidence collected by any observer in 2016, despite the fact that adults and fledglings vocalize conspicuously during the post-fledging period. Detected in 1% of blocks (1/78) during June surveys, and only 2 sightings of this species were reported to eBird during the 2016 breeding season. TC observed 1 bird at the Rex Ave. bridge on June 8, which is presumably the same individual seen “feeding on rock below bridge” by PK on June 13. The nearest population with 2016 breeding season records is Evansburg State Park (Montgom-

ery Co.) and Ridley Creek State Park (Delaware Co.). 2009–2015 records: AA found a pair along a stream in the Andorra area (N. Wissahickon) on June 15, 2009, and 1 adult in the same area in 2014. AA found 4, 1, and 5 adults along Forbidden Dr. (north end) on June 1, 2, and 11, 2010, respectively. AIB found 3 adults in this same area on June 10, 2014. After “seeing one in this area for a week or so,” KJ saw a pair on June 17, 2011, not far upstream of Kitchen’s Lane; and a single bird there on July 22 and 30, 2014. MRH did not detect the species in the Cresheim Creek valley (Wissahickon) during breeding season surveys in 2014–16, although there were transient individuals seen and heard in the preceding weeks. No records from Pennypack Park during this period.

× **BLUE-WINGED WARBLER** (*Vermivora cyanoptera*) – Rare.

No evidence of breeding. Detected in 1% of blocks (1/78). TC observed 2 singing males on June 4 in Houston Meadow (Wissahickon). AM reported a single individual at Heinz NWR on July 2.

× **BLACK-AND-WHITE WARBLER** (*Mniotilta varia*) – Rare.

No evidence of breeding. Detected in 3% of blocks (2/78). A total of 2 individuals were counted, including 1 at Haddington Woods by MRH/DK, and 1 at Heinz NWR by GV.

× **KENTUCKY WARBLER** (*Geothlypis formosa*) – Rare, former breeder.

Detected in 3% of blocks (2/78). KeR wrote on June 15, 2016: “never saw this bird but heard it singing regularly between 9 and 9:45 am along the upper Yellow Trail on the west side of the Wissahickon Creek just south of Bell’s Mill Road. Heard bird at close range as it moved around the forest. Song up-slurred with very fruity tone that was quite different from the plainer less complex tone of Carolina Wren song. Have not found this species in the Wissahickon during summer since 1996.” Similarly, MRH, NS, & ME detected a bird that sounded “quite unlike the Carolina Wren singing in the adjacent glade. We tried a playback from Morgan’s phone – after 2 minutes it responded with a single song that was to our ears (all of us heard it) very like the reference recording.” The only other breeding season report of the last 20 years is from Pennypack, where FW had a solitary male singing sporadically in

June 2010. There was no evidence of breeding during the census.

^ **COMMON YELLOWTHROAT** (*Geothlypis trichas*) – Common, local breeder.

Detected in 37% of blocks (29/78). A total of 134 individuals were counted, of which 24 (18%) were detected in West Fairmount Park (4/4 blocks), 21 (16%) at Eastwick Meadows, 15 (11%) at the Schuylkill Center, 10 (7%) in the Cobbs Creek corridor (3/5 blocks) and 8 (6%) in Wissahickon Park (4/19 blocks). No nests were found, but food carries were observed at Mt. Moriah Cemetery and Houston Meadow. KeR & ST saw an adult male feed a cowbird fledgling at Houston Meadow (Wissahickon) on June 19. KJ found 19 at Houston Meadow on July 3: “Saw at least 6 males and 4 females and heard the others. This is always a very good place for them and I assume numbers are higher because they include young, though I did not see any noticeable young males.”

× **HOODED WARBLER** (*Setophaga citrina*) – Rare.

A single bird was reported by MS at Houston Meadow on June 5, “heard on the hillside in the horse-shoe loop below the houses on the trail connecting the 2 portions of the meadow. It had been heard by TC and others the day before (6/4) on the BirdPhilly walk but had not been seen on either day.” CL also detected a single bird at Heinz NWR on June 14. There was no evidence of breeding during the census.

* **AMERICAN REDSTART** (*Setophaga ruticilla*) – Rare, local breeder.

Detected in 12% of blocks (9/78). A total of 15 individuals were counted, of which 6 (40%) were detected in Wissahickon Park (4/19 blocks), 4 (27%) were detected by RI in the lower Tacony Creek (Roosevelt Blvd to I St and Ramona), 2 (13%) at Heinz NWR, and 1 each at the Schuylkill Center, Pleasant Hill Park, and the Cumberland St. “No-man’s-land.” MD found a nest at Heinz NWR on May 14. JZ saw an adult feeding a cowbird fledgling at Heinz NWR on July 9.

× **NORTHERN PARULA** (*Setophaga americana*) – Rare.

No evidence of breeding. A single bird was reported by AB at Carpenter’s Woods.

* **YELLOW WARBLER** (*Setophaga petechia*) – Common, widespread breeder.

Detected in 40% of blocks (31/78). A total of 142 individuals were counted, including 17 (12%) at Eastwick Meadows, 12 (8%) at Bartram’s Garden, 11 (8%) in the Cobbs Creek corridor, 11 (8%) in East Fairmount Park, 11 (8%) at FDR Park, and 11 (8%) at Cumberland St. “No-man’s-land.” MaE reported a nest with 3 young at Heinz NWR on June 9, and fledglings were observed there on six occasions. BR saw a fledgling at Awbury Arboretum on June 24. Adults were seen feeding cowbird fledglings on July 2 (MRH) and July 5 (SK) at Heinz NWR. Food carries were observed by KJ at the Manayunk Canal on June 6, and SK at FDR Park on June 7.

× **PINE WARBLER** (*Setophaga pinus*) – Rare, local.

No evidence of breeding. Detected in 3% of blocks (2/78). A total of 4 individuals were counted, including 3 (75%) at Hermit Lane in the lower Wissahickon Park, and 1 in the white pines on the lower Cresheim Creek, of which MRH made an audio recording. Two males and 1 female were observed by KeR at Hermit Lane, but no breeding evidence was obtained.

× **YELLOW-BREASTED CHAT** (*Icteria virens*) – Rare, former breeder.

Detected in 3% of blocks (2/78). AR photographed 1 at FDR park on May 15, and JM found 1 at the Navy Yard on June 13: “excellent great close look at one that was calling repeatedly right beside me; I imitated its calls and pished and it popped up and came in to investigate me, at the south fringe of the tiny birch forest in the thickets, shrubs and briars.”

* **CHIPPING SPARROW** (*Spizella passerina*) – Common, widespread breeder.

Detected in 40% of blocks (31/78). A total of 115 individuals were counted, including 26 (23%) in East Fairmount Park, 14 (12%) at Woodlands Cemetery, 13 (11%) in West Fairmount Park, 13 (11%) at the Schuylkill Center, and 11 (10%) in the Cobbs Creek corridor (4/5 blocks). One nest was found, with a sitting adult, by CA & SA at Burholme Park on June 22. MRH & DK observed an adult feed 1 of 2 fledglings at Morris Park on June 8. MRH saw a fledgling with an adult on the front lawn of the Horticultural Center in June 9. At the Navy Yard on June 11, GA saw:

The Philadelphia Bird Breeding Census of 2016

“2 singing males, another seemed to be carrying food or nesting material.” KeR saw a fledgling at Houston Meadow on June 15. RI found a fledgling at Juniata Park on June 25: “Adult feeding fledgling young on the ground. Young bird could fly and followed the parent begging as it moved to different sections of the lawn.” A photo of a fledgling in Andorra Meadow was shown to TC by a park visitor.

* **FIELD SPARROW** (*Spizella pusilla*) – Rare, local breeder.

Detected in 6% of blocks (5/78). A total of 13 individuals were counted, of which 6 (46%) were in the Houston and Andorra Meadows of Wissahickon Park, 3 (23%) were at Island Green Golf Course, 2 (15%) were at Haddington Woods along the edge of the golf course, and 2 (15%) at the Schuylkill Center. KeR saw a fledgling at Houston Meadow on June 15.

* **SONG SPARROW** (*Melospiza melodia*) – Common, widespread breeder.

Detected in 68% of blocks (53/78). A total of 292 individuals were counted, of which 50 (17%) were detected in the Cobbs Creek corridor (5/5 blocks), 28 (10%) in East Fairmount Park (4/5 blocks), 17 (6%) at Eastwick Meadows, 17 (6%) at the Schuylkill Center, and 16 (5%) at the Manayunk Canal. RB saw an adult feeding a cowbird fledgling at Heinz NWR on June 15. No nests were found in 2016, but 4 juveniles were seen: (1) GV on June 1 at Heinz NWR: “numerous song sparrows but found one feeding a fledgling.” (2) MRH at the Horticultural Center on June 9, (3) CA & SA at Burholme Park on June 22, (4) AR, CA & SA on the north side of Pennypack Creek (between Pine Rd. and Verree Rd.) on June 30: “multiple singing males, pair observed copulating, all at creek edge or woods edge near homes – 7 between Pine and Verree (north side), 6 between Verree and Krewstown (north side), 4 observed and heard between Verree and Krewstown (south side) family with fledgling.” Four independent food carries were also observed in 2016.

× **SWAMP SPARROW** (*Melospiza georgiana*) – Rare, local.

No evidence of breeding. Detected in 1% of blocks (1/78), at Heinz NWR only. This species has been reported every year since 2006, in groups of 1–8 individuals, and “heard it in the horseshoe” was a popular eBird comment.

* **EASTERN TOWHEE** (*Pipilo erythrophthalmus*) – Uncommon, local breeder.

Detected in 17% of blocks (13/78). A total of 44 individuals were counted, of which 17 (39%) were detected at the Schuylkill Center, 12 (27%) in Wissahickon Park (4/19 blocks), of which 8 were found in the Houston and Andorra Meadows, and 7 (16%) in West Fairmount Park. No nests were found, but a juvenile was seen by AR, CA & SA in Pennypack Park on June 30, “[a] light rusty brown bird briefly observed in low shrub between Pine and Verree (north side), adult male singing “drink your tea” between Verree and Krewstown (north side).” Another juvenile was seen by KJ on July 11 at Houston Meadow (Wissahickon).

§ **SCARLET Tanager** (*Piranga olivacea*) – Uncommon, local breeder.

Detected in 19% of blocks (15/78). A total of 26 individuals were counted, including 8 (31%) in various blocks in Wissahickon Park, 5 (19%) at the Schuylkill Center, and 3 (12%) at Pennypack Park (south side of the creek, Pine Rd. to Verree). Three solitary and isolated male singers were found (1) near the recycling plant on the Belmont Plateau by MRH, (2) along Chamounix Dr., and (3) Haddington Woods (Cobbs Creek). There were no detections made along Tacony Creek. There was no evidence of breeding during the census, but breeding is likely considering the numbers.

* **NORTHERN CARDINAL** (*Cardinalis cardinalis*) – Common, widespread breeder.

Detected in 91% of blocks (71/78). A total of 479 individuals were counted, including 13 juveniles; including 31 (6%) at the Schuylkill Center, 20 (4%) in the Chamounix area of West Fairmount Park, and 14 (3%) each at Haddington Woods, Carpenter’s Woods, and the upper Cresheim Creek valley. MRH, JDW, and some ornithology students observed a female carrying nesting material on May 11 at Heinz NWR. Four nests were found: (1) MRH discovered “1 nest [on the Belmont Plateau on June 10] found by flushing female as I approached. Presumably she was incubating or brooding very small young, but nest was too high to confirm contents.” (2) MRH found another nest at Clark Park on June 23, with female perched on the rim. (3–4) AB, EB, & MiS found the species abundant between Kitchen’s Lane and Mt. Pleasant Ave. (Wis-

sahickon) on June 25: “13 singing, 8 calling, 4 young making begging calls. Of these 11 seen, 4 of which were young – one of these just fledged, its sibling still in nest just below. Other 2 young seen, from different nest, were much more mature.”

× **BLUE GROSBEAK** (*Passerina caerulea*) – Rare.

No evidence of breeding. A singing male was found and photographed by GA at the Navy Yard on June 11, seen by AR the same day, and detected again on June 13 and 19.

* **INDIGO BUNTING** (*Passerina cyanea*) – Uncommon, local breeder.

Detected in 32% of blocks (25/78). A total of 64 individuals were counted, including 9 (14%) at Cumberland St. “No-man’s-land,” 7 (11%) at the Schuylkill Center, and 7 (11%) at Houston Meadow. MRH detected 6 males singing along a power-line cut that runs parallel with the Cresheim Creek as it crosses Germantown Ave. On July 3, KJ saw “2 males, one juvenile, and one female” at Houston Meadow (Wissahickon).

* **RED-WINGED BLACKBIRD** (*Agelaius phoeniceus*) – Common, widespread breeder.

Detected in 47% of blocks (37/78). A total of 508 individuals were counted, of which 10 were juveniles; including 64 (13%) at Eastwick Meadows and 60 (12%) at FDR Park. Four nests were found and photographed: (1) MRH found and photographed a nest on the Ave. of the Republic, near the Mann Music Center on June 6: “1 nest found by flushing female, after which the female and a male were very agitated, giving loud calls and swooping at me. 1 fledgling seen. 1 food carry seen (not in the same area as the nest I found.)” (2) SK found 1 nest on June 7 at FDR park, (3–4) MRH & DK found and photographed 2 nests “in the wet meadow at SW Quarry 1, one with 4 eggs and one with 3 eggs” at Morris Park on June 8.

* **COMMON GRACKLE** (*Quiscalus quiscula*) – Common, widespread breeder.

Detected in 74% of blocks (58/78). A total of 508 individuals were counted, of which 65 were juveniles. No nests were found, but 4 food carries and 1 material carry were observed, including 41 (8%) at Pleasant Hill Park, 32 (6%) at FDR Park, and 24 (5%) at the NE

Water Pollution Treatment Plant. GV saw fledglings as early as May 31 at Heinz NWR.

* **BROWN-HEADED COWBIRD** (*Molothrus ater*) – Common, widespread breeder.

Detected in 72% of blocks (56/78). A total of 232 individuals were counted, of which 18 were juveniles; 55 (24%) were detected in Wissahickon Park (15/19 blocks), 17 (7%) at Woodlands Cemetery, 15 (6%) in East Fairmount Park (4/5 blocks), 12 (5%) in Cobbs Creek corridor (4/5 blocks), 12 (5%) in the Tacony Creek corridor (3/4 blocks), and 12 (5%) in West Fairmount Park (3/4 blocks). Cowbirds accounted for 1.6% of counted individuals in the census (210/13,174). MRH, JDW and some ornithology students observed a copulation on April 20 at Heinz NWR. PB & MS heard “One Singing male seen near Livezey House 100 yards upstream on Forbidden Drive. Another up hill on the yellow trail heard singing” on June 18.

* **ORCHARD ORIOLE** (*Icterus spurius*) – Uncommon, local breeder.

Detected in 22% of blocks (17/78). A total of 27 individuals were counted, of which 5 (19%) were detected in the Cobbs Creek corridor (3/5 blocks), 3 (11%) in the lower Tacony Creek (Roosevelt Blvd to I St and Ramona), 3 (11%) at FDR Park, 3 (11%) at the Navy Yard, and 2 (7%) in the Houston Meadow of Wissahickon Park. Three nests were found: (1) DB & NS saw a female remove a fecal sac from her nest at the Philadelphia International Airport on May 14, (2) LM *et al.* found a nest on June 11 at Heinz NWR: “1 adult breeding male behind the [visitor’s center]; one 1st year male near around and into a nest on the dike before big [boardwalk];” (3) on June 29, KJ reported “an abandoned Orchard Oriole nest [at Andorra Meadow]. I think it most likely that it’s from this year and that birds have fledged. We might have seen more than two birds this weekend and last but can only confirm the two adults.”

* **BALTIMORE ORIOLE** (*Icterus galbula*) – Common, widespread breeder.

Detected in 65% of blocks (51/78). A total of 240 individuals were counted, of which 6 were juveniles; 34 (14%) were detected in the Cobbs Creek corridor (5/5 blocks), 32 (13%) in the Tacony Creek corridor (4/4 blocks), 30 (13%) in West Fairmount Park (4/4

The Philadelphia Bird Breeding Census of 2016

blocks), 29 (12%) in East Fairmount Park (5/5 blocks), 25 (10%) in Wissahickon Park (9/19 blocks), 17 (7%) at FDR Park, and 16 (7%) at the Schuylkill Center. NS saw a pair building a nest at Heinz NWR on May 15. Twelve nests were found: (1) GV found 1 being built at Heinz NWR on June 1, (2) MRH found 1 at Sedgley Woods on June 2, (3–4) MRH & DK found 2 nests at Morris Park on June 8, (5) NS & SL found 1 nest being built at Bartram's Garden on June 10, (6–7) GM found 2 nests at the Navy Yard on June 11, (8–9) RI, PC & TJ found 2 nests in Tacony Creek Park on June 12, (10) LW found 1 nest at Lemon Hill on June 18, (11) MRH, DK & NS found 1 nest in the central Cobbs Creek corridor on June 19, (12) GG found 1 nest at East Laurel Hill Cemetery on June 19, "with at least one nestling making begging calls from within nest (Sycamore tree; 20 feet up on end of down-drooping branch, within a cluster of leaves)."

* **HOUSE FINCH** (*Haemorhous mexicanus*) – Common, widespread breeder.

Detected in 49% of blocks (38/78). A total of 213 individuals were counted, of which 8 were juveniles; 29 (14%) were detected in West Fairmount Park (4/4 blocks), 24 (11%) were detected in East Fairmount Park (4/5 blocks), 14 (7%) at Burholme Park, 13 (6%) at Pennypack Park (south side of the creek, Pine Rd. to Verree), 12 (6%) in Wissahickon Park (5/19 blocks).

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^ **AMERICAN GOLDFINCH** (*Spinus tristis*) – Common, widespread breeder.

Detected in 77% of blocks (60/78). A total of 258 individuals were counted, of which 42 (16%) were detected in Wissahickon Park (13/19 blocks), 26 (10%) at Island Green Golf Course, 20 (8%) in the Cobbs Creek corridor (5/5 blocks). This species breeds later than most songbirds (Jun–Aug), and despite its abundance, its breeding activities are often overlooked. To our knowledge, there were no nests in Philadelphia Co. reported to eBird in 2016, although SK observed a material carry at FDR Park on June 7.

* **HOUSE SPARROW** (*Passer domesticus*) – Common, widespread breeder.

Detected in 76% of blocks (59/78). A total of 827 individuals were counted, of which 17 were juveniles; 75 (9%) were detected in Wissahickon Park (13/19 blocks), of which 40 were reported by KeR at Hermit Ln., 52 (6%) at the Navy Yard, 50 (6%) at Burholme Park, 49 (6%) in West Fairmount Park (4/4 blocks), and 48 (6%) in East Fairmount Park (5/5 blocks). A total of 14 nests were reported, 4 food carries, and 3 material carries.

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