

A sunset scene with a field in the foreground and trees silhouetted against the sky. The sky is filled with orange and yellow light, with a band of dark clouds near the horizon. The sun is low on the horizon, creating a bright glow.

State of the Birds

**My Little Big Year
in the Park with No Name**

Park 566, 2018
Dan Lory

Goals of this study

At the start of the Chicago Park District's EPA-funded environmental improvements in the park, this study's goals are to:

1. Establish a baseline measure of bird activity in the park
2. Document any immediate impact of environmental improvement actions on bird activity in the park
3. Record the presence of other flora and fauna as observed



About Park 566

Former site of US Steel South Works. Established as a park in 2004.

70-acre narrow strip along Lake Michigan from 79th St to 85th St.

Shore is comprised of scrap cement and huge plugs of slag from the former steel mill.

Park is almost entirely flat, with a raised berm along the lake for much of the length.

In 2017 the EPA awarded \$600K for “various environmental improvements.”

Work on those improvements began in autumn, 2017.



Habitat Features of Park 566



Environmental Improvements

Nov 2017	Nov 30, controlled burn of entire northern half of park, from S. Farragut Dr down to the elbow.
Jan 2018	Year began with northern half of park covered in foot-high burnt grasses, with scrub trees and larger brush still standing. South half of park is dead grasses.
March-April 2018	Cleared most small trees and brush from fence line on NE corner of park and then all the way down the shore to the slip. (Areas 1, 2, 3 were impacted)
April-May 2018	<ul style="list-style-type: none">• Planted Burr Oak and Jack Pine in grassy field north of the bay. (Area 1)• Hauled in topsoil to cover about an acre, halfway between the elbow and the slip. (Area 4)
May-June	Selective spray of entire park, targeting all invasives.
July 2018	<ul style="list-style-type: none">• Mowed entire park to 6", including the heavy brush and small trees that had still been standing in north end of park (Area 10).• Sprayed entire park with Roundup.

Environmental Improvements

<p>October 2018</p>	<ul style="list-style-type: none">• Sprayed beach area (grass between the newly planted trees) with RoundUp.• Sprayed entire park again with Roundup.• Wrapped a select number of trees along shore with wire fencing to protect from beaver damage.• Built split-rail fence along Farragut Dr.• Planted and fenced 400 shrubs and small trees on the berm in Area 1. Appears to be an equal mix of: American Plum, Red Ozier Dogwood, Elderberry, American Filbert, Wild Black Current, Blue-fruited Silky Dogwood, Alleghany Shadblow, Ninebark, Black Chokeberry, Common Witch Hazel, Wahoo (Eastern Burning Bush)
<p>November- December 2018</p>	<ul style="list-style-type: none">• Planted dune grass in the beach area.• Nov 8 burned 20 acres, apparently of certain target plants.• Disked and seeded the open areas around the trees that had been planted in April between the beach and Farragut.• Built roped-in walkway to keep visitors off planted dunes area.• Seeded entire park with variety of prairie grasses.

State of the Birds: Before 2018

No recorded birding outings prior to
Dec 23, 2014

In the 3-year period 2015-2017:

88 birding outings (about 30/year)
by about 20 different individuals
(as per eBird)

168 bird species observed across
those three years

Impressive,
yet Park 566 has been “*underbirded.*”



Project Plan

Wonderful opportunity to:

- Test hypothesis that more species actually visit the park than the three years of data indicate, and
- Use 2018 to establish baseline data against which to measure the impact of the Park District's restoration work.



Procedure

Stated simply:

Bird the park more consistently than it had ever been birded before, keeping records of all birds sighted.

- Species
- Frequency/Count
- Specific locations of bird sightings (to limited degree)
- Nature of the presence (transitory, nesting, etc.)

Data for the study were gathered from:

1. 202 observation walks by one observer over the course of the entire year
 - 2.8-mile fixed route around circumference of park
2. 68 other observation walks by 49 other observers during the year
 - Random routes, dates, and distances

All data recorded in eBird. Data management assistance by Hiroki Lory.

All photos in this presentation were taken by Dan Lory at Park 566 in 2018.



Results: Bird's-eye Overview

In 2018: 197 bird species were observed

189 species observed by Dan Lory in the study's 202 fixed-route observation walks

8 additional species were sighted by others throughout 2018

Total species count for Park 566 is now 215 species

30% increase over the 168 species that had been observed 2015-2017.



Results: Bird's-eye Overview

Birds of Park 566



Peregrine Falcon

Bottom Line:

This desolate-looking park hosts an impressive diversity of bird species common to:

Grasslands

Shrub/Savannah

Water/Wetlands

Threatened and Endangered Species*

1 of the 7 species listed as **Threatened Species** was observed in Park 566:

Black-billed Cuckoo

7 of the 24 species listed as **Endangered Species** were observed in Park 566:

Black-crowned Night Heron

Short-eared Owl

Upland Sandpiper

American Bittern

Northern Harrier

Osprey

Forster's Tern



* pertains to species' breeding status in Illinois, as recognized by State and Federal agencies

Upland Sandpiper

Birds of Concern*

Grassland Habitat Birds of Concern
that visited Park 566:

7 of the 12 species listed by BCN

Grasshopper Sparrow (nested)

Bobolink

American Kestrel (nested)

Sedge Wren

Dickcissel (nested)

Eastern Meadowlark

Upland Sandpiper



American Kestrel

* Refers to species of declining populations (in IL and elsewhere) for which conservation efforts can have significant impact-- as per Bird Conservation Network

Birds of Concern*

Shrub Habitat Birds of Concern that visited Park 566:

7 of the 10 species listed by BCN

Black-billed Cuckoo

Brown Thrasher (nested)

Willow Flycatcher

Field Sparrow (nested)

Yellow-breasted Chat

Blue-winged Warbler

Eastern Kingbird (nested)



Willow Flycatcher



Yellow-breasted Chat

* Refers to species of declining populations (in IL and elsewhere) for which conservation efforts can have significant impact-- as per Bird Conservation Network

Birds of Concern*

Woodlands Habitat Birds of Concern that visited Park 566:

8 of the 14 species listed by BCN

Red-headed Woodpecker

Eastern Whip-poor-will

American Woodcock

Northern Flicker

Chimney Swift

Yellow-billed Cuckoo

Veery

Prothonotary Warbler



Yellow-billed Cuckoo

* Refers to species of declining populations (in IL and elsewhere) for which conservation efforts can have significant impact-- as per Bird Conservation Network

Birds of Concern*

Wetlands Habitat Birds of Concern that visited Park 566:

8 of the 22 species listed by BCN

American Bittern

Black-crowned Night Heron

Pied-billed Grebe

Wilson's Snipe

Marsh Wren

Virginia Rail

Osprey

Caspian Tern



Wilson's Snipe

* Refers to species of declining populations (in IL and elsewhere) for which conservation efforts can have significant impact-- as per Bird Conservation Network

Nesting Species

Evidenced by territorial behavior, nest with eggs or young, carrying food, juvenile birds present

Song Sparrow (areas 1,2,10)

Field Sparrow (areas 6,7,9)

Grasshopper Sparrow (areas 2,3)

Common Yellowthroat (areas 1,9,10)

Brown Thrasher (areas 1,9)

Dickcissel (area 10)

Eastern Kingbird (area 1)

American Kestrel (area 6)

Mallard (area 6)

Spotted Sandpiper (areas 2,3,5)



Sparrows

- 14 species were observed in 2018.
- Total of 18 species seen in park since 2015.
- Evidence of breeding:
 - Song Sparrow (areas 1,2,10)
 - Field Sparrow (areas 6,7,9)
 - Grasshopper Sparrow (areas 2,3)



Field Sparrow



Grasshopper Sparrow



Song Sparrow

Sparrows

- Significant frequency (15 days or more)
Savannah, Lincoln's, Dark-eyed Junco, White-crowned
American Tree, Swamp, Song, Field, Grasshopper
- Occasional (4-14 days)
Eastern Towhee,
Fox, Clay-colored,
Chipping, White-throated
- Missing in 2018
Vesper, Lark,
Nelson's and LeConte's,
possibly due to the drastic
cutting in July.
- Never observed
Henslow's Sparrow



Warblers

- 24 species were observed in 2018.
 Seen in prior years, but missing in 2018: Black-throated Blue Warbler
- Evidence of breeding
 Common Yellowthroat (areas 1,9,10)



American Redstart



Wilson's Warbler



Blackpoll Warbler

Warblers

Frequent (15 days or more)

Palm, Common Yellowthroat, Yellow-rumped
Yellow, Blackpoll, Nashville, American Redstart

Occasional (4-14 days)

Northern Waterthrush, Tennessee, Cape May
Magnolia, Orange-crowned, Wilson's
Black-and-white, Blackburnian, Canada
Bay-breasted, Black-throated Green

Rare (3 days or less)

Ovenbird, Northern Parula
Blue-winged, Chestnut-sided
Prothonotary, Mourning



Raptors, Birds of Prey

Hawks, Vultures

- Red-tailed Hawk
- Broad-winged Hawk
- Rough-legged Hawk
- Northern Harrier
- Cooper's Hawk
- Bald Eagle
- Osprey
- Turkey Vulture



Cooper's Hawk



Osprey

Raptors, Birds of Prey

Falcons (year-round, frequent)

American Kestrel

Merlin

Peregrine Falcon

Owls (seasonal)

Short-eared Owl

Snowy Owl

Great-horned Owl



Short-eared Owl



Snowy Owl

Shorebirds, Rails, Sandpipers

Frequent

- Killdeer
- Spotted Sandpiper (nested)
- American Coot
- American Woodcock
- Wilson's Snipe

Occasional

- Sanderling, Black-bellied Plover
- Greater & Lesser Yellowlegs

Rare

- Semipalmated Plover, Willet
- Virginia Rail, Sandhill Crane
- American Golden Plover, Dunlin
- Upland Sandpiper, Ruddy Turnstone
- Baird's Sandpiper, Least Sandpiper
- Semipalmated Sandpiper



Waterfowl, Grebes, etc

Frequent

Canada Goose (almost daily)

Red-breasted Merganser

Double-crested Cormorant

Mallard (nested)

Common Goldeneye

Common Merganser

Horned Grebe

Greater Scaup

Redhead

Bufflehead



Common Merganser



Double-crested Cormorant

Waterfowl, Grebes, etc

Occasional

White-winged Scoter, Blue-winged Teal
Canvasback, Lesser Scaup, Snow Goose
Green-winged Teal, Common Loon,
Black Scoter, Greater White-fronted Goose

Rare

Mute Swan, Northern Shoveler
Wood Duck, Long-tailed Duck
Ring-necked Duck, Cackling Goose
Hooded Merganser, Surf Scoter
Northern Pintail, Pied-billed Grebe
Ross's Goose, Red-throated Loon
American Black Duck
Western Grebe



Gulls, Terns

Frequent

Ring-billed Gull

Herring Gull

Caspian Tern

Rare

Great Black-backed Gull

Bonaparte's Gull

Lesser Black-backed Gull

Iceland Gull

Glaucous Gull

Forster's Tern



Caspian Tern



Great Black-backed Gull



Herring Gull

Flycatchers, Vireos

Frequent

Eastern Phoebe, Eastern Kingbird
Warbling Vireo, Least Flycatcher
Eastern Wood Pewee

Occasional

Willow Flycatcher, Red-eyed
Vireo

Rare

Philadelphia Vireo
Great Crested Flycatcher
Blue-headed Vireo



Red-eyed Vireo



Eastern Wood-Pewee



Great Crested Flycatcher

Thrushes

Frequent

American Robin

Swainson's Thrush

Hermit Thrush

Rare

Veery

Eastern Bluebird

Gray-cheeked Thrush



Gray-cheeked Thrush



Hermit Thrush



Veery

Wrens

All regional wrens except Carolina Wren

Surprise: Marsh Wren more frequent than Sedge Wren



Chickadee, Kinglets...

Black-capped Chickadee
Blue-gray Gnatcatcher
Golden-crowned Kinglet
Ruby-crowned Kinglet



Blue-gray Gnat-catcher



Ruby-crowned Kinglet



Golden-crowned Kinglet

Finches, etc

Frequent

- American Goldfinch
- Common Redpoll

Occasional

- House Finch

Rare

- Pine Siskin, Hoary Redpoll



American Goldfinch



Common Redpoll



Hoary Redpoll

Blackbirds, Field and Meadow Birds

Summer

Red-winged Blackbird

Eastern Meadowlark

Dickcissel

Common Grackle

Baltimore Oriole

Orchard Oriole

Bobolink

Rusty Blackbird (rare)



Eastern Meadowlark



Baltimore Oriole



Orchard Oriole

Blackbirds, Field and Meadow Birds

Frequent Winter

Snow Bunting

Horned Lark

Lapland Longspur



Horned Lark



Lapland Longspur



Snow Bunting

Various Shrub Birds

Frequent/Occasional

Brown Thrasher (nested)

Gray Catbird

Northern Mockingbird

Rare

Northern Shrike

Yellow-breasted Chat



Woodpeckers, Creepers, etc

Frequent/Occasional

Northern Flicker

Downy Woodpecker

Red-breasted Nuthatch

Yellow-bellied Sapsucker

Brown Creeper

Red-headed Woodpecker

Rare

Red-bellied Woodpecker

White-breasted Nuthatch



Yellow-bellied Sapsucker



Red-breasted Nuthatch



Brown Creeper

Swallows, Nightjars, Swifts

Frequent/Occasional

Northern Rough-winged Swallow

Barn Swallow

Chimney Swift

Tree Swallow

Rare

Common Nighthawk

Eastern Whip-poor-will



Northern Rough-winged Swallow



Eastern Whip-poor-will



Chimney Swift

No-shows

Seen in prior years, but not observed in 2018

Neotropic Cormorant – *was observed at Rainbow Beach*

Common Tern

Black Tern

Black-legged Kittiwake

American White Pelican

Whimbrel

Sora

Sharp-shinned Hawk

Monk Parakeet

Le Conte's Sparrow

Vesper Sparrow

Nelson's Sparrow

Lark Sparrow

Alder Flycatcher

Yellow-bellied Flycatcher – *probable sighting, but could not confirm*

Bank Swallow – *probable sighting*

Black-throated Blue Warbler

Yellow-throated Vireo

Species Presence by Area

In order of number of species observed

Area 1 – 103 species

- Area with largest diversity of habitat
 - Large & small trees, shrubs, grass, shore
- Welcoming environment, despite significant habitat changes in 2018
- Raptors, passerines, shorebirds, shrub birds – wide variety
- Evidence of nesting:
 - Song Sparrow, Common Yellowthroat, Eastern Kingbird, Brown Thrasher

Area 2 – 101 species

- No honey locusts, but tall grasses, numerous poplars and rocky shoreline were good for flycatchers, warblers, sparrows, raptors, shorebirds.
- Evidence of nesting:
 - Song Sparrow (nest located), Grasshopper Sparrow, Spotted Sandpiper



Species Presence by Area



Area 5 – 86 species

- Nice mix of sumac, large trees and shrub undergrowth. Along rocky shoreline.
- Warblers, raptors, vireos, flycatchers. Lake and shore birds.
- Evidence of nesting: Spotted Sandpiper

Area 3 – 64 species

- Grassland with several small trees. One swath of knee-high grasses was left untouched by CPD cuts and burns.
- Raptors, sparrows, larks, ground-foraging birds
- Evidence of nesting: Grasshopper Sparrow

Species Presence by Area



Area 9 – 57 species

- High grasses adjacent to large stand of young poplar
- Wrens, woodcock, snipe, woodpeckers, Yellow-breasted Chat, warblers, raptors
- Evidence of nesting:
 - Field Sparrow, Song Sparrow, Common Yellowthroat, Brown Thrasher
 - Drastic reduction in activity after the July cutting

Area 7 – 52 species

- Similar to area 9, but shorter grass, and trees more scattered
- Warblers, finches, woodpeckers, kinglets, gnatcatcher, Meadowlark

Species Presence by Area

Area 6 – 47 species

- Large piles of sand with dense shrub growth, with grass to east and mixed shrub to west
- Sparrows, warblers, Meadowlark, raptors
- Evidence of nesting: Field Sparrow, American Kestrel, Mallard (nest located)

Area 4 – 31 species

- Low grass with several trees along shore; patch of waist-high grass that grew in after top soil was spread in late spring.
- Sparrows, ground-feeding birds, Upland Sandpiper

Area 10 – 27 species

- High grass, with scattered stands of scraggly small trees
- Evidence of nesting: Dickcissel, Common Yellowthroat

Area 8 – 25 species

- Large piles of sand overgrown with dense shrub, surrounded by low grass
- Redpoll, sparrows, blackbirds



Butterflies and Moths



European Skipper



Clouded Sulphur



Orange Sulphur



Black Swallowtail

Butterflies and Moths



Common Buckeye



Red Admiral



Orange Helomelina



Question Mark

Butterflies and Moths

Birds of Park 566



Cabbage White



Viceroy



Monarch

Dragonflies





Eastern Cicada Killer



Common Stretch Spider

Other Creatures



Differential Grasshopper



Bold Jumper

Other Creatures



Eastern Red Bat



Silver-haired Bat



Coyote

Other Creatures

Gray Tree Frog



White-tailed Deer



Opossum



Conclusion

2018 ended with Park 566 cleared and barren, but with:

invasive plants temporarily in check;

prairie seed spread over the entire park;

shrubs and trees planted;

and much of the groundwork laid for substantive environmental improvements.

A baseline of avian presence and activity has been established.

Let's see what 2019 brings!

Dan Lory, February 2019

