

# State of the Birds, 2020

## Park 566

Dan Lory

February, 2021





# 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

2020 is year 3 of data gathering and analysis



Bald Eagle (immature)

# About Park 566

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

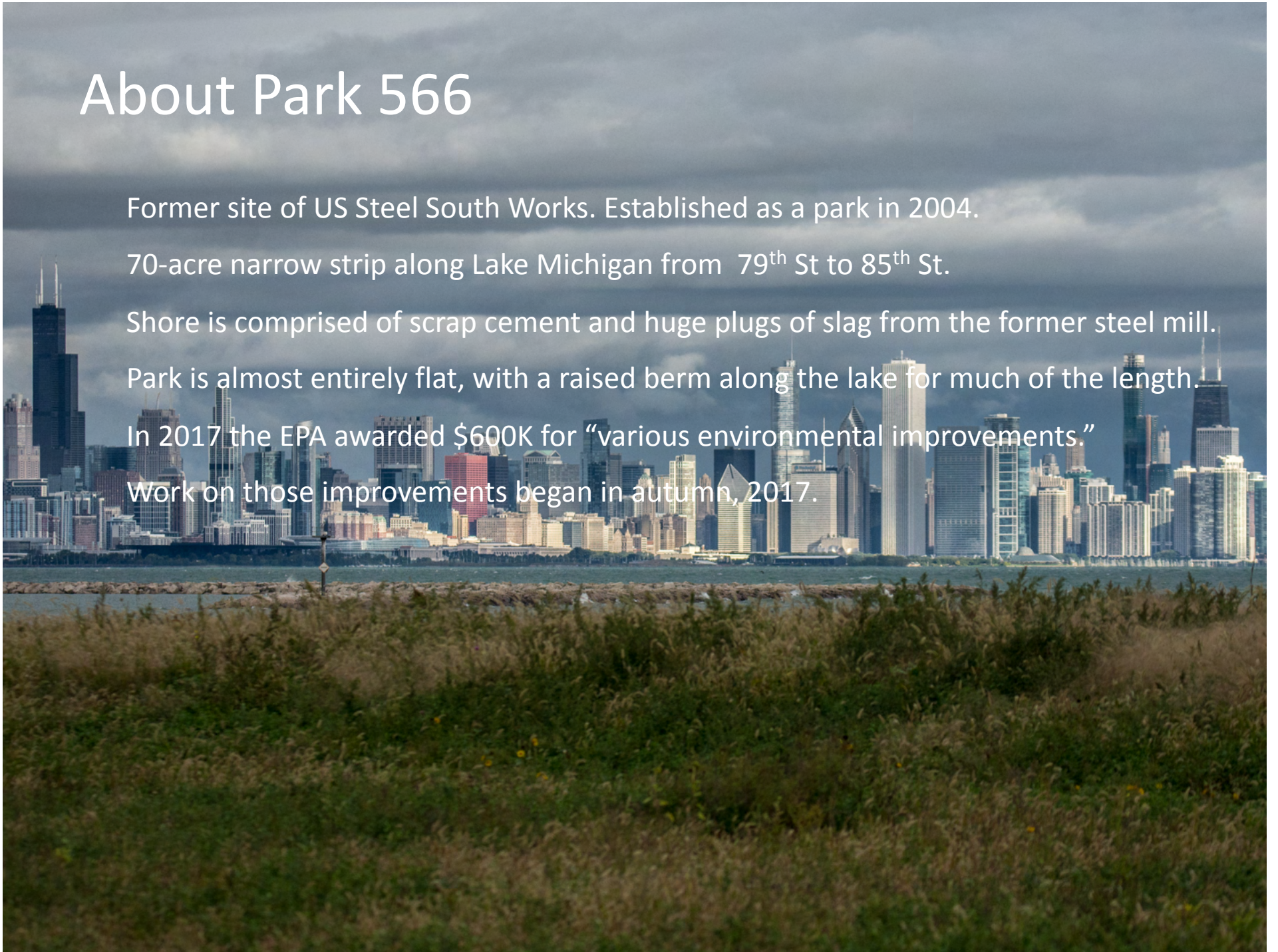
70-acre narrow strip along Lake Michigan from 79<sup>th</sup> St to 85<sup>th</sup> St.

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.

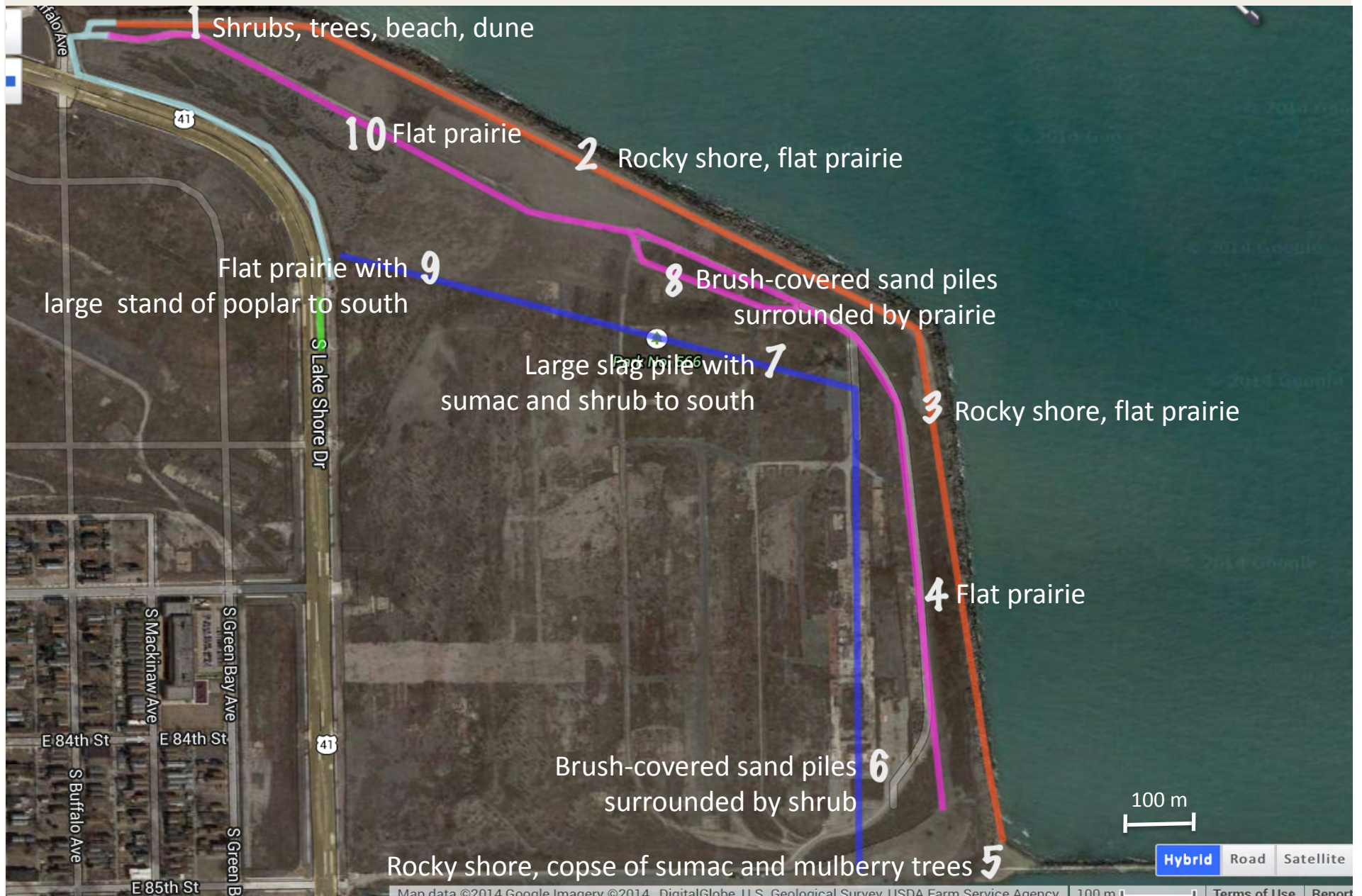
In 2017 the EPA awarded \$600K for “various environmental improvements.”

Work on those improvements began in autumn, 2017.





# Habitat Features of Park 566





# Environmental Improvements

2017 start	Nov 30, controlled burn of entire northern half of park
2018 key actions	<ul style="list-style-type: none"><li>• Cleared small trees and brush, especially area 1</li><li>• Cleared and planted dune area – Burr Oak, Jack Pine, dune grasses, prairie grasses</li><li>• Broadcast a mix of prairie seeds over entire park</li><li>• Sprayed to eliminate invasive plants</li><li>• Mowed to cut back invasives and assist sprouting prairie grasses</li><li>• Planted 400 shrubs and small trees on the berm in Area 1</li><li>• Erected ropeway and split-rail fencing to limit access to planted areas</li></ul>
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.



# Environmental Improvements

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



# Environmental Improvements

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.

## 2020 compared with previous years:

- There was no broadcast seeding in end 2019, so any burning and cutting that was done in 2020 was in service of seeding done in end 2018 and early 2019.
- There were no new plantings and no broadcast seeding in 2020.



# Review of Procedure

Bird the park consistently, keeping records of all birds sighted

- Species
- Frequency/Count
- Nature of the presence



Data for the study were gathered from:

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 87 followed a fixed route, 164 were of varied routes

## NOTE:

Number of observers continues to increase as park becomes more popular as a birding site.

*\*\*All wildlife photos in this presentation were taken by Dan Lory at Park 566 in 2020.*



# State of the Birds over time

Prior to 2015: No recorded birding outings

2015-2017:

- 30 birding outings per year by about 20 different individuals (as per eBird)
- 168 bird species observed

2018

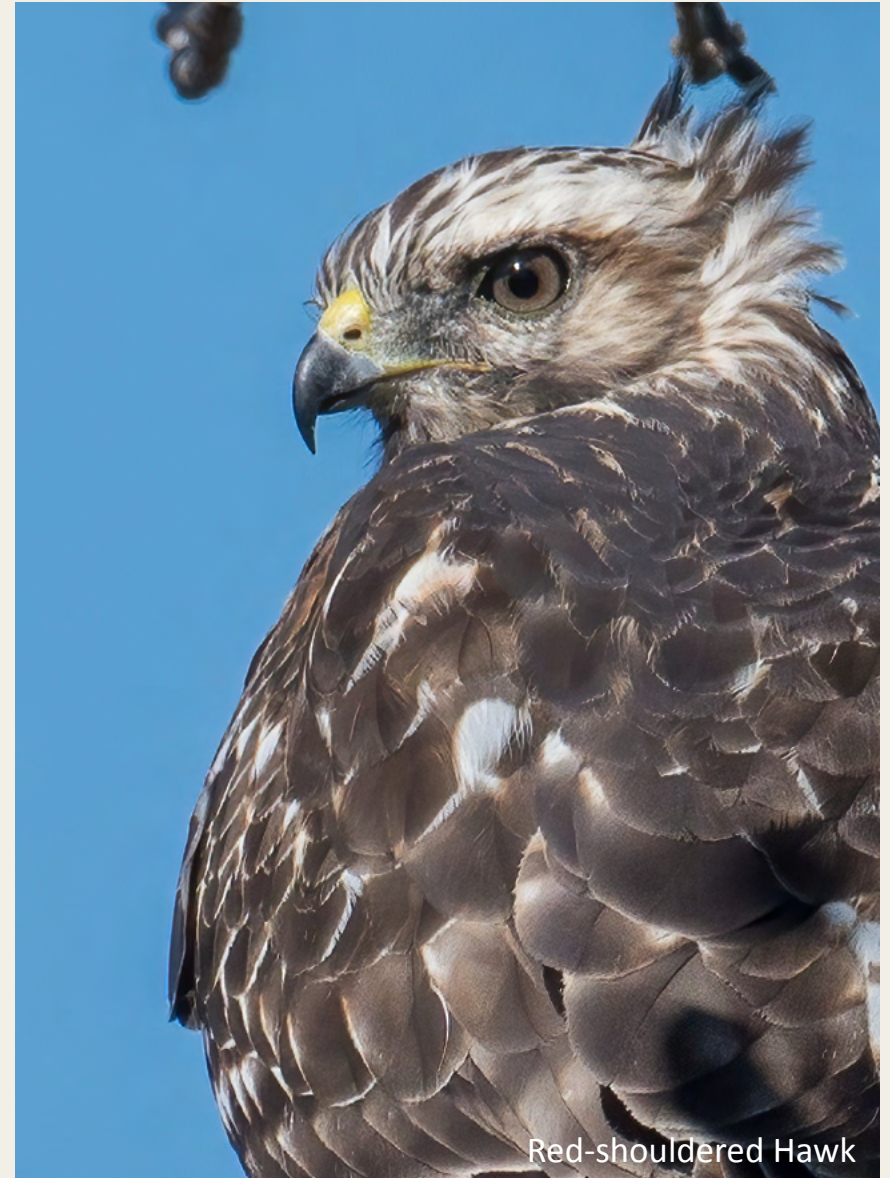
- 270 birding outings by 47 individuals
- 197 species observed
- Park 566's lifetime species count: 215

2019

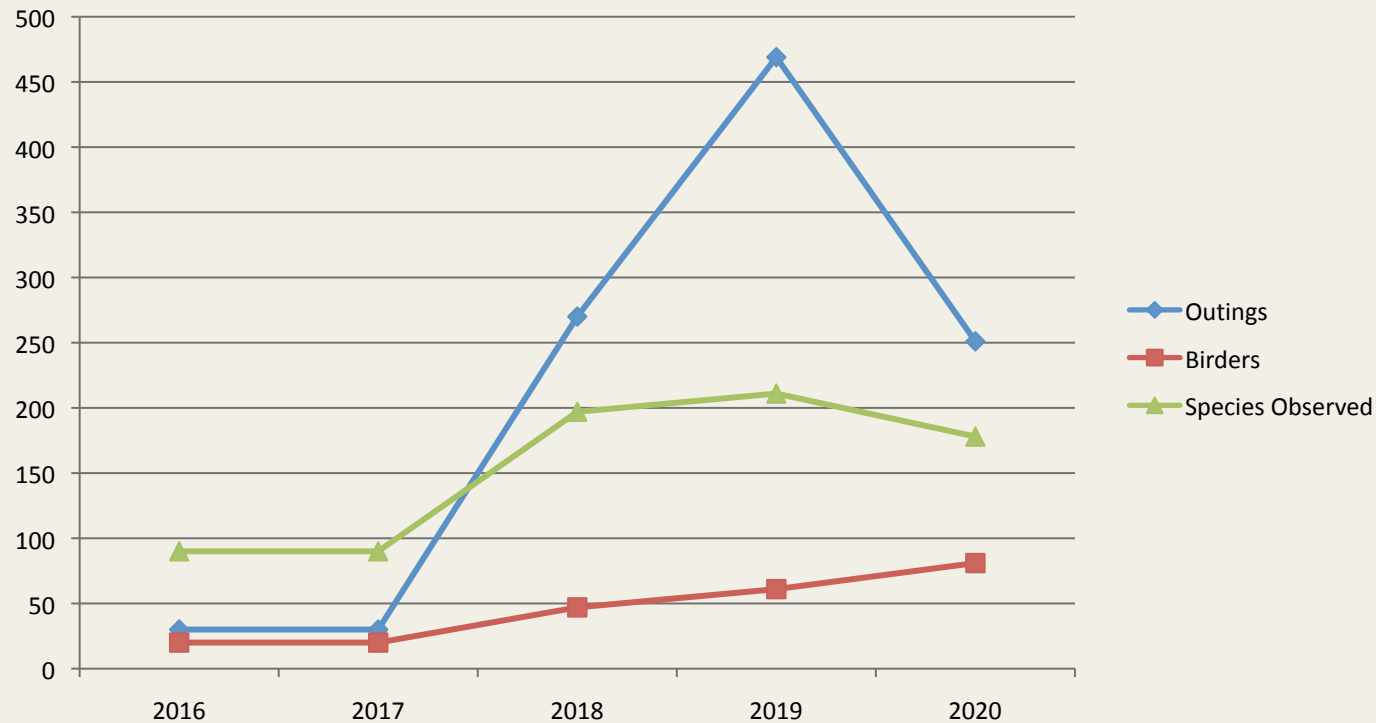
- 469 birding outings by 61 individuals
- 211 species observed
- Park 566's lifetime species count: 234

2020

- 251 birding outings by 81 individuals
- 178 species observed
- Park 566's lifetime species count: 243



# State of the Birds over time



## 2020 compared with previous years:

- As expected, the number of outings and species observed dropped dramatically in 2020, due to park closure during peak birding period.
- However, there has been a steady increase in the number of birders visiting the park, even in 2020, despite the park's closure Apr-June.



# Results 2020: Bird's-eye Overview

In 2020, 178 bird species were observed

81 birders submitted 251 checklists across 149\* days.

\* the park was closed for 90 days due to COVID restrictions

9 new species were added to the Park's record.



Red-breasted Merganser

Total species count for Park 566 is now 243 species

Park 566 is ranked #21 among Cook County's birding hotspots



*Birds of Park 566, 2020*

## Results: 2020 Bird's-eye Overview

### Bottom Line:

Despite the park being inaccessible from March 26 to June 25 during the peak migration period, data point to a continuing, vibrant presence of migrant and resident birds.

Ruddy Duck





## Threatened and Endangered Species\*

1 of the 6 species listed as **Threatened Species** was observed in Park 566:

Osprey

4 of the 23 species listed as **Endangered Species** were observed:

Black-crowned Night Heron

Short-eared Owl

Northern Harrier

Yellow-headed Blackbird



\* *Checklist of IL Endangered and Threatened Animals and Plants, 2020*

IL Endangered Species Protection Board

*Birds of Park 566, 2020*

# Birds of Concern\*

**Grassland Habitat** Birds of Concern  
observed at Park 566:

7 of the 9 species listed by BCN

Grasshopper Sparrow (nested)

American Kestrel (nested)

Dickcissel (nested)

Eastern Meadowlark

Bobolink

Sedge Wren

Northern Harrier



Eastern Meadowlark

\* 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\*

## **Shrubland Habitat** Birds of Concern:

4 of the 10 species listed by BCN

Brown Thrasher (nested)

Willow Flycatcher

Field Sparrow (nested)

Eastern Kingbird (nested)



Brown Thrasher



Eastern Kingbird

\* 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:

7 of the 12 species listed by BCN

Red-headed Woodpecker

American Woodcock

Northern Flicker

Chimney Swift

Yellow-billed Cuckoo

Veery

Red-shouldered Hawk



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 observed:

7 of the 17 species listed by BCN

Black-crowned Night Heron

Yellow-headed Blackbird

Pied-billed Grebe

Wilson's Snipe

Marsh Wren

Virginia Rail

Sora

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



Marsh Wren

# Nesting Species

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

Song Sparrow  
Field Sparrow  
Grasshopper Sparrow  
House Wren  
Brown Thrasher  
Dickcissel  
Eastern Kingbird  
American Kestrel  
Spotted Sandpiper



Spotted Sandpiper juvenile



## Species reported for the first time - 9

Sabine's Gull  
Parasitic Jaeger  
Red-shouldered Hawk  
Long-eared Owl  
Tufted Titmouse  
White-winged Crossbill  
Purple Finch  
Eurasian Tree Sparrow  
Yellow-headed Blackbird



Red-shouldered Hawk



## 2020 vs 2019: Tentative Conclusions

With a 3-month gap in the data for 2020, it is best to refrain from drawing year-on-year conclusions. Details by group on following pages.



# Sparrows

- 17 species were observed in 2020.
  - vs 18 species in 2019, 14 in 2018
- Evidence of breeding:
  - Song Sparrow
  - Field Sparrow
  - Grasshopper Sparrow



American Tree Sparrow



Grasshopper Sparrow

# Sparrows

- Significant frequency (10 days or more, despite no data for Apr-June)  
Savannah, Lincoln's, Dark-eyed Junco,  
White-crowned, White-throated, Fox,  
American Tree, Swamp, Song  
Field, Grasshopper
- Occasional (3-9 days)  
Chipping,  
Clay-colored  
Eastern Towhee
- Rare  
LeConte's, Vesper  
Nelson's  
Eurasian Tree  
Sparrow
- Never observed  
Henslow's Sparrow



LeConte's Sparrow  
photobombing a  
Common Redpoll



# Warblers

- 21 species were observed in 2020. (N.B.: no data for Apr-June)  
vs 26 species in 2019, 24 in 2018
- No clear evidence of nesting by any warbler species



Blackpoll Warbler



Black-throated Green Warbler



Cape May Warbler

# Warblers

Frequent (8 days, despite lack of data from Apr-June)

Palm, Common Yellowthroat, Yellow-rumped,  
Yellow, Blackpoll, Magnolia

Occasional (3-7 days)

Tennessee, Cape May, Orange-crowned,  
Nashville, Black-and-white, American Redstart

Rare (1 or 2 days)

Connecticut, Chestnut-sided, Mourning,  
Northern Waterthrush, Wilson's,  
Bay-breasted, Black-throated Green,  
Canada, Ovenbird



Northern Waterthrush



Connecticut Warbler



# Raptors, Birds of Prey

## Hawks, Vultures

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



Cooper's Hawk



Northern Harrier

# Raptors, Birds of Prey

Falcons (year-round, frequent)

American Kestrel

Merlin

Peregrine Falcon

Owls (seasonal)

Short-eared Owl

Snowy Owl

Great Horned Owl



American Kestrel



Peregrine Falcon



# Shorebirds, Rails, Sandpipers

*Birds of Park 566, 2020*

## Frequent

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

## Occasional

- Virginia Rail

## Rare

- Semipalmated Plover,
- Sandhill Crane, Dunlin, Sora
- Solitary Sandpiper, Sanderling
- Wilson's Snipe, Woodcock



Sandhill Crane



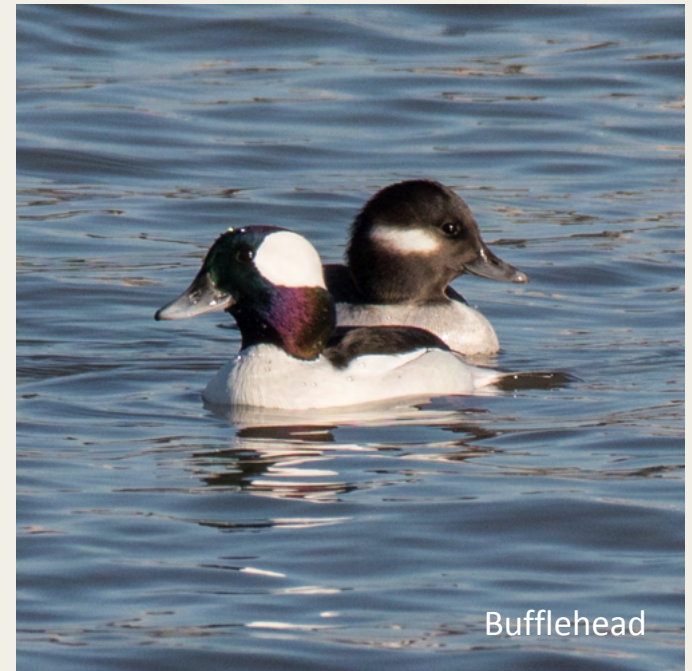
Spotted Sandpiper

# Waterfowl, Grebes, etc

## Frequent

Canada Goose, Mallard  
Red-breasted Merganser  
Common Merganser, Greater Scaup  
Lesser Scaup, White-winged Scoter  
Black Scoter, Common Goldeneye  
Double-crested Cormorant  
Horned Grebe, Redhead, Bufflehead  
Common Loon  
Red-throated Loon  
Canvasback  
Wood Duck  
Long-tailed Duck  
Green-winged Teal

*Birds of Park 566, 2020*



Bufflehead



White-winged Scoter



# Waterfowl, Grebes, etc

## Occasional

- Blue-winged Teal
- Pied-billed Grebe
- Hooded Merganser
- Ring-necked Duck

## Rare

- Mute Swan, Northern Shoveler
- Gadwall
- Greater White-fronted Goose
- Neotropic Cormorant
- Surf Scoter
- Ruddy Duck



Green-winged Teal



Horned Grebe

# Gulls, Terns

## Frequent

Ring-billed Gull

Herring Gull

Caspian Tern

## Rare

Great Black-backed Gull

Lesser Black-backed Gull

Bonaparte's Gull

Iceland Gull

Glaucous Gull

Parasitic Jaeger

Sabine's Gull



Herring Gull



Iceland Gull (Thayer's)



# Flycatchers, Vireos

## Frequent

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

## Occasional

- Eastern Wood-Pewee
- Willow Flycatcher
- Red-eyed Vireo

## Missing in 2020 were:

- Great Crested Flycatcher
- Yellow-bellied Flycatcher
- Alder Flycatcher



Least Flycatcher



Eastern Phoebe

# Thrushes

## Frequent

- American Robin
- Hermit Thrush
- Swainson's Thrush

## Rare

- Veery
- Eastern Bluebird
- Gray-cheeked Thrush



Gray-cheeked Thrush

# Wrens

## Frequent

- House Wren, Winter Wren

## Rare

- Marsh Wren, Sedge Wren



Winter Wren



# Finches, etc

## Frequent

American Goldfinch

House Finch

Common Redpoll (after 2-yr absence)

Pine Siskin (unusually high count)

## Rare

White-winged Crossbill

Purple Finch

*Birds of Park 566, 2020*





# Blackbirds, Field and Meadow Birds

## Summer

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



Baltimore Oriole



Orchard Oriole



# Blackbirds, Field and Meadow Birds

## Occasional Winter\*

- Snow Bunting
- Lapland Longspur
- Horned Lark

\* Less frequent than previous years, probably because the park was not seeded in the 2019-20 winter.



Horned Lark



Snow Bunting



Lapland Longspur



# Thrashers, Pipits, etc.

Frequent/Occasional  
European Starling  
Brown Thrasher (nested)  
Gray Catbird  
American Pipit



Brown Thrasher



European Starling



*Birds of Park 566, 2020*

# Woodpeckers, Creepers, etc

## Frequent/Occasional

Northern Flicker

Downy Woodpecker

Yellow-bellied Sapsucker

## Rare

Red-headed Woodpecker

Red-breasted Nuthatch

White-breasted Nuthatch

Red-bellied Woodpecker

Brown Creeper



Red-breasted Nuthatch

# Swallows, Nightjars, Swifts

## Frequent/Occasional

Northern Rough-winged Swallow

Barn Swallow

Chimney Swift

Tree Swallow

## Rare

Bank Swallow

Cliff Swallow

\* Purple Martin  
not observed



Chimney Swift



Northern Rough-winged Swallow



*Birds of Park 566, 2020*

# Rare Bird Surprise Visitors

Le Conte's Sparrow, Nelson's Sparrow  
White-winged Crossbill  
Sabine's Gull  
Parasitic Jaeger



Nelson's Sparrow



White-winged Crossbill

# And assorted others





# Butterflies and Moths

*Birds of Park 566, 2020*



Garden Webworm Moth



Armyworm Moth



Pearl Crescent



Soft-lined Wave (tentative)



# Dragonflies



Carolina Saddlebags



Wandering Glider



Yellow-legged Meadowhawk



Common Green Darner



# Conclusion

As year three of the restoration work ended, the following could be noted:

Some prairie grasses and flowers have established a foothold, notable especially in the beach area.

Newly planted shrubs and trees are in their third year of growth, with remarkably good survival rate.

Three years of data of avian presence and activity have been established.

An asterisk has to be placed on 2020 because of the absence of birding data from April through June. Despite this, it is evident there is a vibrant array of bird activity in the park.

Dan Lory, February 2021