

Goals of this project

As the Chicago Park District continues the EPA-funded environmental improvement actions in the park, this study's goals are to:

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

2023 was year 6 of data gathering and analysis

(For a summary of years 1-5 data, see the 2022 report)



About Park 566

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

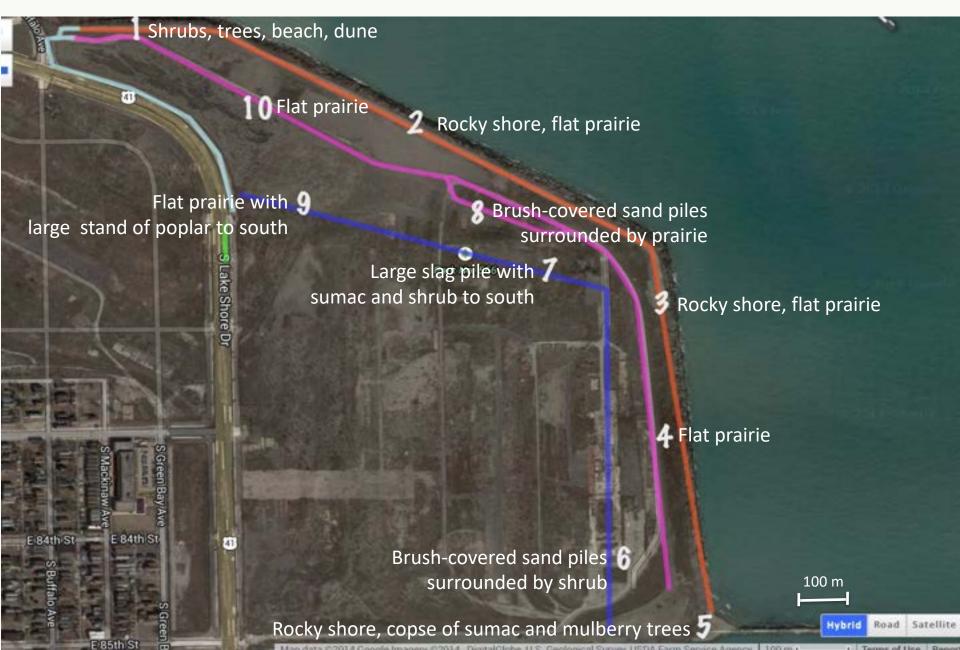
70-acre narrow strip along Lake Michigan from 79th St to 85th St.

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



2017 start	Nov 30, controlled burn of entire northern half of park
2018 key actions	 Cleared small trees and brush, especially area 1 Cleared and planted dune area – Burr Oak, Jack Pine, dune grasses, prairie grasses Broadcast a mix of prairie seeds over entire park Sprayed to eliminate invasive plants Mowed to cut back invasives and assist sprouting prairie grasses Planted 400 shrubs and small trees on the berm in Area 1 Erected ropeway and split-rail fencing to limit access to planted areas.
Jan 2019	Unlike Jan 2018, when entire park was shaved to 6" and barren, 2019 began with knee-high vegetation over much of park. 400 shrubs in area 1 had remarkable survival rate. Same was true for Burr Oak and Jack Pine in area 1. Dune grasses appeared to suffer significant wave and ice damage
April 2019	Work crews tended to new plantings in area 1, clearing undergrowth, repairing fences, etc.

May 2019	Late May, spot spraying of certain plants in far north end of park					
June 2019	6/17, sprayed entire half of park north of elbow to control invasives. 6/28, mowed the entire park to 6". No spraying evident.					
July 2019	Noted presence of prairie plants and other native species that the June mowing was intended to assist, including the following: Black-eyed Susan, Purple Coneflower Goldenrod (species unknown), Partridge Pea					
August 2019	Mowed entire area from South Shore Drive to the sand piles near middle of park.					
September 2019	Mowed the area overgrown with lambs quarters, east of the sand piles and north to where the lambs quarters ceased.					
March 2020	Controlled burn of entire park, with small swaths of unburned grasses remaining here and there throughout park					

July 2020	Mowed entire park to about one foot high.
August 2020	Cleared weeds from around the plantings at the NE end of park. Appears to be a very high survival rate on those plantings.
March 2021	Controlled burn of entire park, including between the planted Jack Pine and Burr Oak in the dunes area to the NE and the mid-park sand piles (sparing the mulberry). Did not burn the far south copse of sumac and mulberry, and left the south sand piles untouched. Overall, a much more complete burn than the one done in end 2020.
April 2021	Sprayed entire park with broadleaf-specific herbicide. Followed with spot spraying of thistle and other invasives throughout entire park, including beach area. Weeding and clean-up around hedge plantings, and spot spraying at far north end.
September 2021	To allow better access for birders and walkers to the area around the shrub plantings, Cardno mowed a 3'-wide circle path through the tall grasses.

December 2021	Selective burn of area north of sandpiles and west of center road. No seeding was done in 2021.
Summer 2022	Low brush cleared around plantings in beach area and NE corner of park. Spot spraying of pockets of various invasives throughout park.
Summer 2023	Systematic spot spraying of invasive broadleafs. Periodic cutting/extraction of certain invasives. Controlled burn of northwest corner of park, with seeding planned for early 2024.



Results 2023: Bird's-eye Overview

In 2023, 222 bird species were observed

235 birders submitted 811 birding checklists across 230 days.

5 new species were added to the park's cumulative record.

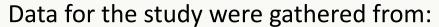
At end 2023, total cumulative species count is 259. Park 566 ranks #13 among Cook County's birding hotspots.



Review of Procedure

Bird the park consistently, keeping records of all birds sighted

- Species
- Frequency/Count
- Nature of the presence



2018	270 observation walks 202 followed a fixed route, 68 were of varied routes
2019	469 observation walks 217 followed a fixed route, 252 were of varied routes
2020	251 observation walks (low number due to COVID restrictions) 87 followed a fixed route, 164 were of varied routes
2021	538 observation walks 195 followed a fixed route, 343 were of varied routes
2022	646 observation walks 249 followed a fixed route, 397 were of varied routes
2023	811 observation walks 176 followed a fixed route, 635 were of varied routes



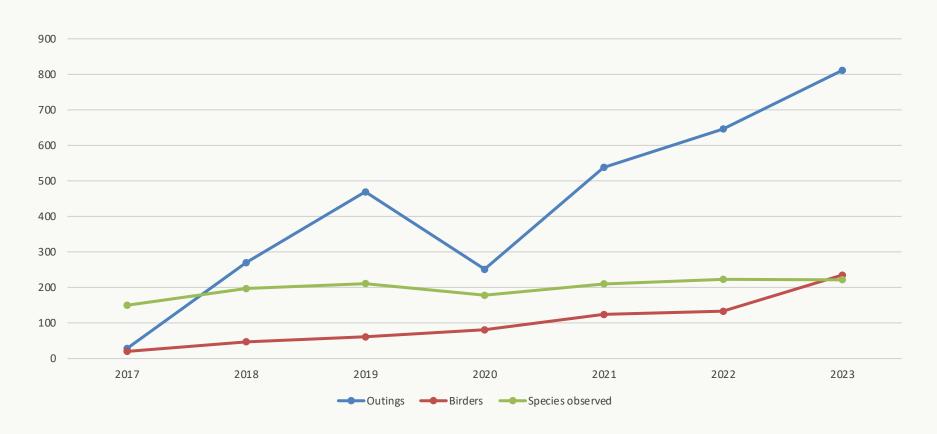
State of the Birds over time

	2018	2019	2020*	2021	2022	2023
Number of Birding Outings	270	469	251	538	646	811
Number of Birders	47	61	81	124	133	235
Number of Species Observed	197	211	178	210	223	222
Park's Cumulative Species Total	216	233	240	248	254	259

^{*} COVID restrictions



Park Utilization (by birds and birders) over time



2023 compared with previous years:

- The number of birders increased by 77% compared to prior year.
- In 2017, Park 566 was not even in the top 100 of Cook County birding hotspots. At end 2023 it was #13 as measured by number of species observed.

State of the Birders by Season



Key points of chart above:

- Heavy utilization in Oct and Nov is typical. Park 566 has become known as a haven for migrating rare sparrows.
- Jan-Mar was unusually popular thanks to the presence of two rare visitors.

Rare Visitors

Western Meadowlark

On January 1, 2023, the park was visited for the first time by a Western Meadowlark, quite far from its normal range.

It decided to stick around until the Ides of March.



Rare Visitors

Ross's Gull

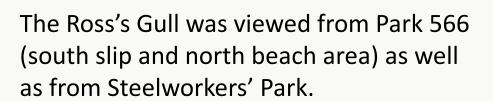
The Bird of the Century, so far....

This tiny gull of the Alaskan North Slope, that rarely visits anywhere in the lower 48, decided to spend time at Park 566. On three days in early March hundreds of bird enthusiasts from around the country thrilled at this intrepid little traveler.



Rare Visitors Ross's Gull









Threatened and Endangered Species*

1 of the 6 species listed as Threatened Species was observed:

Osprey

5 of the 23 species listed as

Endangered Species were observed:

Black-crowned Night-Heron

Short-eared Owl

Northern Harrier

Forster's Tern

Upland Sandpiper



^{*} Checklist of Illinois Endangered and Threatened Animals and Plants, 2020 IL Endangered Species Protection Board

Birds of Concern*

Grassland Habitat Birds of Concern observed at Park 566:

All 6 of the species listed by BCN (LVL 1, LVL 2)

Grasshopper Sparrow (nested) Bobolink

Upland Sandpiper Sedge Wren (nested)

Henslow's Sparrow Eastern Meadowlark (nested)



* 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 Park 566, 2023

Birds of Concern*

Shrubland Habitat Birds of Concern:

3 of the 5 species listed by BCN
Brown Thrasher (nested)
Willow Flycatcher
Field Sparrow (nested)





^{*} 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 observed:

5 of the 7 species listed by BCN

Red-headed Woodpecker

American Woodcock

Chimney Swift

Yellow-billed Cuckoo

Wood Thrush



^{*} 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 observed:

2 of the 9 species listed by BCN Black-crowned Night-Heron 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

Grasshopper Sparrow

Spotted Sandpiper

Killdeer

Dickcissel

Eastern Kingbird

American Kestrel

Field Sparrow

Song Sparrow

Savannah Sparrow

Sedge Wren

American Robin

Warbling Vireo

Yellow Warbler

Common Yellowthroat

Brown Thrasher

Gray Catbird



Species reported for the

first time: 5

Western Meadowlark

Ross's Gull

Red Phalarope

Smith's Longspur

Red Crossbill



2018 - 2023: Six Years of Data Four Key Take-aways

At the risk of sounding like a broken record, the key take-aways remain as follows.

- #1 Baseline: 210 species per year
- #2 Impressive variety
- #3 Clear impact of restoration work
- #4 Increase in park utilization

#1: Baseline: Number of species hosted

222 species in 2023

Six years of observations tell us that about 210 species can be expected in any given year.

- 2018-2023 the species count ranged from 197 to 223
- About 80% of these 210 are seen every year without fail
- The remaining 20% is a hodgepodge of birds that appear one year but not the next. Often some surprising rarities.
- The park's total species life list at end 2023 was 259.

For reference, species counts at other parks in 2023:

Jackson Park – 195

Steelworkers' Park – 186

Rainbow Beach – 205

Montrose Point - 270

#2: Impressive Variety, from grassland regulars to migrant warblers, with no scarcity of rarities.

Vibrant presence of virtually every grassland species:

20 sparrow species, with 4 species nesting
10 oriole and blackbird species (Bobolink frequent, but not nesting)
Northern Harrier and Short-eared Owl

The expansive lakefront serves as an important stopover for songbirds migrating between the neotropics and Canada:

25 warbler species (Yellow Warbler and Common Yellowthroat nesting)

Vagrants (outside their typical range)

Notables: Western Meadowlark, Ross's Gull

Lake attracted over 70 species of waterfowl, gulls, terns, shorebirds.

Species' presence varies by season

#3: Positive impact of restoration activities

Open space (majority of park)

Six years is too short a period to attribute increases in bird activity or numbers to specific conservation actions.

Northwest section of park is showing some oddly unusual flora, possibly due to the imported topsoil (mud-to-park program)?

Still, the trend appears positive. Continued observation is important.

Plantings in NE corner of park

There is **clear evidence** of the positive impact of these plantings.

With the stand of large locust as a shaded anchor, the newly planted shrubs, jack pine, burr oak and prairie flowers are developing into a small enclave welcoming to birds of woodlands and shrub areas.

#4: Increase in park's popularity and use

Birding outings increased 3-fold since 2018. Number of birders increased 5-fold since 2018.

It's not just the birds. One of the appeals of the park is its feeling of expansive isolation, with stunning views of downtown Chicago. Good for humans and for plants and animals!



Conclusion

The data summary portion of this presentation ends here.

The following pages are brief snapshots of various bird groups and other flora and fauna as observed in 2023.

It could go on for a hundred pages, but I hope these pages can show at least a bit more of the beauty and the diversity of the animal and plant life of Park 566.

Grasshopper Sparrow

Sparrows

Savannah Sparrow

20 species were observed in 2023, 12 with great regularity.

Evidence of nesting:

Song Sparrow

Field Sparrow

Grasshopper Sparrow

Savannah Sparrow



Sparrows

Significant frequency (more than 21 days in the year)

Savannah, Lincoln's, Dark-eyed Junco,

White-crowned, White-throated, American Tree, Swamp, Song,

Field, Grasshopper

Occasional (8-21 days)
Clay-colored, Fox,
Eastern Towhee,

Chipping, Vesper

Rare (1-7 days)

LeConte's, Nelson's,

Lark Sparrow

Henslow's, Harris's

2023 no-shows

Lark Bunting



More sparrows,

because Park 566 is definitely a sparrow's park







Warblers

• 25 species were observed in 2023

Evidence of nesting by Yellow Warbler

and Common Yellowthroat



Ovenbird

Warblers

Frequent (10 days or more)

Palm, Common Yellowthroat, Yellow-rumped, Yellow, Magnolia, Tennessee, Cape May, Nashville

Occasional (3-9 days)

Black-throated Green, Chestnut-sided, Canada, Blackpoll, Orange-crowned, Black-and-white,

Blackburnian, Ovenbird, American Redstart, Bay-breasted, Wilson's

Rare (1 or 2 days)

Connecticut, Mourning,
Black-throated Blue,
Northern Parula, Pine,
Northern Waterthrush





Raptors, Birds of Prey

Hawks, Vultures

Red-tailed Hawk Red-shouldered Hawk Broad-winged Hawk Rough-legged Hawk





Hawks, Vultures

Northern Harrier
Sharp-shinned Hawk
Cooper's Hawk
Osprey
Bald Eagle
Turkey Vulture

Raptors, Birds of Prey

Falcons and Owls

Frequent:

American Kestrel, Merlin

Peregrine Falcon

Short-eared Owl

2023 No-shows:

Snowy Owl, Great Horned Owl





Shorebirds, Rails, Sandpipers

Frequent

Killdeer (nested), American Coot Spotted Sandpiper (nested)

Occasional

Wilson's Snipe, Greater Yellowlegs, American Woodcock, Virginia Rail, Lesser Yellowlegs, Dunlin, Black-bellied Ployer

Rare

Least Sandpiper
Sanderling
Upland Sandpiper
Semipalmated Plover
Red Phalarope
American Golden Plover
American Avocet
Semipalmated Sandpiper
Sora

Birds of Park 566, 2023





Cranes, Herons

Occasional

Great Blue Heron Green Heron Great Egret

Rare

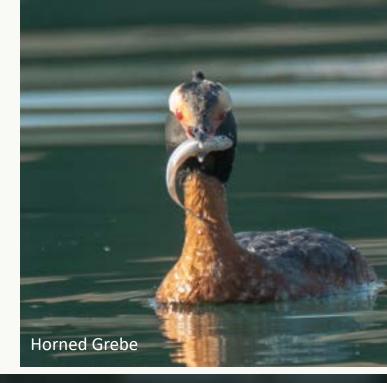
Sandhill Crane Black-crowned Night-Heron



Waterfowl, Grebes, Loons

Frequent

Canada Goose, Mallard Red-breasted Merganser Common Merganser White-winged Scoter **Greater Scaup Lesser Scaup Double-crested Cormorant** Common Goldeneye Horned Grebe Redhead **Wood Duck Bufflehead** Blue-winged Teal





Waterfowl, Grebes, etc

Occasional

Northern Shoveler, Green-winged Teal Mute Swan, Ruddy Duck, Canvasback Common Loon, Surf Scoter, Gadwall Hooded Merganser, Black Scoter, Long-tailed Duck, Red-throated Loon Blue-winged Teal



Snow Goose, Tundra Swan,
Greater White-fronted Goose,
Trumpeter Swan, Northern Pintail
Pied-billed Grebe
Red-necked Grebe
Trumpeter Swan, Ross's Goose,
American Wigeon,
Ring-necked Duck,
American White Pelican
Neotropic Cormorant





Gulls, Terns

Frequent

Ring-billed Gull Herring Gull Caspian Tern

Occasional/Rare

Great Black-backed Gull Lesser Black-backed Gull Bonaparte's Gull Forster's Tern Black-legged Kittiwake Iceland Gull Sabine's Gull

Extremely Rare Ross's Gull





Flycatchers, Vireos

Frequent

Eastern Phoebe
Warbling Vireo (nesting)
Eastern Kingbird (nesting)
Least Flycatcher
Eastern Wood-Pewee

Occasional

Great Crested Flycatcher
Willow Flycatcher
Red-eyed Vireo
Philadelphia Vireo

Rare

Alder Flycatcher
Blue-headed Vireo
Yellow-bellied Flycatcher
Yellow-throated Vireo





Thrushes

Frequent

American Robin

Hermit Thrush

Swainson's Thrush

Rare

Wood Thrush

Eastern Bluebird

Wrens

Frequent

House Wren, Sedge Wren

Occasional

Marsh Wren, Winter Wren

(Carolina Wren has never been reported)





Finches, etc

Frequent
American Goldfinch
Pine Siskin
House Finch
Occasional/Rare
Red Crossbill
Purple Finch
Common Redpoll





Blackbirds, Field and Meadow Birds

Summer

Red-winged Blackbird (nested)
Eastern Meadowlark (nested)
Dickcissel (nested)
Brown-headed Cowbird
Common Grackle
Baltimore Oriole, Bobolink
Orchard Oriole, Rusty Blackbird





Blackbirds, Field and Meadow Birds

Occasional Winter

Western Meadowlark

Snow Bunting Lapland Longspur Smith's Longspur



Woodpeckers, Creepers, etc

Frequent/Occasional

Northern Flicker, Brown Creeper, Yellowbellied Sapsucker, Downy Woodpecker, Red-bellied Woodpecker, Red-headed Woodpecker, White-breasted Nuthatch

Rare

Red-breasted Nuthatch Hairy Woodpecker



Swallows, Nightjars, Swifts

Frequent

Chimney Swift
Northern Rough-winged Swallow
Barn Swallow
Tree Swallow
Purple Martin

Occasional

Bank Swallow Cliff Swallow



And assorted others







Other Flora and Fauna of Park 566

Following is a tiny sampling of the beautiful plant and animal life that can be enjoyed at Park 566. All photos are from 2023.



Plants of Park 566







Plants of Park 566







Plants of Park 566







Birds of Park 566, 2023

Butterflies Moths





Birds of Park 566, 2023

Butterflies Moths





Birds of Park 566, 2023

Butterflies Moths









Twelve-spotted Skimmer

Other Creatures

Common Five-lined Skink nest



Other Creatures







