

CITIZEN SCIENCE BIRD MONITORING AVIARY CITIZEN SCIENCE BIRD MONITORING AT HERMAN FRANKS PARK Project Report 2017 2019

Project Report 2017-2018

Project Overview

Herman Franks Park is a small city park in downtown Salt Lake City, UT (Figure 1). Featuring a dog park and baseball fields, Herman Franks Park stretches across Emigration Creek, which has been diverted underground between Westminster College and where it flows into Liberty Park Pond. The Seven Canyons Trust has proposed the idea to uncover, or 'daylight,' over 1,000 feet of Emigration Creek along the northern and eastern parts of the park. In 2017, Tracy Aviary began a citizen science bird monitoring survey project at the park. This project will establish a baseline understanding of the bird community at Herman Franks park, and quantify the impact of creek daylighting or other site changes on bird habitat.

Breeding season point count surveys:

During April – July of 2017 and 2018, 9 citizen scientists conducted 11 breeding season point count surveys at two survey points in Herman Franks Park (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:

Data from point count surveys was supplemented by 11 non-breeding group surveys conducted between August - March of 2017 and 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.

2017-2018 Results

During 11 breeding season surveys in 2017-2018, we had 567 bird observations and detected 24 species (Figure 3). During 11 non-breeding season surveys in 2017-2018, we had 633 bird observations and detected 26 species. 8 species were detected exclusively during the breeding season, and 10 species were detected exclusively during the non-breeding season, resulting in a total species list of 34 species. See the complete species list for Herman Franks Park on page 2.



Figure 1. Map of bird sampling points at Herman Franks Park.



Figure 2. Tracy Aviary citizen scientists conducting breeding season (left) and non-breeding season (right) bird surveys.

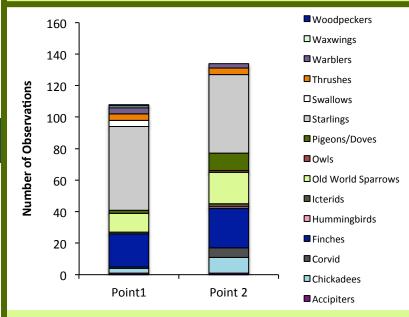


Figure 3. Observations of bird species from different families detected during breeding season surveys at Herman Franks Park.

COMPLETE LIST OF BIRDS DETECTED AT HERMAN FRANKS PARK IN 2017 AND 2018

| Species | Number of Observations (detections/survey) | | | |
|----------------------------|--|---|-------------------------------------|---|
| | Breeding Season 2017 (5 surveys) | Non-breeding Season 2017 (5 surveys) | Breeding Season 2018 (6 surveys) | Non-breeding Season 2018 (6 surveys) |
| European Starling | 23 | 24.4 | 36.33 | 6.5 |
| American Crow | 4 | 1.8 | 0.17 | 0 |
| House Sparrow | 3 | 13.4 | 4.5 | 3.17 |
| House Finch | 2.4 | 19.4 | 5 | 6.83 |
| Rock Pigeon | 2 | 2.4 | 1 | 0 |
| Black-capped Chickadee | 1.8 | 1.8 | 1.33 | 1.5 |
| American Robin | 1 | 0.2 | 1.5 | 0 |
| Eurasian Collared-dove | 0.8 | 4 | 1.5 | 0.5 |
| Lesser Goldfinch | 0.8 | 1.2 | 1.83 | 1.17 |
| American Goldfinch | 0.4 | 1.2 | 0 | 0 |
| Cooper's Hawk | 0.4 | 0 | 0 | 0.17 |
| Mallard | 0.4 | 0 | 0 | 0 |
| Mourning Dove | 0.4 | 3.2 | 0.33 | 0.5 |
| Yellow Warbler | 0.4 | 0 | 1.17 | 0 |
| Barn Swallow | 0.2 | 0 | 0.67 | 0 |
| Black-chinnued Hummingbird | 0.2 | 0 | 0 | 0 |
| California Gull | 0.2 | 0 | 0.33 | 1.83 |
| Downy Woodpecker | 0.2 | 1.6 | 0.17 | 0.17 |
| Brewer's Blackbird | 0 | 0 | 0.5 | 0 |
| Cedar Waxwing | 0 | 8.4 | 0.5 | 0 |
| Canada Goose | 0 | 6.2 | 0.33 | 1.33 |
| Great-blue Heron | 0 | 0 | 0.17 | 0 |
| Great-horned Owl | 0 | 0 | 0.17 | 0 |
| Northern Mockingbird | 0 | 0 | 0.17 | 0 |
| Ring-billed Gull | 0 | 0.4 | 0 | 0.17 |
| Sharp-shinned Hawk | 0 | 0.2 | 0 | 0 |
| Northern Flicker | 0 | 1 | 0 | 0 |
| Woodhouse's Scrub-jay | 0 | 0.2 | 0 | 0.33 |
| Common Raven | 0 | 0.2 | 0 | 0 |
| Evening Grosbeak | 0 | 0.4 | 0 | 0 |
| Pine Siskin | 0 | 0.4 | 0 | 0 |
| Dark-eyed Junco | 0 | 0.8 | 0 | 0 |
| Ruby-crowned Kinglet | 0 | 0 | 0 | 0.17 |
| Yellow-rumped Warbler | 0 | 0 | 0 | 0.17 |