

CITIZEN SCIENCE BIRD MONITORING AT THE REGIONAL ATHLETIC COMPLEX AND THE JORDAN RIVER GOLF COURSE

Project Report 2018

PROJECT OVERVIEW

In partnership with Salt Lake City Parks and Public Lands, Tracy Aviary is conducting citizen science bird monitoring projects at two sites along the Jordan River: 1) the Nature Preserve Area of the Regional Athletic Complex (RAC), and 2) the Jordan River Golf Course (JGC). Beginning in 2015, our goal for this study was to collect data on the avian community of these sites better understand the birds that occur at the RAC and JGC, determine how the bird community differs between sites and over time, and identify the presence of species of conservation concern. Here, we summarize results from our 2018 field season.

Breeding season point count surveys:

During May – July of 2018, 7 citizen scientists conducted 5 breeding season point count surveys at the RAC and the Jordan River Golf Course (Figure 2). Point count surveys were conducted by pairs of citizen scientists between dawn and 10am. The 'observer' identified all birds seen and heard during a 6-minute period, and noted the number of individuals, distance, and direction. The 'recorder' wrote all of the observations on the datasheet, noted the minute during the survey (1-6) when the observation was made, and also noted weather and site variables, such as wind speed and cloud cover.

Non-breeding season group surveys:

Information from point count surveys was supplemented by 8 non-breeding group surveys conducted at each site in January, February, March, August, September, October, November, and December 2018. During non-breeding surveys, groups of citizen scientists lead by a trained Tracy Aviary staff person walked a transect through the site and noted all birds seen and heard in the area.

2018 RESULTS

During 5 breeding season surveys at the RAC, we had 522 bird observations and detected 48 species (Figure 3, 4). During 8 non-breeding season surveys, we had 6,198 bird observations and detected 91 species. We had a total species list of 99 species at the RAC in 2018.

During 5 breeding season surveys at the JGC, we had 196 bird observations and detected 36 species (Figure 3, 4). During 8 non-breeding season surveys, we had 4,624 bird observations and detected 54 species. We had a total species list of 64 species at the JGC in 2018.

We've detected a total of 144 bird species at the RAC and JGC between 2013 and 2018 (complete list, pages 3 – 8).



Figure 1. Map of the two study sites (a), 6 bird sampling points at the RAC (b), and 2 sampling points at JGC (c).



Figure 2. Tracy Aviary citizen scientists conducting breeding season and non-breeding season bird surveys at JGC/RAC.

PATTERNS OF BIRD COMMUNITY COMPOSITION ACROSS THE REGIONAL ATHLETIC COMPLEX AND THE JORDAN RIVER GOLF COURSE

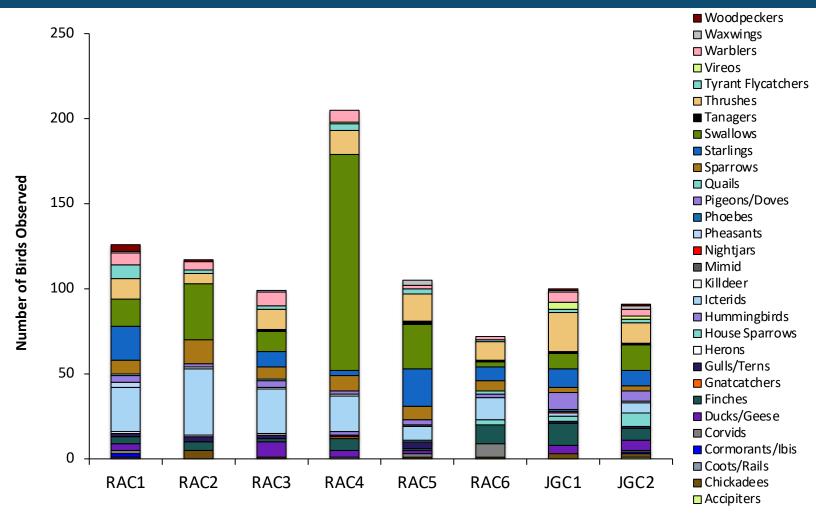


Figure 3. Number of birds from different families detected during 2018 breeding season surveys at RAC/JGC.

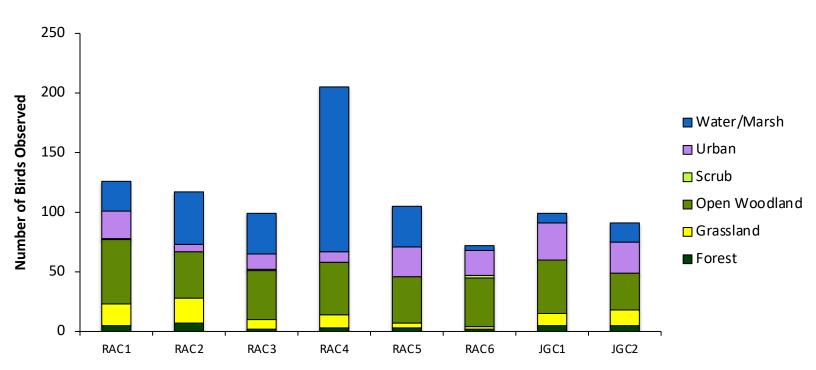


Figure 4. Proportion of birds from different habitat guilds detected during 2018 breeding season surveys at RAC/JGC.

COMPLETE LIST OF BIRDS DETECTED DURING BREEDING SEASON SURVEYS (BSS) AND NON-BREEDING SEASON SURVEYS (NBS) AT THE RAC IN 2013-2018

Species Number of Observations (detections/survey)									
	2015		2016		2017		2018		
	BSS	NBS	BSS	NBS	BSS	NBS	BSS	NBS	
American Robin	9.8	15.8	12.3	32.8	10.3	10.6	13.4	7.9	
Bullock's Oriole	5.4	0.2	8.8	0.1	8.3	0	12.6	0	
Cliff Swallow	2	0	8	0	3	0.3	10.4	0	
Song Sparrow	9.4	6.5	8.8	8.1	8.3	8.4	10.4	8.4	
Brown-headed Cowbird	2	0	2.7	0.1	3.8	0	5.4	0	
Yellow Warbler	3.4	0.5	3.5	1.9	4.3	1.9	5	2.5	
Yellow-headed Blackbird	1.6	0	3.2	0	4.8	0.1	4.6	0.8	
European Starling	7.6	596.7	4.8	602.4	4.2	107.8	3.8	500.1	
Western Kingbird	2.4	0.3	4.7	0.1	2.3	0.8	3	1	
Mourning Dove	7	7.5	7	5.8	3.5	3.4	2.4	1.8	
House Finch	4.4	25	4.2	24.9	2.2	12.5	2.2	11.8	
Northern Rough-winged Swallow	12.2	0	3.3	0.8	0.8	0.3	2.2	0.5	
Black-billed Magpie	3	8.2	3.2	11.1	3.3	9.5	1.8	6.3	
Lesser Goldfinch	2.4	3.2	0.5	5.9	0.7	3	1.8	1.8	
Mallard	4.4	30.2	5	77.5	3.8	42	1.8	30.5	
Black-capped Chickadee	1	8.5	2.8	8.9	0	4.4	1.6	3.5	
Western Meadowlark	0.2	0	0.3	0	0.2	0.1	1.6	0	
American Goldfinch	1	8.3	1.5	5.6	0.7	3.5	1.2	1.5	
Downy Woodpecker	1.8	2.7	0.7	2.8	0.5	1.3	1	1.4	
California Gull	0.8	29	2.3	1.8	0.5	2.6	0.8	9.4	
California Quail	0.4	1.5	0	4.4	0.2	4	0.8	0.9	
Great-tailed Grackle	0.8	0.2	2	0	1.7	0.3	0.8	0.6	
House Sparrow	0.4	21.3	0.5	25.1	0.3	5	0.8	3.5	
Western Tanager	1	0.5	1.5	2.1	1.2	0.4	0.8	0.3	
Barn Swallow	1.4	1.7	1.2	4.4	1.2	0	0.6	2.1	
Black-chinned Hummingbird	0	0.5	0.7	1.4	1.8	0.3	0.6	0.1	
Cedar Waxwing	3	12.8	0.7	6.1	0.8	0.8	0.6	1.6	
Common Yellowthroat	0.2	0	0	0.1	0.3	0	0.6	0.1	
Forster's Tern	1	0.2	1	0	0.3	0.1	0.6	0.6	
Franklin's Gull	3.2	21.3	21.5	3.6	1	3.5	0.6	5.8	
Killdeer	3.6	2.2	2.2	1.3	1.5	0.4	0.6	0.8	
Red-winged Blackbird	2.4	3.7	1.8	10.9	2.5	13.8	0.6	14.1	
Ring-necked Pheasant	1	0.3	0.2	0.3	0.8	1	0.6	0.1	
Western Wood-pewee	0	0	0.3	0.4	0	0	0.6	0.1	
Eurasian Collared-Dove	1.6	22.2	1.8	38.4	0.7	13.8	0.4	6	
Great Blue Heron	0	0.2	0	0.1	0.2	0.5	0.4	0.3	
Yellow-rumped Warbler	0.2	6.5	2.8	5.4	1.2	1.5	0.4	2.5	
American Coot	0.8	8.5	0.3	15.1	0	9.1	0.2	7.4	
Bank Swallow	0	0	0.3	0.4	0	3.6	0.2	0.3	
Black-crowned Night-Heron	0.2	0.2	0.3	0.5	0.3	0.1	0.2	0.8	
Blue-gray Gnatcatcher	0.6	0.3	0	0.6	0.3	0.5	0.2	0.1	
Canada Goose	4.8	86	2.2	78.8	0	28.5	0.2	29.8	
Double-crested Cormorant	0.2	0.3	0.5	0	0	0	0.2	0.1	
Gray Catbird	0.4	0.2	0.3	0	0.5	0.3	0.2	0.1	
Wilson's Snipe	0	3.7	0	1.5	0	0.6	0	1.1	











COMPLETE LIST OF BIRDS DETECTED DURING BREEDING SEASON SURVEYS (BSS) AND NON-BREEDING SEASON SURVEYS (NBS) AT THE RAC IN 2013-2018 (CONT.)

Species	Pecies Number of Observations (detections/survey) 2015 2016 2017 2018								
	BSS	NBS	BSS	NBS	BSS	NBS	BSS	NBS	
Rock Pigeon	0	16.8	0.3	19	0.3	4.5	0.2	2.5	
Warbling Vireo	0.2	0.2	0	0.1	0.2	0	0.2	0.1	
White-faced Ibis	4	0	1.3	1.8	0.2	9	0.2	6.5	
Violet-green Swallow	0	0	0	0	0.2	0	0.2	0.5 0	
American Avocet	1	1.3	0.2	1.3	0	0	0.2	0.8	
American Crow	0	1.2	0.2	1.6	0	1.8	0	8.4	
American Kestrel	0	0.5	0	1.1	0	0.6	0	0.5	
American Pipit	0	1	0	0.4	0	0.1	0	1	
American Tree Sparrow	0	0.2	0	0	0	0	0	0	
American White Pelican	1.8	0	0.3	0	0	0	0	9.1	
American Wigeon	0	0.5	0	0	0	0.1	0	0	
Bald Eagle	0	0	0	0.1	0	0	0	0.1	
Barn Owl	0	0	0.7	0	0	0	0	0	
Belted Kingfisher	0.2	0.7	0	0.4	0	0.3	0	1.1	
Black Phoebe	0	0	0.2	0	0	0	0	0	
Black-headed Grosbeak	0	0	0.2	0.1	0.2	0.1	0	0	
Black-necked Stilt	0.4	0	0.3	0	0	0	0	0.6	
Blue-winged Teal	0	0.2	0	0.1	0	0	0	0	
Brewer's Blackbird	0	0.3	0.5	1	0	0	0	0.4	
Broad-tailed Hummingbird	0	0	0	0	0	0.1	0	0	
Brown Creeper	0	0.8	0	0.9	0	0	0	0.3	
Cackling Goose	0	0	0	0.1	0	0	0	0	
Canvasback	0	0	0	0	0	0	0	0.3	
Caspian Tern	0	0.3	0.2	0	0	0	0	0	
Chipping Sparrow	0	0.8	0.8	0.5	0	0	0	0.1	
Cinnamon Teal	0.2	0	0	0	0	0	0	0	
Common Goldeneye	0	0	0	0.1	0	0.3	0	0.5	
Common Merganser	0	0.2	0	0	0	0	0	0	
Common Nighthawk	0	0	0	0.1	0	0	0	0.1	
Common Raven	0	0.2	0.2	0	0.8	0.4	0	0	
Cooper's Hawk	0	0.5	0	0.6	0.2	0.1	0	0.4	
Cordilleran Flycatcher	0	0	0	0.1	0	0	0	0	
Dark-eyed Junco	0	32.2	0	14.4	0	6.3	0	4.9	
Dusky Flyctacher	0	0	0	0	0	0	0	0.1	
Evening Grosbeak	0.2	0.2	0	0	0	0.1	0	0	
Ferruginous Hawk	0	0	0	0	0	0	0	0.1	
Gadwall	0.2	0.7	0.8	1.4	0	0.9	0	0.4	
Golden Eagle	0	0	0	0	0	0	0	0.1	
Great-horned Owl	0	0	0	0.3	0	0	0	0.3	
Greater Yellowlegs	0	1.2	0	0.6	0	0.3	0	0.1	
Green-winged Teal	0	0.2	0	0	0	0.3	0	0.5	
Hammond's Flycatcher	0	0	0	0.1	0	0.1	0	0	
Hermit Thrush	0	0	0	0.6	0	0.1	0	0.8	
Herring Gull	0	0.5	0	0.0	0	0.1	0	0.8	
Wilson's Warbler	0	0.5	0	0.6	0.8	0	0	0.1	
Wood Duck	0	0.3	0	0.6	0.8	0	0	0.1	











COMPLETE LIST OF BIRDS DETECTED DURING BREEDING SEASON SURVEYS (BSS) AND NON-BREEDING SEASON SURVEYS (NBS) AT THE RAC IN 2013-2018 (CONT.)

Species	•									
	2015		2016		2017		2018			
	BSS	NBS	BSS	NBS	BSS	NBS	BSS	NBS		
Hooded Merganser	0	0	0	0	0	0.5	0	0		
House Wren	0.2	0	0	0	0	0	0	0		
Lazuli Bunting	0.4	0.5	0	0.4	0	0.8	0	0.3		
Lesser Scaup	0	0	0	0	0	1	0	0		
Lincoln's Sparrow	0.2	0.3	0	0.1	0	0	0	0		
Loggerhead Shrike	0	0	0	0	0	0.1	0	0		
MacGillivray's Warbler	0.2	0.2	0.2	0.3	0	0.1	0	0.1		
Marsh Wren	0	0.2	0	0	0	0	0	0.1		
Merlin	0	0.3	0	0.3	0	0	0	0.1		
Mountain Chickadee	0	0.3	0	0	0	0	0	0		
Nashville Warbler	0	0	0	0.1	0	0	0	0		
Northern Flicker	0	6.7	0	8.1	0	2.9	0	2.4		
Northern Harrier	0	0	0	0.3	0	0.4	0	0		
Northern Mockingbird	0	0	0	0	0	0	0	0.4		
Northern Shoveler	0	1.2	0	0.1	0	0.3	0	0		
Northern Shrike	0	0	0	0	0	0.1	0	0		
Olive-sided Flycatcher	0	0.3	0	0	0	0.1	0	0		
Orange-crowned Warbler	0	0.5	0	0.5	0	0	0	1.4		
Pied-billed Grebe	0.2	1.5	0.3	1.3	0	1.4	0	1.4		
Pine Siskin	0.2	0.3	0	0	0	0	0	0		
Prairie Falcon	0	0	0	0	0	0	0	0.1		
Red-breasted Nuthatch	0	0	0	0	0	0.1	0	0		
Red-naped Sapsucker	0	0.2	0	0	0	0	0	0		
Red-tailed Hawk	0	1.2	0	1.5	0	1.4	0	1.9		
Ring-billed Gull	0	8.8	0	13.3	0	1.9	0	6		
Ring-necked Duck	0	0	0	0	0	2.6	0	4.3		
Ruby-crowned Kinglet	0	4.2	0	2.6	0	0.5	0	1.4		
Rufous Hummingbird	0	0	0	0	0	0.1	0	0		
Sandhill Crane	0	0	0.2	0	0	0	0	0		
Say's Phoebe	0.2	0	0	0	0	0	0	0		
Sharp-shinned Hawk	0	0.3	0.2	0.5	0	0.4	0	0		
Snow Goose	0	0.2	0	0	0	0	0	0		
Snowy Egret	0	0.2	0.2	0	0	0.1	0	0.8		
Solitairy Sandpiper	0	0	0	0.4	0	0.3	0	0.1		
Sora	0	0	0	0.1	0	0	0	0		
Spotted Sandpiper	0.6	0	0.2	0.1	0	0	0	0.3		
Spotted Towhee	0.4	1.3	0.2	0.9	0	0.1	0	1.4		
Swainson's Hawk	0	0.2	0.2	0	0	0	0	0		
Townsend's Solitaire	0	0	0	0.1	0	0	0	0.1		
Tree Swallow	0	0	2.5	0.3	0	0	0	0.8		
Turkey Vulture	0	0	0.2	0	0	0.1	0	0.1		
Vesper Sparrow	0	0.2	0.3	0	0	0	0	0		
White-crowned Sparrow	1.4	7.7	0	5.6	0.5	5.1	0	8.4		
Willow Flycatcher	0	0	0	0.3	0	0	0	0		
Woodhouse's Scrub-Jay	0	0.7	0	1	0	0	0	0		
Rough-legged Hawk	0	0	0	0	0	0	0	0.3		











COMPLETE LIST OF BIRDS DETECTED DURING BREEDING SEASON SURVEYS (BSS) AND NON-BREEDING SEASON SURVEYS (NBS) AT THE JORDAN RIVER GOLF COURSE IN 2013-2018

Species	Number of Observations (detections/survey) 2015 2016 2017 2018									
	BSS	NBS	BSS	NBS	BSS	NBS	BSS	NBS		
American Robin	4.2	15.8	5.8	32.8	7.5	7.5	7	15.6		
European Starling	2	596.7	5.8	602.4	4.8	4.8	4	403.1		
Barn Swallow	2.4	1.7	3.8	4.4	3	3	3.2	6.6		
House Sparrow	2	21.3	4.5	25.1	3.5	3.5	2.2	13.7		
Mallard	1.6	30.2	4.2	77.5	3.8	3.8	2.2	30.9		
House Finch										
	0.8	25	1.7	24.9	1.5	1.5	2	14.9		
Yellow Warbler	0.8	0.5	1.2	1.9	1	1	2	0.7		
Mourning Dove	2.4	7.5	1.2	5.8	1.7	1.7	1.4	0.9		
Cliff Swallow	0.4	0	0.3	0	1.3	1.3	1.2	0		
Lesser Goldfinch	1.4	3.2	1.8	5.9	0.8	0.8	1.2	3.9		
Song Sparrow	0.2	6.5	0.8	8.1	0.3	0.3	1.2	1.6		
Warbling Vireo	0.2	0.2	0.3	0.1	0.3	0.3	1.2	0.1		
Black-capped Chickadee	0.8	8.5	1	8.9	0.3	0.3	1	3.7		
Rock Pigeon	0	16.8	1.2	19	1.3	1.3	1	35.7		
American Goldfinch	0.6	8.3	1	5.6	0.3	0.3	0.8	6.7		
Eurasian Collared-Dove	0.8	22.2	2.3	38.4	1.5	1.5	0.8	14.6		
Brown-headed Cowbird	0	0	0.2	0.1	1.3	1.3	0.6	0		
Cedar Waxwing	0	12.8	0.8	6.1	0.2	0.2	0.6	2.3		
Bullock's Oriole	0.4	0.2	0.7	0.1	0.5	0.5	0.4	0		
Downy Woodpecker	0	2.7	0.8	2.8	0	0	0.4	1.4		
Northern Rough-winged Swallow	0	0	0.5	0.8	0	0	0.4	0		
Western Tanager	0	0.5	0.2	2.1	0.2	0.2	0.4	0.9		
Western Wood-pewee	0.2	0	0	0.4	0	0	0.4	0		
American Crow	0	1.2	0.2	1.6	0	0	0.2	9		
Brewer's Blackbird	0	0.3	0	1	0	0	0.2	0		
California Gull	0.4	29	0.7	1.8	1.8	1.8	0.2	1.4		
Common Nighthawk	0	0	0	0.1	0	0	0.2	0.1		
Cooper's Hawk	0	0.5	0	0.6	0	0	0.2	0		
Double-crested Cormorant	0	0.3	0.7	0	0	0	0.2	0.3		
Franklin's Gull	0.4	21.3	5.2	3.6	0	0	0.2	0.4		
Killdeer	0	2.2	0.2	1.3	0	0	0.2	0.1		
Red-winged Blackbird	0	3.7	0	10.9	0	0	0.2	0.7		
Say's Phoebe	0	0	0	0	0	0	0.2	0		
Western Kingbird	0	0.3	0	0.1	0	0	0.2	0		
Yellow-headed Blackbird	0	0	0	0	0	0	0.2	0		
American Avocet	0	1.3	0	1.3	0	0	0	0		
American Coot American Kestrel	0.2	8.5	0	15.1	0	0	0	2.4		
American Pipit	0	0.5 1	0	1.1 0.4	0	0 0	0	0.3 0.1		
American Tree Sparrow	0	0.2	0	0.4	0	0	0	0.1		
American Tree Sparrow American White Pelican	0	0.2	0	0	0	0	0	0		
American Wigeon	0	0.5	0	0	0	0	0	0		
Bald Eagle	0	0.5	0	0.1	0	0	0	0		
Bank Swallow	0	0	0	0.1	0	0	0	0		
Barn Owl	0	0	0	0.4	0	0	0	0		











COMPLETE LIST OF BIRDS DETECTED DURING BREEDING SEASON SURVEYS (BSS) AND NON-BREEDING SEASON SURVEYS (NBS) AT THE JORDAN RIVER GOLF COURSE IN 2013-2018 (CONT.)

Species	es Number of Observations (detections/survey) 2015 2016 2017 2018								
	BSS	NBS	BSS	NBS	BSS	NBS	BSS	NBS	
Belted Kingfisher	0	0.7	0	0.4	0.3	0.3	0	0.4	
Black Phoebe	0	0	0	0	0	0	0	0	
Black-billed Magpie	1.8	8.2	0.3	11.1	1.7	1.7	0	6.9	
Black-chinned Hummingbird	0.2	0.5	0.2	1.4	0	0	0	0.6	
Black-crowned Night-Heron	0	0.2	0	0.5	0	0	0	0	
Black-headed Grosbeak	0	0	0.2	0.1	0	0	0	0	
Black-necked Stilt	0	0	0	0.1	0	0	0	0	
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Blue-gray Gnatcatcher	0	0.3	0	0.6	0	0	0	0	
Blue-winged Teal	0	0.2	0	0.1	0	0	0	0	
Brown Creeper	0	0.8	0	0.9	0	0	0	0.1	
Cackling Goose	0	0	0	0.1	0	0	0	0	
California Quail	0.4	1.5	0	4.4	0	0	0	0	
Canada Goose	0	86	0	78.8	0	0	0	23.4	
Caspian Tern	0	0.3	0	0	0	0	0	0	
Cassin's Finch	0	0	0	0	0	0	0	0	
Chipping Sparrow	0	0.8	0	0.5	0	0	0	0	
Cinnamon Teal	0	0	0	0	0	0	0	0	
Common Goldeneye	0	0	0	0.1	0	0	0	0	
Common Merganser	0	0.2	0	0	0	0	0	0	
Common Raven	0	0.2	0	0	0	0	0	0.3	
Common Yellowthroat	0	0	0	0.1	0	0	0	0	
Cordilleran Flyctacher	0	0	0	0.1	0	0	0	0	
Dark-eyed Junco	0	32.2	0	14.4	0	0	0	18.3	
Evening Grosbeak	0	0.2	0.3	0	0	0	0	0.4	
Forster's Tern	0	0.2	0	0	0	0	0	0	
Gadwall	0	0.7	0	1.4	0	0	0	0	
Golden Eagle	0	0	0	0	0	0	0	0	
Golden-crowned Kinglet	0	0	0	0	0	0	0	0	
Gray Catbird	0	0.2	0	0	0	0	0	0	
Great Harrand Oud	0	0.2	0	0.1	0.2	0.2	0	0.3	
Great Horned Owl	0	0	0	0.3	0	0	0	0	
Great-tailed Grackle Greater Yellowlegs	0	0.2 1.2	0	0	0	0	0	0	
Green-winged Teal	0		0	0.6 0	0	0	0	0	
Hammond's Flycatcher	0	0.2 0	0	0.1	0	0	0	0.4	
Hermit Thrush	0	0	0	0.6	0	0	0	0.4	
Herring Gull	0	0.5	0	0.0	0	0	0	0.4	
House Wren	0	0.5	0	0	0	0	0	0	
Lazuli Bunting	0	0.5	0	0.4	0	0	0	0	
Lincoln's Sparrow	0	0.3	0	0.4	0	0	0	0	
MacGillivray's Warbler	0	0.2	0	0.3	0	0	0	0.1	
Marsh Wren	0	0.2	0	0.5	0	0	0	0.1	
Merlin	0	0.3	0	0.3	0	0	0	0	
Mountain Chickadee	0	0.3	0	0	0	0	0	0	
Nashville Warbler	0	0	0	0.1	0	0	0	0	











COMPLETE LIST OF BIRDS DETECTED DURING BREEDING SEASON SURVEYS (BSS) AND NON-BREEDING SEASON SURVEYS (NBS) AT THE JORDAN RIVER GOLF COURSE IN 2013-2018 (CONT.)

Species Number of Observations (detections/survey							ırvey)	
	2015 2016 2017				17	2018		
	BSS	NBS	BSS	NBS	BSS	NBS	BSS	NBS
Northern Flicker	0	6.7	0	8.1	0	0	0	6
Northern Harrier	0	0	0	0.3	0	0	0	0
Northern Mockingbird	0	0	0	0	0	0	0	0.1
Northern Pintail	0	0	0	0	0	0	0	1
Northern Shoveler	0	1.2	0	0.1	0	0	0	0
Olive-sided Flycatcher	0	0.3	0	0	0	0	0	0.1
Orange-crowned Warbler	0	0.5	0	0.5	0	0	0	0.3
Pied-billed Grebe	0	1.5	0	1.3	0	0	0	1.1
Pine Siskin	0	0.3	0.5	0	0	0	0	0
Red Crossbill	0					_		-
		0	0	0	0	0	0	0
Red-breasted Nuthatch	0	0	0	0	0	0	0	0
Red-naped Sapsucker	0	0.2	0	0	0	0	0	0
Red-tailed Hawk	0	1.2	0	1.5	0	0	0	0.7
Redhead	0	0	0	0	0	0	0	0
Ring-billed Gull	0	8.8	0	13.3	0	0	0	1.6
Ring-necked Pheasant	0	0.3	0	0.3	0	0	0	0
Ruby-crowned Kinglet	0	4.2	0	2.6	0	0	0	4.7
Sandhill Crane	0	0	0	0	0	0	0	0
Sharp-shinned Hawk	0	0.3	0	0.5	0	0	0	0.3
Snow Goose	0	0.2	0	0	0	0	0	0
Snowy Egret	0	0.2	0	0	0	0	0	0
Solitairy Sandpiper	0	0	0	0.4	0	0	0	0
Sora	0	0	0	0.1	0	0	0	0
Spotted Sandpiper	0	0	0	0.1	0	0	0	0
Spotted Towhee	0	1.3	0	0.9	0	0	0	2.7
Swainson's Hawk	0	0.2	0	0	0	0	0	0
Townsend's Solitaire	0	0	0	0.1	0	0	0	0
Tree Swallow	0	0	0	0.3	0	0	0	0
Turkey Vulture	0	0	0	0	0	0	0	0
Vesper Sparrow	0	0	0	0	0	0	0	0
Vesper Sparrow	0	0.2	0	0	0	0	0	0
Western Meadowlark	0	0	0	0	0	0	0	0
Western Screech-owl	0	0	0	0	0	0	0	0
White-crowned Sparrow	0	7.7	0.2	5.6	0	0	0	0
White-faced Ibis	0.2	0	0	1.8	0	0	0	0
Willow Flycatcher	0	0	0	0.3	0	0	0	0
Wilson's Snipe	0	3.7	0	1.5	0	0	0	0
Wilson's Warbler	0	0.5	0	0.6	0	0	0	0.4
Wood Duck	0	0.3	0	0.1	0	0	0	0
Woodhouse's Scrub-jay	0	0.7	0	1	0	0	0	0.7
Yellow-rumped Warbler	0	6.5	0.8	5.4	0.2	0.2	0	5.9











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