

Breeding Birds
Surveys Demonstrate
the Importance of
Cleveland Metroparks

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Birds in Decline!



Wednesday November 06, 2019

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Tags: birds | decline | northamerica

N America's Bird Population Has Declined by 30M Since 1970



LISTEN EXPLORE EDUCATE EVENTS



09/20/2019

A Troubling Decline In North American Birds

11:09 minutes



LISTEN ON SOUNDCLOUD MORE FROM THIS EPISODE



OPINION | LETTERS

What's Causing the Decline Of Our Bird Population?

This is a disaster caused by human behavior. To put the blame on climate change is a stretch.

Oct 2, 2019 3:20 pm ET



T-MOB FOR BU

CHA A W



CBS NEWS October 7, 2019, 3:17 PM

Nature up close: The massive decline of bird populations

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Verne Lehmborg

A group of prothonotary warblers and one worm-eating warbler enjoy a drink, just after arriving on the Texas coast from South America during spring migration.

State Listed Species

State Listed Bird Species documented in Cleveland Metroparks

Endangered - 11

Threatened - 6

Species of Concern - 20

Special Interest – 35



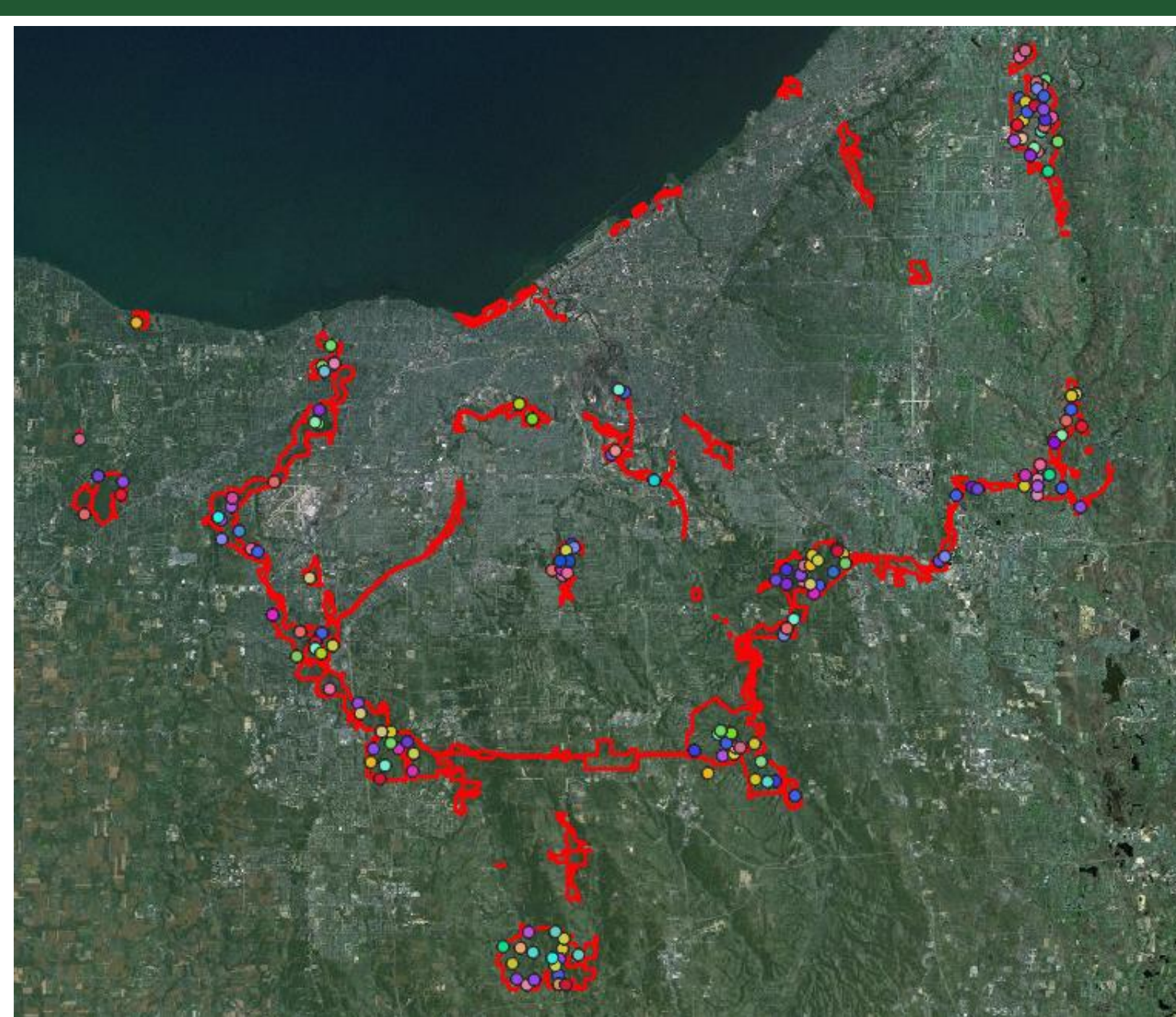
Why Breeding Birds?

- Counts allow us to track changes in bird populations.
- If a piece of land is being developed...the likely impact of the development.
- Information on population sizes of individual species can be used to set priorities.
- Monitoring plays a role in ascertaining the success or failure —these actions might be the acquisition of land to protect particular species, the adoption of new management practices, species recovery programs, or the success of environmental policies.

Birds can be excellent barometers of wider environmental health, particularly when such assessments use summarized data from a wide range of species.

(Bibby 1999, see also Niemi et al. 1997)





164 points surveyed
(2017-2019)

~11,000 records

Plant Community -PCAP

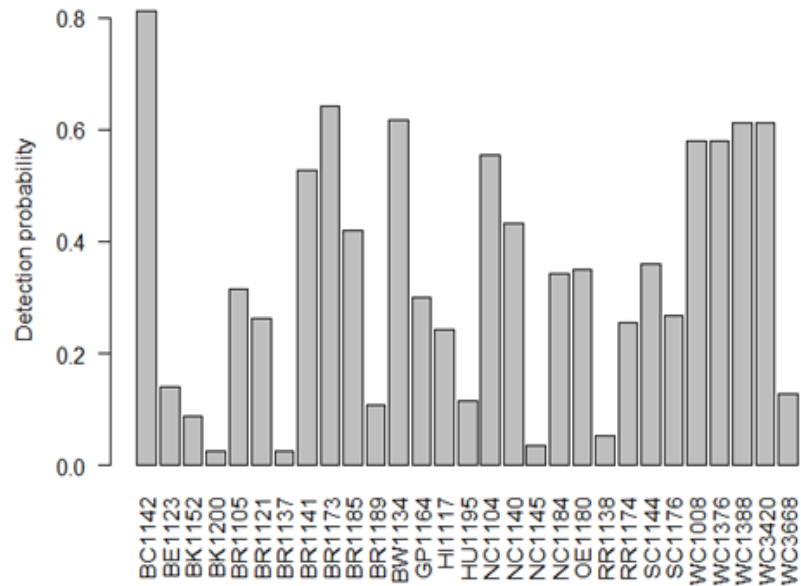
- Long-term vegetation monitoring project (400 plots)
- Identify existing composition and condition of plant communities
- Monitor how these communities change over time



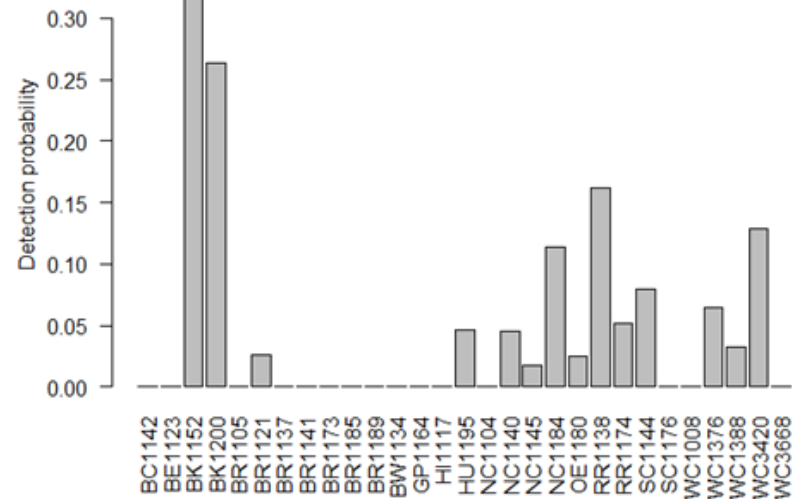
Wildlife Cameras



DEER



RDFOX





Alder flycatcher

Yellow warbler

Baltimore oriole

Redwing blackbird

Common flicker

Blue jay

Song sparrow

Common Species

Species	Detections
American Robin	585
Northern Cardinal	505
Red-eyed Vireo	501
Eastern Wood-Pewee	492
Tufted Titmouse	461
Blue Jay	460
American Goldfinch	445
Black-capped Chickadee	429
Red-bellied Woodpecker	419
Brown-headed Cowbird	359
Downy Woodpecker	357
Song Sparrow	327
White-breasted Nuthatch	312
Acadian Flycatcher	302
House Wren	285
Blue-gray Gnatcatcher	245
Gray Catbird	245
Red-winged Blackbird	227
Wood Thrush	214
Scarlet Tanager	196
Indigo Bunting	186
Chimney Swift	176
Great Crested Flycatcher	166
Cedar Waxwing	154

Species	Points Present	RA
Northern Cardinal	157	0.96
American Robin	155	0.95
Black-capped chickadee	155	0.95
Tufted titmouse	151	0.92
Blue jay	149	0.91
Red-bellied woodpecker	148	0.90
Red-eyed vireo	147	0.90
Downey woodpecker	146	0.89
American goldfinch	144	0.88
Eastern wood pewee	142	0.87
Brown-headed cowbird	138	0.84
White-breasted nuthatch	129	0.79
Blue-gray gnatcatcher	118	0.72
House wren	106	0.65
Song sparrow	105	0.64
Wood thrush	101	0.62
Great-crested flycatcher	96	0.59
Chimney swift	92	0.56
Gray catbird	92	0.56
Scarlet tanager	92	0.56
Acadian flycatcher	89	0.54
Indigo bunting	83	0.51
Red-winged blackbird	81	0.49
Cedar waxwing	79	0.48



Uncommon Species

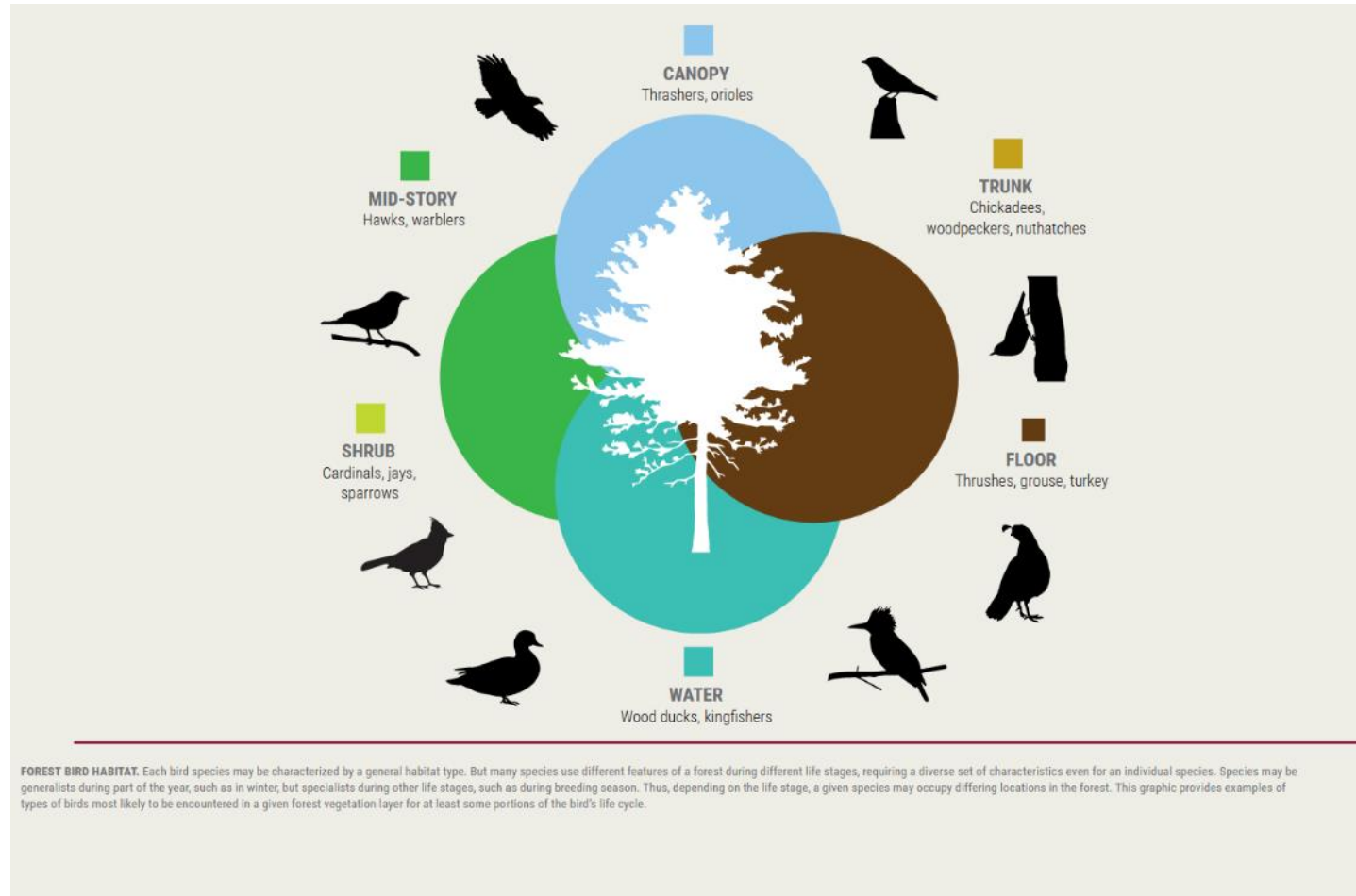
Species	Detections
Red-headed woodpecker	4
Yellow-throated warbler	4
American woodcock	3
Bank swallow	3
Eastern meadowlark	3
Hermit thrush*	3
Purple martin	3
Winter wren*	3
Wood duck	3
Yellow-shafted flicker	3
Alder flycatcher	2
American kestrel	2
Purple finch*	2
Savanna sparrow	2
Spotted sandpiper	2
Black-throated green warbler	1
Black-and-white warbler	1
Blue-headed vireo*	1
Bobolink*	1
Cerulean warbler*	1
Common nighthawk*	1
Northern parula	1
Prairie Warbler	1
Red-breasted nuthatch*	1
Rufus-sided towhee	1
Virginia rail*	1



* Indicates state listed species

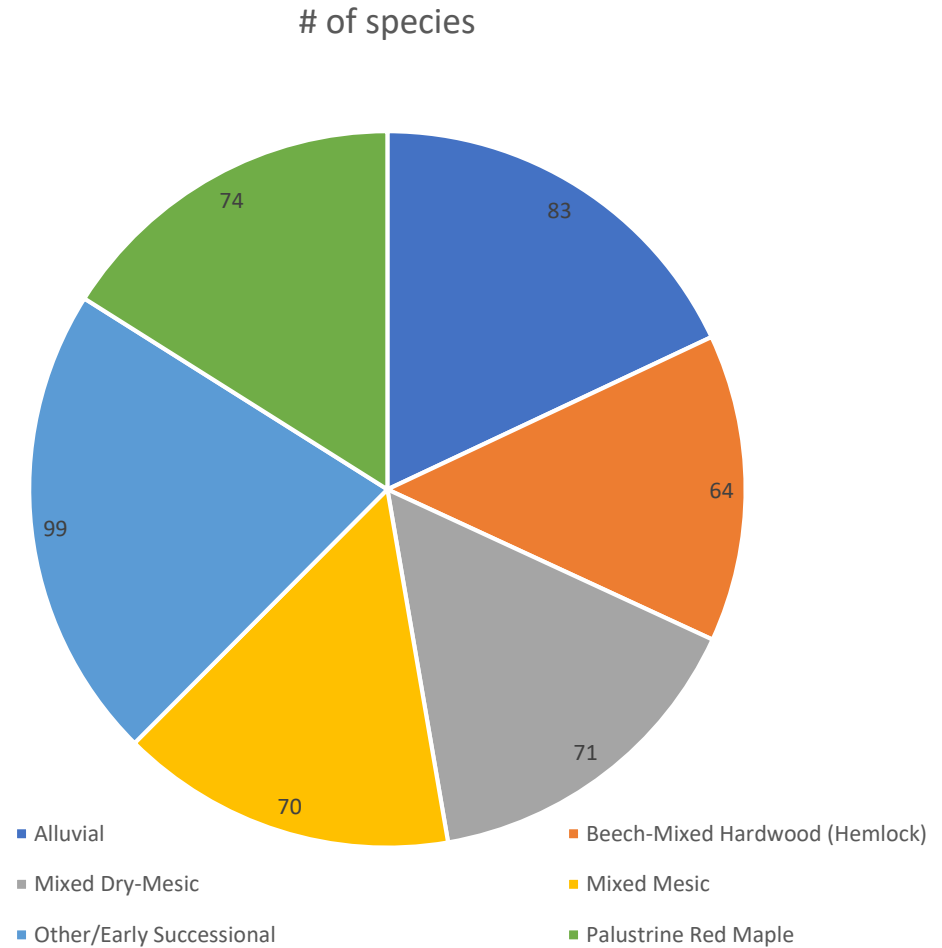


Structure

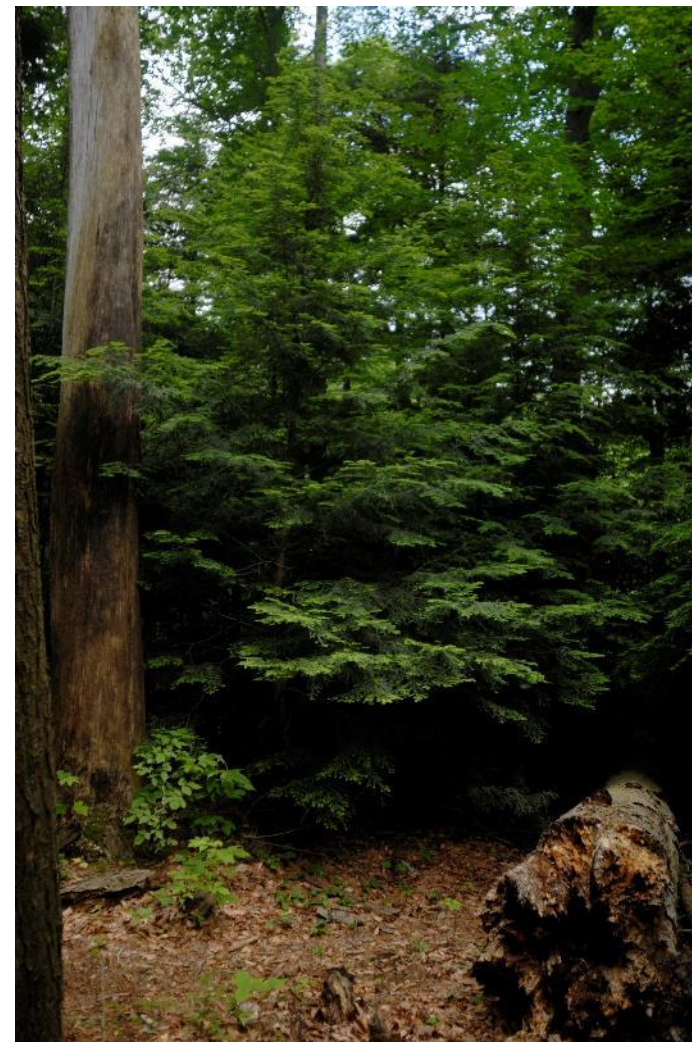
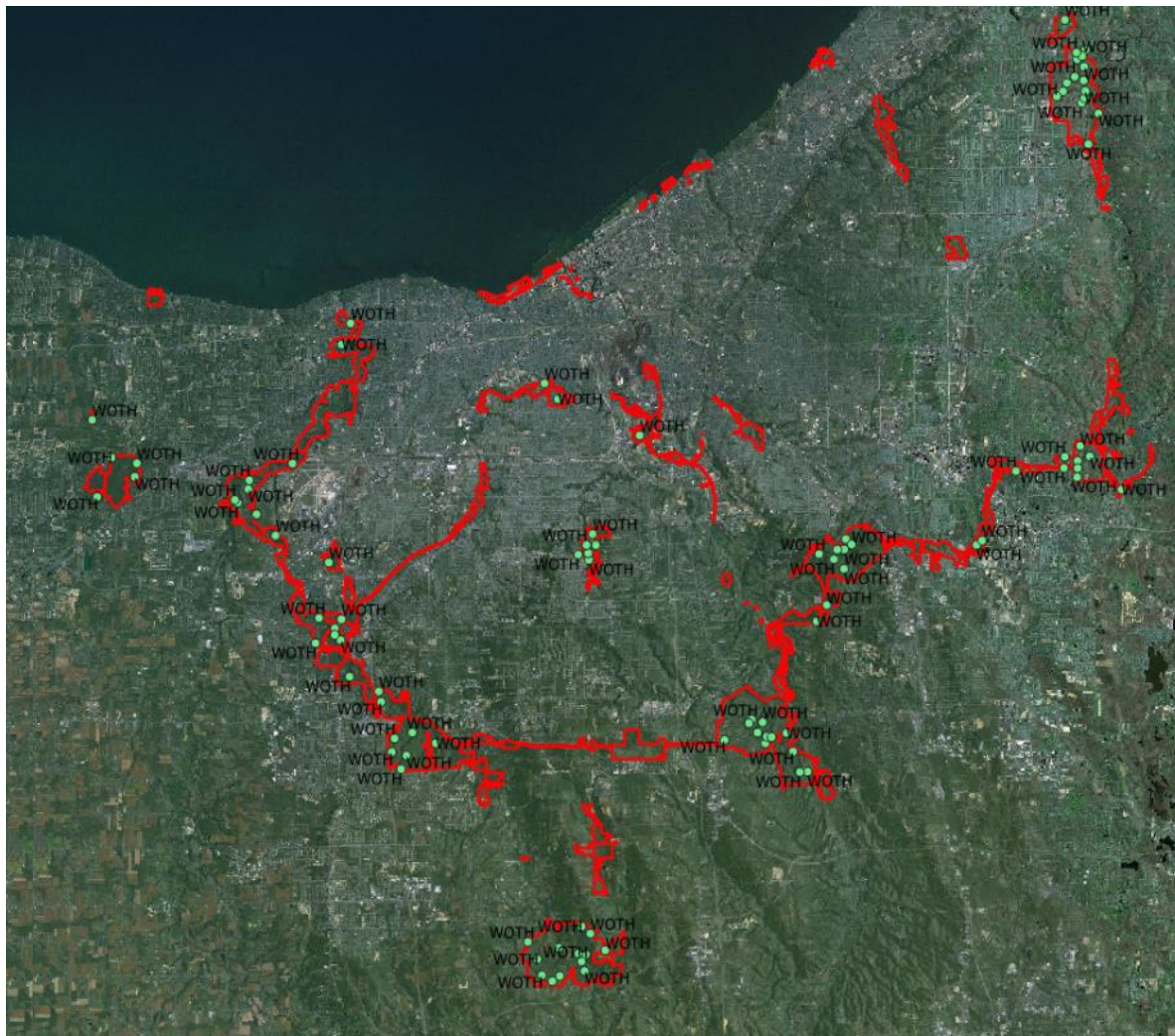


Habitat Importance

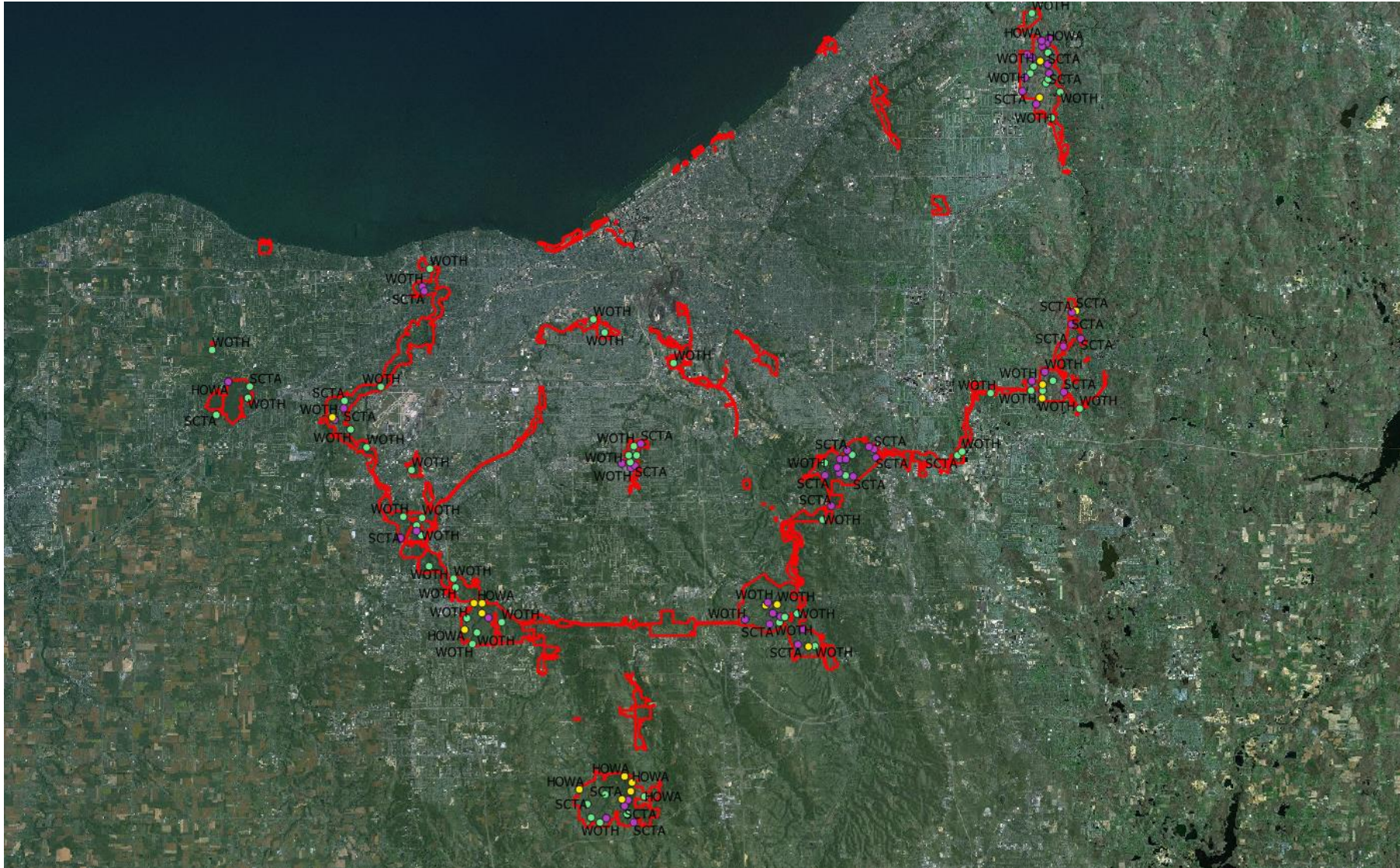
Species	Alluvial	Beech-Mixed Hardwood (Hemlock)	Mixed Dry-Mesic	Mixed Mesic	Other/Early Successional	Palustrine Red Maple
REVI	93	63	68	105	68	96
ACFL	46	50	52	91	17	40
EAWP	91	55	75	90	74	94
TUTI	82	51	66	74	85	85
BLJA	81	41	62	72	104	83
RBWO	78	36	60	69	94	67
NOCA	108	42	51	62	131	94
AMRO	116	39	69	60	160	127
BCCH	80	43	56	58	94	84
DOWO	66	38	41	57	78	66
AMGO	71	40	54	54	133	87
WBNU	58	36	47	53	50	59
SCTA	23	27	29	49	25	39
WOTH	37	28	30	46	30	40
BHCO	70	28	35	43	110	61
HOWA	31	19	23	43	8	9
BGGN	58	33	39	41	40	30
CHSW	29	30	16	29	43	22
GCFL	29	17	23	28	41	21
HAWO	17	7	24	21	11	11
AMCR	23	13	30	18	35	22
PIWO	10	10	18	18	27	10
INBU	54	15	13	17	60	24
HOWR	67	18	36	15	83	60



Habitat Structure



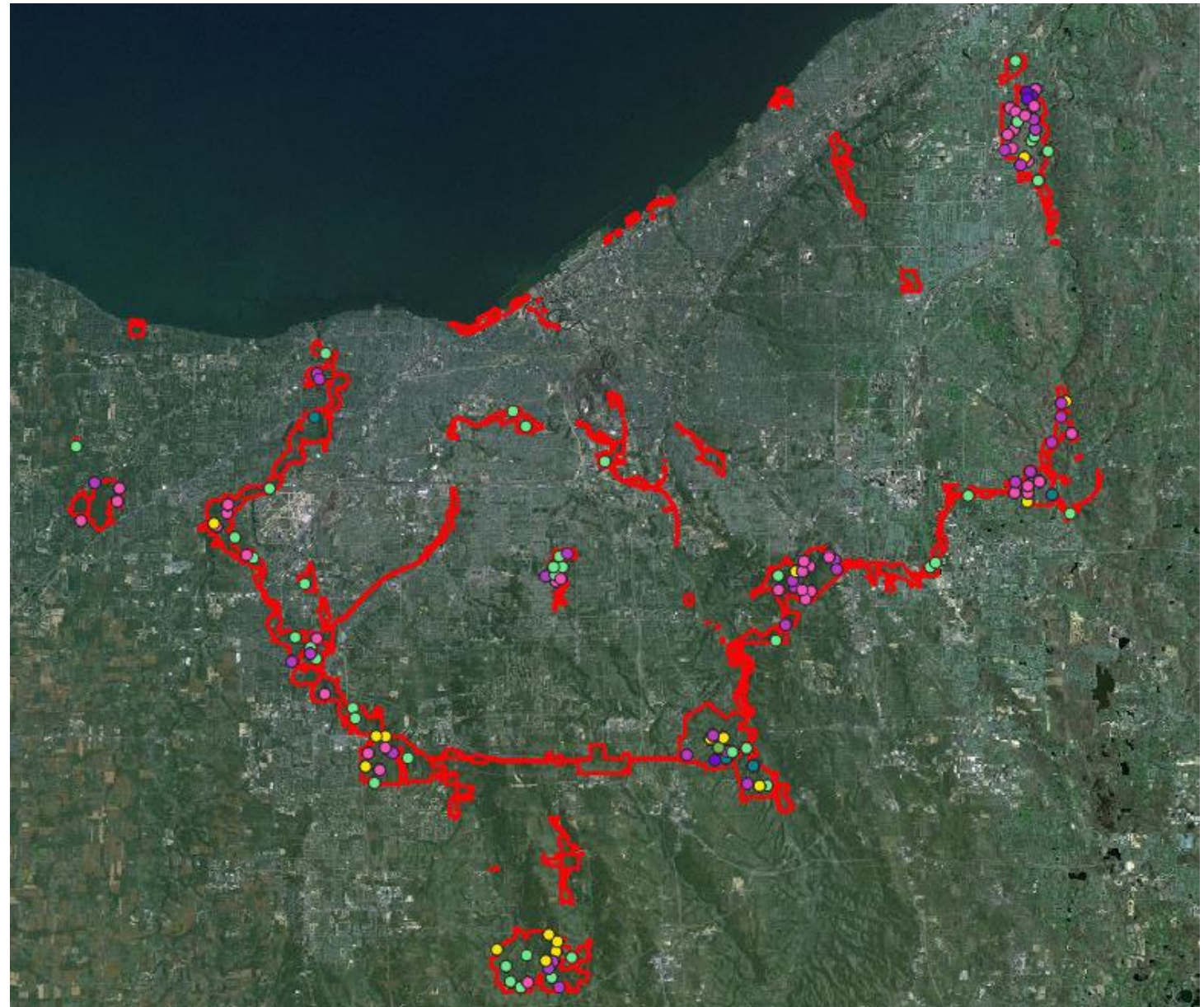
Good Stuff!



Good Habitat = "Good" Species

Species	Average of vib_i_fq_score
Hermit thrush*	86.00
Broad-winged hawk	84.00
Bobolink*	77.00
Dark-eyed junco*	76.76
Louisiana waterthrush	74.65
Northern parula	72.00
Winter wren*	71.25
Acadian flycatcher	70.79
Brown creeper*	70.29
Cerulean warbler*	69.00
Yellow-throated vireo	68.14
Hooded warbler	68.10
Yellow-throated warbler	66.73
Scarlet tanager	64.89
Barred owl	63.71
Hairy woodpecker	63.46
Yellow-shafted flicker	63.00
Ovenbird	62.68
American redstart	62.38
Yellow-billed cuckoo	62.20
White-breasted nuthatch	62.17
Veery*	62.00
Belted kingfisher	61.86
Red-eyed vireo	61.65

* Indicates state listed species



Long-term

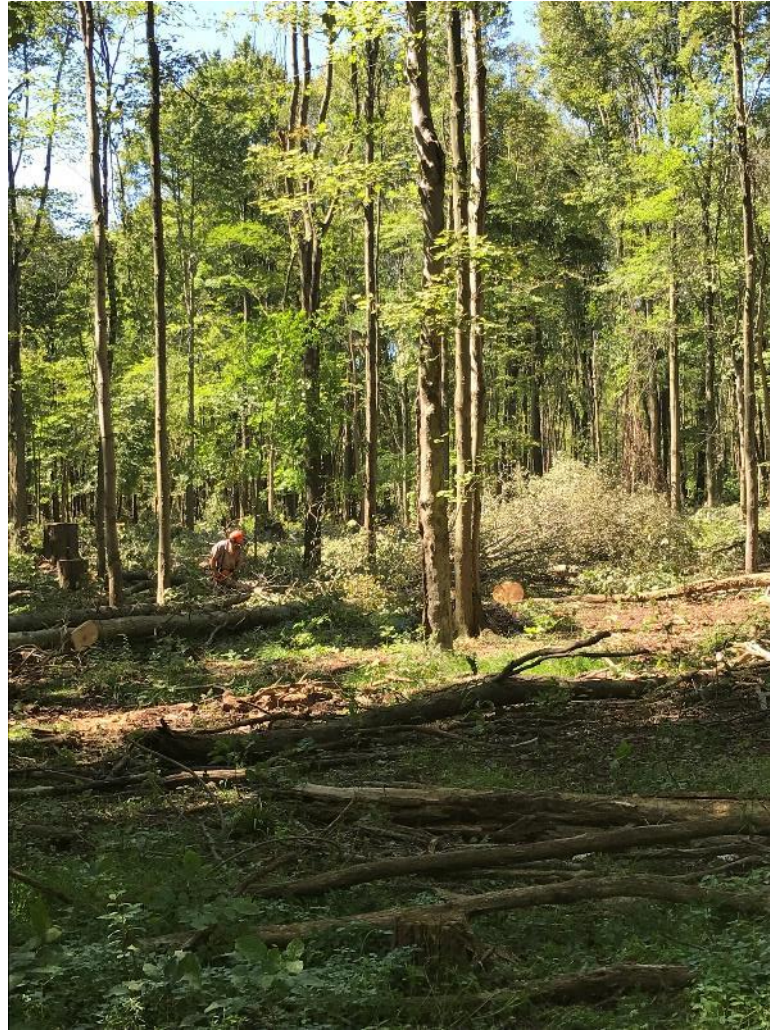
TABLE 17. Numbers of nesting pairs of birds.

Species	Numbers of Pairs			
	1932	1933	1934	1935
1. Red-eyed Vireo.....	25	36	35	30
2. Wood Thrush.....	17	25	22	11
3. Hooded Warbler.....	15	15	16	9
4. American Redstart.....	12	17	19	19
5. Oven-bird.....	11	18	16	8
6. Tufted Titmouse.....	7	8	6	7
7. Black-capped Chickadee.....	6	5	3	2
8. Eastern Wood Pewee.....	6	7	7	7
9. Scarlet Tanager.....	6	6	10	9
10. Eastern Cardinal.....	5	5	5	4
11. Yellow-throated Vireo.....	4	4	7	3
12. Acadian Flycatcher.....	3	3	6	2
13. White-breasted Nuthatch.....	3	3	4	4
14. Black-throated Green Warbler.....	3	3	5	3
15. Red-eyed Towhee.....	3	1	2	1
16. Cerulean Warbler.....	2	2	1	0
17. Northern Downy Woodpecker.....	1	4	3	2
18. Eastern Hairy Woodpecker.....	1	3	3	3
19. Northern Crested Flycatcher.....	1	2	1	2
20. Eastern Phoebe.....	1	2	0	1
21. Northern Barred Owl.....	1	1	1	1
22. Eastern Robin.....	1	1	1	1
23. Louisiana Water Thrush.....	1	1	0	1
24. Northern Pileated Woodpecker.....	1	0	0	0
25. Northern Flicker.....	0	1	0	0
26. Rose-breasted Grosbeak.....	0	1	0	1
27. Red-bellied Woodpecker.....	0	0	1	0
28. Eastern Huffed Grouse.....	?	0	0	0
29. Eastern Cowbird.....	present	present	present	present
Total pairs.....	136	174	176	134
Total individuals.....	272	348	352	268
Pairs per acre.....	2.0	2.6	2.7	2.0
Pairs per hectare.....	4.9	6.4	6.7	4.9
Average number pairs per acre, 4 years.....				2.3
Average number pairs per hectare, 4 years.....				5.7

Species (2017-2019)	Detections
Acadian Flycatcher -- ACFL	8
American Goldfinch -- AMGO	2
American Robin -- AMRO	5
Belted Kingfisher -- BEKI	1
Black-capped Chickadee -- BCCH	3
Blue Jay -- BLJA	3
Blue-gray Gnatcatcher -- BGGN	7
Carolina Wren -- CARW	1
Chimney Swift -- CHSW	1
Chipping Sparrow -- CHSP	2
Common Grackle -- COGR	1
Cooper's Hawk -- COHA	2
Downy Woodpecker -- DOWO	3
Eastern Wood-Pewee -- EAWP	8
Great Crested Flycatcher -- GCFL	1
Hairy Woodpecker -- HAWO	1
Hooded Warbler -- HOWA	1
Northern Cardinal -- NOCA	3
Red-bellied Woodpecker -- RBWO	5
Red-eyed Vireo -- REVI	8
Red-shouldered Hawk -- RSHA	1
Red-tailed Hawk -- RTHA	1
Ruby-throated Hummingbird -- RTHU	1
Scarlet Tanager -- SCTA	3
Tufted Titmouse -- TUTI	6
White-breasted Nuthatch -- WBNU	4
Total	82



Resource Management



Next Steps



- Complete remaining 47 points
- Focus on forest management locations
- Increase quality habitat for common & declining species