SPRING MIGRATION & BREEDING SEASON BIRD SURVEYS ON WETLAND RESERVE EASEMENTS IN MISSOURI 2019

Report to the Natural Resources Conservation Service, Missouri WET Biologists & WRE Landowners



MISSION

The Missouri River Bird Observatory is a 501(c)3 non-profit entity dedicated to the conservation of Missouri's migratory and resident birds through scientific research, community outreach, K-12 education and conservation policy advocacy.

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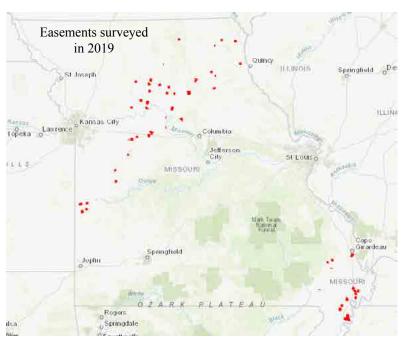
The Wetland Bird Survey project would not have been possible without the hard work of our seasonal technicians from 2015 to present.

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- MRBO surveyors received a sample of 60 wetland easements from NRCS staff. Of these, 54 sites were surveyed. Five sites were inaccessible due to the extreme flooding conditions across the state and one was not surveyed to avoid interfering with the landowner's hunting activities.
- Surveys aimed at documenting migration were conducted from late March to May 15th, beginning in southeast Missouri and ending in the northern part of the state. Breeding season surveys were conducted from May 15th to June 30th following a similar geographic pattern.
- Surveyors documented over 19,000 individual birds, almost 14,000 during migration and over 5,000 during breeding season. This is a typical migration to breeding season ratio, as more birds come through Missouri on their migratory journey than breed here. Some birds documented during the migration period also represent species that have wintered here.
- While migration is always extremely variable in terms of bird numbers and breeding season is more predictable, this year's flooding rendered many sites unusually unsuitable for species that require shallow water levels. This phenomenon resulted in lower numbers of birds overall than has been typical since 2015.

BACKGROUND & METHODS



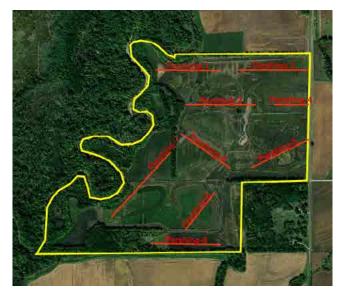
Throughout the Midwest, populations of many marsh-dwelling bird species are in decline and several are listed as species of conservation concern. Wetland habitat loss and degradation, two key factors affecting nearly 80% of migratory land and water bird species, come from agricultural activities and development. This is one of the many reasons cooperative programs with private landowners, such as the Wetland Reserve Easement Program (WREP), are crucial tools for conservation. Sites such as high-quality WREP with high resource abundance are particularly important for waterfowl and wading birds; individuals of these guilds may remain at the same site for weeks during migration stopover.

WREPs are often established for purposes of conserving game birds but clearly benefit non-game birds of many species. More than 150 species other than waterfowl use wetlands as critical wintering, breeding and migration stopover habitat. Wetland easements therefore represent an untold contribution to ecological diversity in general, while at the same time providing excellent recreational opportunities for landowners and their associates.

The Missouri River Bird Observatory (MRBO) began surveying WREP sites in 2014. Each year we survey 30-60 easements throughout the state using the line-transect method. Observers walk each transect at approximately one mile/hour, and record all birds seen and heard on an iPad application. Survey transects are systematically laid on all properties to maximize coverage of emergent marsh and mudflat habitat.



The term *emergent marsh* refers to this type of habitat where vegetation grows out of shallow sheet-water. Emergent marsh is often bordered by gradual slopes consisting of mudflats and then upland areas where the vegetation becomes slightly different. This continuum of habitat is extremely important to about 200 bird species, plus insects, amphibians and mammals. These habitats also take on floodwaters, providing a hugely valuable ecological service to everyone downstream.



An example of a survey transect design. Transects are laid out to get ideal coverage of marsh habitat. Bottomland forest and upland areas are often included in the coverage incidentally.

Structure of this Report

Unlike previous years, in which we printed separate copies of individual reports for each landowner, this year we have compiled all the wetland survey data in to this one book. Landowner names and locations are kept private by referring to each easement only by its USDA agreement number. We believed it would be of interest to landowners to be able to see data from other easements across the state. This book is separated into four sections, one for each Wetland Emphasis Team region. These regions are: Wet I (northwest; biologist Mike McClure), Wet II (northeast; biologist Shawn Duckworth), Wet III (southeast; biologist Tommy Marshall) and Wet IV (southwest, biologist Neal Young).

LETTER TO LANDOWNERS

Dear

Please accept our heartfelt thanks as conservationists for what you do to provide habitat for birds and other wildlife on your property.

You may have seen the recent news that came out from Cornell University, the Smithsonian Institution and others that we've lost about 3 billion birds (about 30% of North America's bird population) over the past 50 years. Birds associated with prairies (grasslands) are faring the worst, but other species, even some that are considered common, are not doing much better. However, the Cornell study found that this wasn't true of waterfowl and a few other bird species that inhabit wetlands – and this is largely because landowners like yourself have set aside habitat for wildlife.

The following report shows that Missouri's wetland easements provide habitat for a lot of marsh-dependent species, but also for grassland birds, forest birds and a group of birds called "aerial insectivores" – birds that forage entirely by hunting insects on the wing. These are the swifts, swallows and nighthawks, and their populations are doing badly. Your property makes a significant contribution to the conservation of all of these species.

Your easement also provides an important ecological service to humans: by taking on water that would otherwise add to downstream flooding of fields and towns. The spring and summer of 2019 saw significant floods throughout Missouri, and those would have been even worse were it not for the thousands of wetland easements that private landowners maintain across our watersheds. The background photo on this page is an example of this.

The extreme water levels this year not only made surveying quite a challenge, but also changed conditions on the ground considerably. In many places, birds that require shallow to moderate levels of water, such as herons and sandpipers, were pushed to higher areas to wade. As you probably know, it is very typical to have a far higher number and diversity of birds during migration than during breeding season. If your easement has been surveyed more than once, please note that we make every effort to time the survey dates as close as possible between years. The extremely variable nature of migration can result in remarkably different numbers of birds between years even if the habitat remains very similar.

While Missouri has over 100 bird species that nest here, we have another 200+ that only stop by during migration or winter here. Breeding birds are often more specific about their habitat requirements, so the birds that remained on your property during the breeding season indicate the quality habitat you are providing just as well as large numbers of migrants do.

As mentioned on the previous page, in this report we refer to properties only by their easement number so that all landowners' personal information remains private. Your easement # is _____; we have bookmarked its place in this report with a brochure that provides more information about the Missouri River Bird Observatory.

If you have any questions or comments on the surveys, your results, or Missouri bird conservation in general, please do not hesitate to contact us.

Sincerely,

Dana Ripper & Ethan Duke
Missouri River Bird Observatory Founders/Directors
dana.ripper@mrbo.org
(660) 837-3888
P.O. Box 16, Arrow Rock MO 65320



Total Contributions of Missouri's Wetland Easements to Bird Populations in 2019

Species	Migration	Breeding	Total
Acadian Flycatcher		7	7
Alder Flycatcher		14	14
American Bittern	71	10	81
American Coot	554	1	555
American Crow	79	28	107
American Golden Plover	14		14
American Goldfinch	85	48	133
American Kestrel	1		1
American Pipit	8		8
American Redstart	3	3	6
American Robin	34	8	42
American White Pelican	120	54	174
American Wigeon	2		2
American Woodcock	3	- The state of	3
Bald Eagle	49	17	66
Baltimore Oriole	23	27	50
Bank Swallow	10	1	11
Barn Swallow	128	67	195
Barred Owl	28	8	36
Bell's Vireo	100	95	95
Belted Kingfisher	16	8	24
Black-and-White Warbler	9	1	10
Black-capped Chickadee	35	7	42
Black-crowned Night-		-	The same of
Heron	6	- 10	6
Black-necked Stilt		12	12
Black-throated Green			- 10.11
Warbler	1		
Blackbird spp.	11		11
Blue Grosbeak		11	11
Blue Jay	138	26	164
Blue-gray Gnatcatcher	88	82	170
Blue-winged Teal	2723	21	2744
Blue-winged Warbler	5		5
Bobolink	1	2	3
Bonaparte's Gull	1		1
Brown Thrasher	73	20	93
Brown-headed Cowbird	265	110	375
Bufflehead	2		2
Canada Goose	417	233	650
Carolina Chickadee	21	4	25
Carolina Wren	61	42/	103
Caspian Tern	1		1
	1		ATTENDED TO

	3.61	D 1'	m . 1
Species	Migration	Breeding	Total
Cattle Egret	1	1	2
Cedar Waxwing		32	32
Chickadee spp.	6	5	11
Chimney Swift	14	2	16
Chipping Sparrow	8	5	13
Cliff Swallow	9	42	51
Common Gallinule	2	1	3
Common Grackle	309	159	468
Common Merganser	1		1
Common Nighthawk		1	1
Common Yellowthroat	210	457	667
Cooper's Hawk	2		2
Crow spp.	3	2	5
Dickcissel	8	502	510
Double-crested			
Cormorant	288	2	290
Downy Woodpecker	45	29	74
Duck spp.	26	25	51
Eastern Bluebird	27	8	35
Eastern Kingbird	23	78	101
Eastern Meadowlark	121	47	168
Eastern Phoebe	22	5	27
Eastern Townhee	33	12	45
Eastern Wood Pewee		52	52
European Starling	62	47	109
Field Sparrow	242	96	338
Fish Crow	64	15	79
Flycatcher spp.	3	2	5
Forster's Tern	2	1	3
Fox Sparrow	2		2
Franklin's Gull	18		18
Gadwall	79		79
Golden-crowned Kinglet	2		2
Golden-winged Warbler	6	A 180	6
Grasshopper Sparrow	8	3	11
Great Blue Heron	70	134	204
Great Egret	80		
	80	96	176
Great Arested Elyaptahar		16	8
Great-crested Flycatcher	16	46	62
Great-tailed Grackle	3	100	3
Greater White-fronted Goose	4		4
Greater Yellowlegs	234		234
Greater removings	234		234

Total Contributions of Missouri's Wetland Easements to Bird Populations in 2019

	Species	Migration	Breeding	Total		Species
	Green Heron	12	31	43		Pileated Woodpec
	Green-winged Teal	209	2	211		Prothonotary War
	Gray Catbird	18	73	91		Purple Martin
	Hairy Woodpecker	5	4	9		Red-bellied Wood
	Henslow's Sparrow	5	3	8		Red-eyed Vireo
	Hooded Merganser	67	9	76		Red-headed Wood
	Horned Lark	15	3	18	N.	Red-shouldered H
	House Sparrow		7	7	т.	Red-tailed Hawk
18	House Wren	26	11	37		Red-winged Black
	Indigo Bunting	11	421	432		Ring-billed Gull
	Kentucky Warbler		1	1		Ring-necked Ducl
	Killdeer	102	97	199		Rock Pigeon
	King Rail	2	2	4		Rose-breasted Gro
	Least Bittern	-1	27	28		Ruby-crowned Ki
	Least Flycatcher	3		3		Ruby-throated
	Least Sandpiper	19	1	19		Hummingbird
	Lesser Scaup	17		17		Ruddy Duck
	Lesser Yellowlegs	241		241		Rusty Blackbird
	Lincoln's Sparrow	8		8		Sandhill Crave
	Long-billed Dowitcher	53	-	53		Sandpiper spp.
	Louisiana Waterthrush	6	8	14		Savanna Sparrow
	Magnolia Warbler		3-1	1		Scarlet Tanager
	Mallard	113	73	186		Scissor-tailed Flyd
	Marsh Wren	86	2	88		Sedge Wren
	Mississippi Kite		4	4		Sharp-shinned Ha
	Mourning Dove	100	67	167		Slate-colored June
	Nashville Warbler	2		2		Snow Goose
-	Nelson's Sparrow	-4-			7	Solitary Sandpipe
	Northern Bobwhite	34	46	80		Song Sparrow
	Northern Cardinal	256	254	510		Sora
	Northern Flicker	26	11	37		Sparrow spp.
	Northern Harrier	21	1	21	-	Spotted Sandpiper
	Northern Mockingbird	1	3	4	-	Summer Tanager
	Northern Parula	35	37	72	di	Swainson's Thrus
	Northern Pintail	2	3	5	1	Swallow spp.
ľ	Northern Rough-winged				-	Swamp Sparrow
	Swallow	55	31	86		Tennessee Warble
	Northern Shoveler	540		540		Tree Swallow
	Northern Waterthrush	21		21		Tufted Titmouse
	Orange-crowned Warbler	1		1		Turkey Vulture
	Orchard Oriole	5	47	52	-	Vesper Sparrow
-	Ovenbird	2	5	7	-	Virginia Rail
	Pectoral Sandpiper	449		449	4	Warbling Vireo
	Peregrine Falcon	2		2	-	Western Palm War
	Pied-billed Grebe	93	22	115		White-breasted No

Species	Migration	Breeding	Total
Pileated Woodpecker	18	18	36
Prothonotary Warbler	5	64	69
Purple Martin	3	19	22
Red-bellied Woodepcker	70	56	126
Red-eyed Vireo	3	12	15
Red-headed Woodpecker	37	20	57
Red-shouldered Hawk	16	11	27
Red-tailed Hawk	9	3	12
Red-winged Blackbird	202	6	208
Ring-billed Gull	8		8
Ring-necked Duck	35		35
Rock Pigeon		21	21
Rose-breasted Grosbeak	10		10
Ruby-crowned Kinglet	27		27
Ruby-throated			
Hummingbird		4	4
Ruddy Duck	17		17
Rusty Blackbird	7		7
Sandhill Crave	6	2	8
Sandpiper spp.	450	2	452
Savanna Sparrow	71		71
Scarlet Tanager	1		1
Scissor-tailed Flycatcher	1	-	1
Sedge Wren	11	5	16
Sharp-shinned Hawk			1
Slate-colored Junco	1		1
Snow Goose	7	1	8
Solitary Sandpiper	47	2	49
Song Sparrow	181	99 -	280
Sora	333		333
Sparrow spp.	52		52
Spotted Sandpiper	19	7	26
Summer Tanager	31-	10	11
Swainson's Thrush	1		1
Swallow spp.	13	7	20
Swamp Sparrow	469		469
Tennessee Warbler	1		1
Tree Swallow	895	45	940
Tufted Titmouse	55	24	79
Turkey Vulture	77	32	109
Vesper Sparrow	1		1
Virginia Rail	35		35
Warbling Vireo	33	54	87
Western Palm Warbler	11		11
White-breasted Nuthatch	11	6	17

TOTAL CONTRIBUTIONS OF MISSOURI'S WETLAND EASEMENTS TO BIRD POPULATIONS IN 2019

Easement Coverage and Bird Detections

2015

30 easements surveyed 153 species detected 10,248 total detections:

> 8,123 during migration 2,125 during breeding season

> > 2016

58 easements surveyed 193 species detected 24,523 total detections:

17,575 during migration 6,948 during breeding season

2017

32 easements surveyed 188 species detected 18,649 total detections:

11,715 during migration 6,934 during breeding season

2018

62 easements surveyed 216 species detected 37,349 total detections:

26,904 during migration 10,445 during breeding season

2019

54 easements surveyed 191 species

19,209 total detections 13,929 during migration

13,929 during migration 5,290 during breeding season

Species	Migration	Breeding	Total
White-crowned Sparrow	8		8
White-eyed Vireo	5	17	22
White-rumped Sandpiper		3	3
White-throated Sparrow	103	1578	103
Wild Turkey	13	3	16
Willow Flycatcher		10	10
Wilson's Snipe	382		382
Wilson's Warbler		all desired	1
Winter Wren	1		1
Wood Duck	192	345	537
Wood Thrush	2	8	10
Woodpecker spp.	3		3
Yellow Rail	2		2
Yellow Warbler	24	20	44
Yellow-billed Cuckoo		73	73
Yellow-breasted Chat	4	72	76
Yellow-crowned Night-			
Heron	2	11	13
Yellow-headed Blackbird	13		13
Yellow-rumped Warbler	96		96
Yellow-throated Vireo	14	17	31
Yellow-throated Warbler	1	2	3
	13929	5290	19209



RAIL & BITTERN DETECTIONS 2015-2019

This project was originally started to document rails and bitterns, collectively known as "secretive marshbirds" for their cryptic habits. In 2014 we began recording all birds seen and heard, regardless of species, but remain interested in tracking numbers of secretive marshbirds. Most of the species in this group are considered to be of conservation concern, as their numbers appear to be declining throughout their ranges. Our surveys suggest that current numbers in Missouri appear to be stable.

	20	15	20	16	20	17	20	18	20	19
Species	Migration	Breeding	Migration	Breeding	Migration	Breeding	g Migration	Breeding	Migration	Breeding
American Bittern	36	9	30	2	15	5	61	1	71	10
King Rail	$\sim 1/$	2	3	5	7	3	5	= 3	2	2
Least Bittern		6	4	12	6	31	3	23	1	27
Sora	/129	7	156	7	173	6	66	8	333	
Virginia Rail	7		3		2		26		35	
Yellow Rail	/ 2								2	
Unknown Rail	3		1				1			
Grand Total	175	24	196	26	203	45	161	35	444	39

BIRDS SUPPORTED BY MISSOURI'S WETLAND EASEMENTS While wetland easements are designed to reestablish hydrological function and natural marsh and bottomland forest habitat, they support many other species of birds that are dependent on a variety of habitats. The graphs below show the proportion of birds we recorded by their ecological categories. Note that since our survey transects are specifically set up to cover emergent marsh, other habitat types are not well-represented; therefore easements probably support even more non-wetland birds than we have measured. The "Other" category includes species that regularly use a variety of different habitat types. WET REGION **Vetland Birds Grassland Birds Forest Birds** Aerial Insectivores ■ Migration ■ Breeding Season WET REGION 2 Wetland Birds **Grassland Birds Forest Birds** Aerial Insectivores Other Migration ■ Breeding Season 60% Wetland Birds **Grassland Birds** Forest Birds Aerial Insectivores Other ■ Migration ■ Breeding Season

EXAMPLE BIRD DETECTION MAP



The map at left is an example of mapped data from one WRE during migration. Reports to each individual landowner include migration and breeding season maps for your properties. Use these maps along with the reference list of four-letter bird codes on page 118. (We can not fit all the species' names on a map) All mapped data are stored in ArcGIS Online and are available to landowners, WET Biologists and other NRCS and MDC staff. ArcGIS Online can be queried to show maps from multiple survey years side-by-side to facilitate understanding of the changes in bird use on a property.

WET REGION 4

WET REGION 1 OVERVIEW

Survey coverage in WET Region 1 in 2019.

	Easement	County	Site Acreage	# Transects	Migration Visit	Breeding Visit
	666412040098P	Livingston	78	2	4/23	inaccessible
	66642401008ZW	Chariton	431	8	4/20	6/27
	66642496009NG	Chariton	108	5	4/21	6/27
	66642496009NC	Chariton	97	3	4/19	6/6
	66642401008ZX	Chariton	290	5	4/17	6/5
	666424020092S	Chariton	169	4	4/17	6/5
	66642496009Q1	Chariton	125	6	4/21	6/26 & 6/27
	75642499000SL	Carroll	153	1.7x4 - 4.7	4/15	5/31
	66642496009Q2	Carroll	599	9	5/1 & 5/2	6/22 & 6/24
	66642498009BL/6664240800MZ1	Chariton	293	6	4/21	inaccessible
	666424010091D	Chariton	165	3	4/23	inaccessible
The state of	666424010090F	Chariton	201	6 1	4/19	6/4
With a	7564240900P3D	Linn	304	93	4/22	6/3
	6664241301CTQ	Chariton (207	5 0	landowner hunting	excluded
	6664241000Z0F	Carroll	428	12	4/16	6/1
	66642498009Z6	Linn	90	3 / 1	4/25	6/6
	666424040099C	Carroll	237	6	4/23	inaccessible

666412040098P

Killdeer

Mallard Marsh Wren Mourning Dove Northern Bobwhite Northern Cardinal

Lesser Yellowlegs Long-billed Dowitcher

0001120100	//01						
					Migr	ation	Breeding
	Migra		Breeding	Species	2018	2019	2018
Species	2018	2019	2018	Northern Mockingbird			1
American Bittern		1		Northern Rough-winged			
American Coot		1		Swallow		5	2
American Crow			2	Orchard Oriole			1
American Goldfinch		3	1	Pectoral Sandpiper	3	u Billianus sadinusci	المتاللة والمسين
American Robin		. 1	1	Pied-billed Grebe	- Harrison Land	1	
American White Pelican	3	公 茶 划	All you	Red-bellied Woodpecker	1		3
Bald Eagle	1	1	10 x 21 x 27 x 37 x 3	Red-eyed Vireo			2
Baltimore Oriole			Parties Transfer	Red-headed Woodpecker	1		3
Bank Swallow		2		Red-shouldered Hawk	-	1	2
Barn Swallow		6	8	Savannah Sparrow	1	1	
Barred Owl	w Total Associa	2	1 10 1	Scarlet Tanager			1
Bell's Vireo	- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	国。1000年	1	Solitary Sandpiper		3	
Belted Kingfisher			KANG TOTAL	Song Sparrow	3	4	
Black-capped Chickadee		2	1	Sora	-0.00	3 1 4	
Blue-gray Gnateatcher		2	在上面的人员	Swamp Sparrow	or to land	10	
Blue Jay	4	2	The state of the s	Tree Swallow	10 Page 15 10 10	42	
Blue-winged Teal	2 + 2	32	是"一个"的"一个"	Turkey Vulture	4 4 4 4 C	本。持持	150 1000
Brown Thrasher	The state of the s	· 拉士	+ tarte L	Warbling Vireo		1	
Brown-headed Cowbird	社の	4	1	White-throated Sparrow		1	-
Canada Goose	4	19	20 M	Wild Turkey	200		1
Carolina Wren			1	Wilson's Snipe	Told to be	1 - 14	- 5
Common Grackle	+ 1 4	-04	1	Wood Duck	- 2-	-3	-42
Common Yellowthroat	the are	. 1	6	Wood Thrush			2
Dickcissel	1 + 21	13. 11	15	Yellow-billed Cuckoo	1 100	to and	2
Downy Woodpecker	17 1 12		1 - 1	Yellow-throated Vireo	X	200	1-
Eastern Phoebe	* * * * * *	131 0	1	Grand Total	38	183	80
Eastern Towhee		1			**	1 1	1 4
Eastern Tufted Titmouse	4	1	1	2019	Survey Dates		
Eastern Wood-Pewee			1100		on: April 23rd	i .	-
Field Sparrow	-	-	711	Breeding Season: inac			1 1 73
Gray Catbird		X.		Act	reage: 78		1
Great Blue Heron			1	Florita #	100		
Great Crested Flycatcher		第二章	4	Notes: This easement s			100
Greater Yellowlegs	2		The state of the s	improvement in 2019 i species representation.			
Horned Lark	100	11		habitat to several wetla			
Indigo Bunting	(1) · 1	The second second	7	as Solitary Sandpiper,			
margo Dunting	man Sale	K THE IS		Mallard Blue-winged			

as Solitary Sandpiper, Sora (below), Wood Duck, Mallard, Blue-winged Teal and Pied-billed Grebe.



2019 Survey DatesMigration: April 20th. Breeding Season: June 27th. **Acreage:** 431

		Migr	ation			Breeding	Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
American Bittern	1		20	4		2		4
American Coot	3		138	19				
American Crow		2	1		6		2	
American Goldfinch	4	6		4	2	1		1
American Robin				1				
American Tree Sparrow			8					
American Wigeon			4					
Bald Eagle	1	1	2	2				
Baltimore Oriole					3		3	
Bank Swallow	A SECTION AND A		and Side	4		odk.	1 100	diameter and
Barn Swallow	13	SHOW IN	2	25	8	4	7	2
Barred Owl		W. FY	T Total	THE REPORT OF	1 705		1	STORES OF STREET
Bell's Vireo	Andrew Parket				1.00	2	2	5
Black-crowned Night-Heron			STATION TO SELECT	2		12.		
Blue Jay					1		2	
Blue-gray Gnatcatcher	1		Υ	3				T
Blue-winged Teal	50	24	524	87		ENTER ENE	BOUNDS	draged I. T
Brown Thrasher	1	是重点是	7	1	2	2	2	1 -
Brown-headed Cowbird	THE PARTY	THE TANK	4	4		4	7	4
Canada Goose	14	7	6	18				
Carolina Wren		AND THE RESERVE		2				1 1 1/
Chimney Swift	7 7							
Chipping Sparrow		1						F. UN
Cliff Swallow	13			ALC: A	11	17	STATE OF THE STATE	1 - 17
Common Grackle	5		$\mathbb{Z} > \mathbb{N}$	5	5		5	2
Common Yellowthroat	13	8		4	12	21	27	11
Dickcissel		750			2	5	27 48	# / / /
Downy Woodpecker		1,2	3	_ ***	71/1			
Eastern Kingbird		· E	1/ ₂ *	14	\/4 \\\		1 6 1 W	\\\4\\
Eastern Meadowlark	7	2		1 1	15 > 1	1 1	3	
Eastern Towhee		<i>, </i>	177				1	
Eastern Wood-Pewee	-		· \ \			1 1 1 1 1 1 1	1	
Field Sparrow	6	2	115	1	2	5	4	1/1/1/1
Gray Catbird	Y	1			1	1 4 6	9	8
Great Blue Heron	11	2		12	19	9	12	3
Great Egret		6	1	10	1	1 1		
Great Horned Owl				2		1,1,1		
Greater White-fronted Goose				1				
Greater Yellowlegs	3	3	66	8			1	
Green Heron					1	2	3	

66642401008ZW

		Migr	ation			Breeding	Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Green-winged Teal			67				1	
Hooded Merganser	1							
Indigo Bunting					3	2	3	10
Killdeer	1	4	. sentile	4	4	12	8	1
Least Bittern	1, 1,000				7	1		2
Least Sandpiper	1		1	4 =				
Lesser Yellowlegs	40	20	17	28	4.5			
Lincoln's Sparrow			5					
Long-billed Dowitcher	1							
Louisiana Waterthrush		3					12	
Mallard	4	2	41	9			6	
Marsh Wren	2	7 3						
Mourning Dove		1	1	1	3	2	7	2
Nelson's Sparrow		2						
Northern Bobwhite		1 1			4		2	
Northern Cardinal	12	1	1	7	3	2	6	8 %
Northern Flicker		· 连续:	1.467				A Shirt Company	
Northern Harrier	N CALESTON	C H	5					
Northern Parula		A	Mary Park	1	1			1
Northern Rough-winged Swallow			14			21-	photo forces	
Northern Shoveler			97	3				
Orchard Oriole	3				3	1	4	4
Pectoral Sandpiper	53	N L		2				
Pied-billed Grebe		(44)	11	16				$\mathcal{M}_{\mathfrak{d}}$
Pileated Woodpecker Prothonotary Warbler		T.					3	
Red-bellied Woodpecker	i i		A CONTRACTOR	2	1/1/	ALA	2	
Red-eyed Vireo		W THE	A A S					To the
Red-headed Woodpecker			11 /	2	TX III	· · · · · · · · · · · · · · · · · · ·	121	1
Red-shouldered Hawk	1		VIV		THE WAY		1	
Red-tailed Hawk				7	H. 1 1			1
Ring-necked Duck			The second	4	THE TYPE	17/12/1	12 4 3 F	
Ruby-crowned Kinglet		**************************************			224	DES TO VE	April 1	
Ruby-throated Hummingbird				WE AND	2		1 1	
Ruddy Duck			1		May July	A King	1 19	
Rusty Blackbird	1 1 3 1 3		200					
Savannah Sparrow	2	5	30	4				
Solitary Sandpiper	6							
Song Sparrow		5	2	12	3	17	15	1 5

66642401008ZW

		Migr	ation			Breeding Season			
Species	2016	2017	2018	2019	2016	2017	2018	2019	
Sora	4	6		12					
Spotted Sandpiper	1	2		1		1			
Swamp Sparrow	5	7	47	17					
Tree Swallow	7		28	30					
Tufted Titmouse				1		1			
Turkey Vulture	72		2	1	1				
Upland Sandpiper							1		
Virginia Rail			3						
Warbling Vireo	1	2				1	3	2	
White-breasted Nuthatch							1		
White-eyed Vireo	1								
White-throated Sparrow	1	1		2					
Wild Turkey					2				
Willow Flycatcher						4	4	2	
Wilson's Snipe	5	6	9	12					
Wood Duck		5	2	2	4	19	3	12	
Wood Thrush			and the same of th				1		
Yellow Warbler	1				2	National Control	SAME IN		
Yellow-billed Cuckoo					7	1	7	2	
Yellow-breasted Chat					4_	据版1	3		
Yellow-headed Blackbird				11					
Yellow-rumped Warbler			3	1		A NET	MI		
Yellow-throated Warbler	Second 1	1 1							
Grand Total	379	145	1400	412	138	170	228	100	
The state of the s	HATTING THE REST	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1	A.		16 M C 2 4 4	1631	

Notes: This easement contines to provide a large, quality wetland habitat for both migrants and breeding birds. Of particular note during the 2019 migration visit, Yellow-headed Blackbirds (right) made a rare appearance. While overall numbers were slightly down, this was largely due to the "snapshot" nature of survey timing. For example, in 2018 we happened to be on site to document a large flock of Mallards and Northern Shovelers, along with an unusal flock of Rusty Blackbirds. Species diversity and overall numbers of most wetland-dependent species have been holding steady on this easement over the years it has been surveyed.



		Migration		Br	eeding Seaso	n 🖠	
Species	2017	2018	2019	2017	2018	2019	1 - 6 - 5 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6
American Bittern		1					
American Coot	6	209			1 (10 kg) (10 kg)	dise parev	
American Wigeon		4					
Bald Eagle		1			1		
Barn Swallow	2	9	3	5	10		
Barred Owl				11	Contrary.	1	
Blue-gray Gnatcatcher	1 1	1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	144	11/1	
Blue-winged Teal	11	110	61		1		
Canada Goose	1 4	2			5		
Carolina Wren					1		1 1/2
Chimney Swift		沙人			i/h/		
Cliff Swallow		XDVIV		(ALL)	10	(+ 1 /2)	
Common Grackle		The Levil	The Contract of the Contract o		8 /		MAL
Common Merganser	6						
Common Yellowthroat	7			19	8	13	
Dickcissel				1	4		MAG
Eastern Kingbird			1				
Eastern Meadowlark			1			11	
Eastern Tufted Titmouse	1 1			VI) A Ty	1		W. Cin
Eastern Wood-Pewee	6		X (III)		T I	2	
Gadwall	G Y 1	71			THE P	MAN	HIE
Gray Catbird	3		-14	1	2	2	NA C
Great Blue Heron	1	1	2		5	7 7	
Greater Yellowlegs	187	24	19			The - Y	Att
Green Heron					i Y	P. I	- for
Green-winged Teal		13		-0	- J.		
Hooded Merganser			- The		1		
Hudsonian Godwit	6				TVV	- 10 -	
Indigo Bunting	Z.			3	6	15	
Killdeer	7	5	3	. 11	8	1	
King Rail	7 2 2	A PART	1 9				
Least Bittern					1		Y K
Least Sandpiper	AT	11	5	V /	1		
Lesser Yellowlegs	52	111		The V		N.	
Mallard		3			1	2	
Marsh Wren	7			1.42		241	
Nelson's Sparrow		2					The D
Northern Bobwhite	×/	YX	- Land	11-1	4	1 1 .	
Northern Cardinal			2	The same	2	1 *	
Northern Flicker			No.	V/	1 1		
					1	1	1
The Land		16			A r		- 15
	The same	10			133		

66642496009NG

		Migration		Bı	eeding Seaso	n
Species	2017	2018	2019	2017	2018	2019
Northern Rough-winged Swallow				1		4
Northern Shoveler		39	25			
Pectoral Sandpiper	103	72	38			
Pied-billed Grebe		7				
Pileated Woodpecker	1					
Prothonotary Warbler	نهر ومخفضات والباس	Marketon as	Miller			2
Purple Martin				1	2	- and
Red-bellied Woodpecker		1				2
Red-tailed Hawk					1	
Ruby-throated Hummingbird					1	
Savannah Sparrow	1		2			
Semipalmated Sandpiper					8	* # =
Solitary Sandpiper			1,			-1996
Song Sparrow	1		2	10	7	9
Sora	16	图 融	5			With send of
Swamp Sparrow Swamp Sparrow	10	2		当14.7	MENT	And Williams
Tree Swallow		3	1			2
Turkey Vulture	1		1	11-19-10		
Virginia Rail	MAZALIKY		13 X/V	IN LAND	TO SHAN THE	
Warbling Vireo	1-1-1	有是什么从	1	2//	(* .t)	
White-eyed Vireo			N NAME OF THE PARTY		A	1
Wilson's Snipe	14	/13	13			
Wood Duck			3		41/3	13
Yellow-billed Cuckoo		NAME OF THE PARTY		線之有別	2	1/211/
Yellow-headed Blackbird		$\langle 1 \rangle \rangle$			7 11/1/2	
Yellow-throated Vireo				1/1/	15/21/20	
Grand Total	449	538	188	61	120	81
		A FURY				1.7.1. (12)



Notes: This easement experienced a great deal of flooding this year, but still provided habitat for marsh-dwelling species that require a variety of vegetation structure and water levels, such as Sora, Wilson's Snipe, and Great Blue Heron (left). There were few exposed mudflats during the shorebird migration period, but we did document Pectoral and Least Sandpipers and Greater Yellowlegs. Blue-winged Teal and Northern Shovelers were relatively abundant in the open water portions of the easement.

2019 Survey DatesMigration: April 19th. Breeding Season: June 27th. **Acreage:** 97

66642496009NC

		Migration		Br	eeding Se	ason
Species	2017	2018	2019	2017	2018	2019
Alder Flycatcher				2		
American Bittern	1					
American Coot			1			
American Crow			2		2	
American Goldfinch	10			12	4	1
American Robin		2				
Bald Eagle				BLACE	3	
Baltimore Oriole				4	5	1
Barn Swallow		33	10	3	1	1
Black-capped Chickadee		1		- LA SI	1	1
Blue Grosbeak					1	1
Blue Jay	2	2	4	3	1	
Blue-gray Gnatcatcher	-	1	1	1	12/LEU	-
Blue-winged Teal	2	1	52	A PARTY	Till and	JAN D
Brown Thrasher		3		5	3	
Brown-headed Cowbird	4	10	15	8	1	
Canada Goose			2	22	12	2
Carolina Wren	1886		1 6	API, NE	1	2012
Cedar Waxwing				3		MAY T
Cliff Swallow				9	1.	到經
Common Gallinule	50.45		<1	4		41
Common Grackle	2				BURNS.	2
Common Tern	1 2 M	1500	P944	1	80年代19	D
Common Yellowthroat	3		7411	16	7	4
Dark-eyed Junco	4.15	2	2011	AREA S		X X
Dickeissel		对外 系	SERVE.	10//	9	2
Downy Woodpecker		1	23		34-15/	MASS
Eastern Kingbird	1	Sep 6 39		4	All a	2
Eastern Meadowlark	1.	2	2	DH	P 1	2
Eastern Towhee	Alle	120	The same	200		319
Eastern Wood-Pewee	A18		15.	MIK	1	4
Eurasian Collared-Dove		3000	- AL.	C181=	All	1
Field Sparrow	m in the	2	2	2	41	V
Gadwall		2		17	1	KY
Gray Catbird		60	\leq	7	3	3
Great Blue Heron	Sil	1		-10	THE	1 18
Great Crested Flycatcher		La	print.	I	10	LA
Greater White-fronted Goose	200	1/K	1	1	1	11/
Greater Yellowlegs	-	3			100	1/1/
Green Heron	117	To the second	7		1	11/1
House Wren	10	1	Nº 1		1	14/9

18

Notes: This easement provided migration habitat for a slightly higher diversity of species and a larger number of individual birds than it has during previous survey years. The site had relatively large flocks of waterfowl and a good representation of swallows. Songbird species such as Common Yellowthroat, Orchard Oriole (below photos; female top, male bottom) and Eastern Wood-Pewee were present on the easement during breeding season.





66642496009NC

		Migration		Br	eeding Se	ason
Species	2017	2018	2019	2017	2018	2019
Indigo Bunting				11	5	8
Killdeer			1		1	
Least Bittern				1		
Least Flycatcher				1		
Lesser Yellowlegs		13	3			
Magnolia Warbler				2		
Mallard			7		1	8
Marsh Wren	7			. 1		
Mourning Dove		1	3	1/	5	
Northern Bobwhite	3		4 1	2		
Northern Cardinal	3	6	2	1	3	2
Northern Flicker		1				1
Northern Parula						1
Northern Shoveler			3			
Orchard Oriole			1	/ 3	1	2
Pectoral Sandpiper		3				
Pied-billed Grebe		2	2			
Pileated Woodpecker		XX Marine		1-4		A STATE
Red-bellied Woodpecker	1	1	2		1	1
Red-headed Woodpecker	1		1		2	
Ring-necked Duck			2			
Ruby-crowned Kinglet	1	1	1			
Savannah Sparrow	1	3		分 公司。		W. Carl
Sedge Wren	1973	1 经产品				1
Snow Goose	2				新建筑	学》
Solitary Sandpiper	l			THE PARTY OF		
Song Sparrow	2	1	2		3	
Sora	2		4	1	tax is	
Spotted Sandpiper	1.40	1				
Summer Tanager					11.	1420
Swamp Sparrow	7	2 1/	13	4/12		人民
Tree Swallow	D 14 (1)	1 MAN A	34	$\langle f_1 \rangle$	1 1	不复在是
Tufted Titmouse			-2	17. 1.	1	
Turkey Vulture			5			
Warbling Vireo	1				1,	
Western Palm Warbler	2	$\mathcal{M}_{\mathcal{S}}$				
White-rumped Sandpiper			从 關於	门大		1 / 1/
Wilson's Snipe	N.	1 1	4 1			MA
Wood Duck		Will Kill	1			
Yellow Warbler		10 1			χ_{μ}	
Yellow-billed Cuckoo	练。几			1/////		/////////
Yellow-rumped Warbler	3	10		1 h		
Grand Total	62	80	184	140	88	53/

2019 Survey Dates & Site Photo Migration: April 17th. Breeding Season: June 5th. Acreage: 290

	Migr	ation	Breedin	g Season	
Species	2018	2019	2018	2019	
American Bittern	2				
American Coot	25	5			<i>Notes:</i> This is one of just a few
American Crow	3	2	1	1	easements on which the numbers of
American Goldfinch	5	4	6	2	most species stayed relatively steady between 2018 and 2019. Both diversity
American Kestrel	1				and numbers of migrating and breeding
Bald Eagle	3	2	2		birds remained consistent overall.
Baltimore Oriole			5	2	Highlights included an abundance of Blue-winged Teal during migration
Barn Swallow		2	2	2	and of Common Yellowthroat (below),
Barred Owl	3		2		a warbler species, during breeding
Bell's Vireo			2	1	season. The site also provided habitat for migrating shorebirds such as Lesser
Belted Kingfisher	A 1			2	Yellowlegs.
Black-capped Chickadee	////1				
Blue Grosbeak		No a graza	1		
Blue Jay	3	2/	1 1 m	4	
Blue-gray Gnatcatcher		1	Alexa Alism	and State of the	
Blue-winged Teal	21	213			
Brown Thrasher	4	1	1		
Brown-headed Cowbird	3	9	1 Some	3	
Canada Goose	12	17	i i i kiliwi	and the second	-4
Carolina Wren					
Chipping Sparrow		3			
Cliff Swallow			5/	3 3	
Common Grackle	1 12	3		7/11/1/	
Common Yellowthroat	WANT F		11/12/1	33	
Downy Woodpecker					ALCOHOLD IN A CONTROL OF THE CONTROL
Eastern Kingbird	101				
Eastern Towhee		X			
Eastern Wood-Pewee	X Y	1 NE d		T ALL IN	
Field Sparrow	10	8	3	MARKET I	
Grasshopper Sparrow					
Gray Catbird	· W	N. S. C.	5.4	N	
Great Blue Heron	T P	1	13	V21	
Great Crested Flycatcher	- 2)	1	1		
Great Egret		1	*		
Greater Yellowlegs				y	4.
Green Heron	1	140		1	7
Green-winged Teal	10	NAT			
Hermit Thrush	1 1				
(II II) 3-18 (I \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			×		
Hooded Merganser		49	- 1-1	5	
House Sparrow	1			3	
£ \$'	L n				

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66642401008ZX

	Migi	ation	Breedin	g Season	
Species	2018	2019	2018	2019	
House Wren		1			
Indigo Bunting			7	9	
Killdeer	1	2	7		
Lesser Yellowlegs	3	13			
Louisiana Waterthrush	2				
Mallard	5	3		2	
Marsh Wren	5				
Mourning Dove	5	2	14	6	
Northern Cardinal	9	3	7	10	
Northern Flicker	4		1		
Northern Harrier	1				
Northern Parula		1	1		
Northern Shoveler	15	1	Ma		
Orchard Oriole			5	till James	
Pied-billed Grebe	6				
Red-bellied Woodpecker	7	21	3		
Red-headed Woodpecker	de to side		1		
Red-shouldered Hawk	Apple of	Market Line	1		
Red-tailed Hawk	3				water the second second
Ruby-crowned Kinglet	4				
Savannah Sparrow					生 一种 计图像 医原皮膜
Solitary Sandpiper		1		Transaction of	THE RESERVE OF THE PARTY OF THE
Song Sparrow	5	2	4	4	现现在 年代的第三人称形式
Sora -	2				
Swamp Sparrow	55/	74			
Tree Swallow	2	1/5	2	17/1/1/2	
Tufted Titmouse	3		3	// // C	
Turkey Vulture		8		# /2 II 3	
Virginia Rail	5		FEBRUSE W	1 5 June 9	
Warbling Vireo			5	10	
Western Palm Warbler					
White-breasted Nuthatch	1/ W. 3		V (MANN)		
White-throated Sparrow	HW W	1/ 3/1/			
-Wild Turkey		4		1/1/	
Willow Flycatcher	1 / J W/	1 7	1		
/ //1	A.	11/1	1		
Wilson's Snipe Wood Duck	7	1/2	2	2	
	6	\$ W '	3 5	3	
Yellow Warbler	1	/ ///		3	
Yellow-billed Cuckoo	The state of the s		5	2	
Yellow-breasted Chat		√	5	3	
Yellow-rumped Warbler	5	245	4.00	1400	
Grand Total	274	345	163	139	

2019 Survey DatesMigration: April 17th. Breeding Season: June 5th. **Acreage:** 169

					Acreage: 10	59	
		Migration		В	reeding Seaso	n	
Species	2015	2016	2019	2015	2016	2019	
American Avocet	1						
American Coot	18		17				
American Crow		1			2		
American Goldfinch					2		
American Robin	1	1	4			1	
Bald Eagle			1	1			
Baltimore Oriole		3			6		
Bank Swallow	V V	5					
Barn Swallow	12	6	14		3		
Bell's Vireo	Disputation of		Little or Lightness	ON THE PARTY OF TH	and I		
Belted Kingfisher Black-capped Chickadee Blue Jay	arangalatudhy di 4 1925 (1)	Maharaja Mar <mark>3</mark> N	1 Markatti jak Lata 3 majari	Linguage Linguage Linguage	1 1 2	MILLIONEN TO THE STATE OF THE S	AND HOLD
Blue-gray Gnatcatcher				1	2	C. C. C. S. S. J. J.	1 (-120/A)) IE
Blue-winged Teal	22	17	130			V Y	1 1
Brown Thrasher	14 1	1	2		AA	hand he	J / /
Brown-headed Cowbird	4 4 6			引起		71. 146	A ME
Canada Goose	9	18	9450				
Carolina Wren			2				
Chimney Swift	Karanga Karangan	2			The second		
Chipping Sparrow		F					
Cliff Swallow		232			9		
Common Grackle		9	2	Sin	16	4	
Common Yellowthroat Dickcissel		9			3	3	
			24 /-	A STATE OF THE PARTY OF THE PAR	17	14	
Downy Woodpecker Eastern Bluebird		1					
Eastern Kingbird		1	3		1 1	3 7	10
Eastern Meadowlark		/// 1	6		37	4	
Eastern Phoebe	11/1/20				A W		<i></i>
Eastern Towhee		10/			14/-/		11/18/1
Field Sparrow	N/N/		13/				VIII.
Forster's Tern							
Gray Catbird							MTY
Great Blue Heron	观众周围的	X ON THE	Val			JA Hall	W/ 1/
Great Crested Flycatcher			WAR				TAKY
Great Egret		计从处址					1
Greater Yellowlegs		MXX	177		A WAY		KIN
Green Heron	W/AWY		X	1		753	
Green-winged Teal	ARVANI				T WX		
Indigo Bunting	W Company	T			3//	41-1-10	1
		TILL	W V		JE 11 1		
1997	AN CONTRACTOR	E STAND	No.	MA YEAR		X	A NA

		Migration		Br	eeding Seaso	n
Species	2015	2016	2019	2015	2016	2019
Killdeer	8	4	5		7	6
Lesser Scaup			9			
Lesser Yellowlegs	48	18	46			
Lincoln's Sparrow		1				
Long-billed Dowitcher		2				
Mallard	1		1			
Mourning Dove	2	6	1		1	2
Nashville Warbler		1			В.	
Northern Bobwhite					2	1
Northern Cardinal			4		3	5
Northern Flicker	3	3	1		1	1
Northern Parula		2			1 -	
Orchard Oriole				-		3
Pectoral Sandpiper		13	45			
Pied-billed Grebe		1	2			V
Red-bellied Woodpecker		1	2		1	2
Red-headed Woodpecker		3	1		1	
Ring-necked Duck			3			
Sandpiper Species	1					
Savannah Sparrow		10	4			1
Semipalmated Plover	2					
Solitary Sandpiper			3			
Song Sparrow		3				1
Sora		1	4			
Spotted Sandpiper	2	6	-			
Summer Tanager	400	y the				1
Swamp Sparrow	2000	1/2	6			
Tree Swallow		18	10	100	1	2
Tufted Titmouse		1			1	
Turkey Vulture			1			
White-breasted Nuthatch	1	T				100
White-crowned Sparrow		1	-			1887
White-throated Sparrow	10.5	The State of	3			
Wild Turkey	18/	1	270		2	
Wilson's Snipe	2	200	16	1		1
Wood Duck		100		10	9	100
Yellow Warbler	1 1	1/1/10			3	1
Yellow-billed Cuckoo	110		1		2	2
Yellow-breasted Chat		12/3		8	1	120
Grand Total	145	430	385	14	120	67
	2	Control of the Contro			1	

Notes: There has been a significant increase in bird numbers and diversity since we first surveyed this easement in 2015. Highlights include good numbers of migrating shorebirds and marshbirds, including Lesser Yellowlegs, Solitary Sandpiper, Sora, and Wilson's Snipe. The high numbers of Dickcissel (background picture), a grassland-dependent species, along with the presence of Northern Bobwhite indicate that the drier areas of this easement provide attractive habitat for breeding grassland birds.

2019 Survey Dates
Migration: April 21st. Breeding Season: June 26th and 27th.
Acreage: 125

	Mig	ration	Breeding	Season
Species	2018	2019	2018	2019
American Bittern		10		
American Coot	186	29		
American Crow			2	
American Golden-Plover	3			
Bald Eagle	h ula		1	
Baltimore Oriole			والفر والطائمان	oblid 4 Julian
Barn Swallow	14	3	18	10
Bell's Vireo	THE PARTY		1	1000
Belted Kingfisher		1		
Blue-gray Gnatcatcher			2	
Blue-winged Teal	52	26	1	1
Brown Thrasher	4	2	2	
Brown-headed Cowbird	A SURVEY		1	
Canada Goose	17	13	49	
Chimney Swift	STATE NA		(1) (1) (1)	10 两 5
Cliff Swallow			15	
Common Grackle			7-1	4 70
Common Yellowthroat		7- 1	6	7/
Dickcissel			4	7
Eurasian Collared-Dove		IX MEN		
European Starling	NVAS		6	40
Gadwall	117%			
Gray Catbird	1. 7.4		1 3 1	4
Great Blue Heron	3	1/\(1^*\!\\	20	6
Great Egret		NAME OF THE PARTY	3	
Greater Yellowlegs	22			Will file
Green Heron		17-11 V.	上红花	APPLANT.
Hooded Merganser		// n	\6 \\	
Indigo Bunting			14/	(\\\6\\1\\
Killdeer	1 11/1	$\backslash / / \lambda$	20) 2 X
Least Bittern			1/1/	5 /
Least Sandpiper	3	11-11-12		MAIL
Lesser Scaup	8/-			Ar
Lesser Yellowlegs	1_		1	M^{\parallel} M_{i}
Mallard		14.4	10	5 //
Marsh Wren	to for	37	14.	
Mourning Dove	The Reservoir	4	4	1 1
Northern Bobwhite			3 /	
		A CONTRACTOR		11 / -

24

			_	_
		ation	Breeding	
Species	2018	2019	2018	2019
Northern Cardinal	1		1	3
Northern Mockingbird			1	
Northern Rough-winged Swallow		1		9
Northern Shoveler	4	3		9
Orchard Oriole	4	3	1	
Pectoral Sandpiper	77		2	
Pied-billed Grebe	2		2	2
	2		2	2
Purple Martin Pad balliad Waadnaakar				
Red-bellied Woodpecker Red-shouldered Hawk			1	
			1	
Rock Pigeon			2	
Savannah Sparrow		1		1
Sedge Wren	1			1
Semipalmated Plover	1		-	
Semipalmated Sandpiper	5	0	7	-
Song Sparrow	5	8	9	5
Sora	3	22	1	-
Swamp Sparrow	2	4		
Tree Swallow	37			1
Turkey Vulture		1		
Warbling Vireo	No. of Spi		3	
White-eyed Vireo		Suc las	70,844 3	
Wild Turkey	2 975	DEFENDANCE OF	AST NE	
Willow Flycatcher	200000		3	TO ALL
Wilson's Snipe	The state of the s	2	NA PEN	100
Wood Duck	80) BASS 101	2	47	9
Yellow-billed Cuckoo	TO COM	STILL STATE	LEW MEN	Na Lin
Yellow-headed Blackbird	4	The state of the s	NE TEN	THE SE
Yellow-rumped Warbler	4	360	42	Section 1
Grand Total	469	152	281	133





Notes: This easement was notable in 2019 for its high numbers of marsh-dependent birds, such as Sora, American Bittern (top right) and Least Bittern (bottom right). The site and the easement that borders it represent a healthy wetland complex that provides habitat for a diversity of bird species and also provides a valuable ecological service by taking on floodwaters. Other highlights from this year's surveys include good numbers of Hooded Merganser, American Coot, and Blue-winged Teal.

2019 Survey DatesMigration: April 15th Breeding Season: May 31st.

		N	1igration				Bree	ding Se	ason	
Species	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Alder Flycatcher										4
American Bittern			2	3				1		
American Coot	5	159	256	1100	55					
American Crow					2		1		3	
American Goldfinch		1	1			1	2		5	2
American Kestrel					1					
American Wigeon				3	2					
Bald Eagle	2	3	2	2	1	4	2		1	
Baltimore Oriole		1					10	5	1	1
Barn Swallow	1	5		2	1	1	4	7	3	1
Barred Owl								2	1	
Bell's Vireo						1	5	3	3	8
Belted Kingfisher					1					
Black-capped Chickadee					1		3	1	1	1
Black-crowned Night-Heron					1					
Blue Jay			1		3		3			
Blue-gray Gnatcatcher	2 3	Comment of	in State of	7. 1/2 Lagran	Carlot M	E.V	Kandille.	LAN LOS	-	2
Blue-winged Teal	14	319	430	122	126		No. of			4
Brown Thrasher	1		4			-1		1	1	1
Brown-headed Cowbird				XXVIII J	2	- Jad				4
Canada Goose	5	15	12	9	7		The state of the s	THE OWNER OF THE OWNER,		35
Carolina Wren		MIT THE STATES	THE STREET	110		1/4		1 .	I	
Cedar Waxwing	Marie Land	ALCOHOL: NO	est through an	and stone is			11-10-1		1	3
Common Gallinule				1		XX,		17 W T)		y hall
Common Grackle		3 3 6	17 7-6	Day of the			5		6.	
Common Merganser			2		1					
Common Yellowthroat	7	7	1	1/2	To the second	8 /-	15	15	11//	11
Cooper's Hawk	1	- 1	No. of the last			$1 \setminus 1$			1/1	
Dickcissel					1	3/1	2	5	15	g 5
Downy Woodpecker					$(^2 $					
Eastern Bluebird				17				1	$\langle \cdot \rangle$	
Eastern Kingbird	2									2
Eastern Meadowlark	3				SACTOR A		APPEN.			
Eastern Phoebe	$\setminus 1 \setminus 1$						A A	1 18 1		
Eastern Wood-Pewee			THE STATE OF			MA.		2		
Franklin's Gull			1				13 /ho			
Gadwall	/ /	11/1	25	12	NG 800		J. F			
Gray Cathird								3	4	
Great Blue Heron	$\langle \chi \chi \rangle$	4 \	$\begin{pmatrix} 3 \\ 1 \end{pmatrix}$	6		7	14	14	Pij	* 1 ×
					外。	(, 1)	-//			

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			/- 4*			Breeding Season				
Spacias	2015	2016	Tigration 2017	1 2018	2019	2015	2016	2017		2019
Species Creat Foret	2015	10		14	2019			2017	2018	2019
Great Egret Great-tailed Grackle		10	2	14		8	1			
	19	12	6	2	5		4			
Greater Yellowlegs	19	12	6	3	3	2	1	1	1	1
Green Heron	4	1		02	10	2	1	1	1	1
Green-winged Teal	4	1		92	10			2		
Hooded Merganser	2				1			2	2	•
House Wren							2	_	3	2
Indigo Bunting		1					3	7	2	9
Killdeer	2		2	1	2		3	3	2	
Lark Sparrow								1		
Least Bittern		1	1	1		2		1		
Lesser Yellowlegs	83	11	5	7						
Lincoln's Sparrow		1								
Long-billed Dowitcher					7					
Mallard	1.0		7	6	3	1			5	-
Marsh Wren	ASSESSED BY	И	Da(0.01)	N. Barrie	2	The M	C'10	Chico	499	
Mourning Dove		37 3		7			3	8	3	2
Nelson's Sparrow			1							-14
Northern Bobwhite			Section 1	100			1	-dla		
Northern Cardinal	all Market	N-17 70	1	n-Tail	= 7 ::		1	1	4	15
Northern Flicker				Marrie L	With the	- 1719-	K. I	Samuel A		1
Northern Parula		2	主 物p(1)		# 1	I I	2	1		2
Northern Pintail			2			CONTRACTOR	en de			
Northern Rough-winged Swallov	W	5	194 5				0.770	and t	100	die i
Northern Shoveler		34	126	537	8			不		
Orchard Oriole		-ICE	DATE OF THE PARTY	THE PARTY		5		3	2	2
Pectoral Sandpiper	10000000000000000000000000000000000000	(1)	96	17/6	4			不		
Pied-billed Grebe	4	4	121	19	2		12	的是是		2
Pileated Woodpecker	教は自	J.M.		1/4	4	MAR	71	4.		1
Prothonotary Warbler		3				外 《排	2	2	2	//6
Purple Martin	(集)	爱有义义		The state of	1	5		-1	N H	# <
Red-bellied Woodpecker	JAN A	1		179	-2	The state of the s	2	2	2	1
Red-eyed Vireo	人 ((()):	4		-			13		- 71	2
Red-headed Woodpecker	1 ho			7-4			1	1		1
Red-shouldered Hawk			1		1		1/3	1=1	3	HA
Ring-necked Duck	1 - 3	ž.		3		-34	1-1	-3		385
Ruby-crowned Kinglet	17.73		-		3	7	-	100 000	1	
Savannah Sparrow	文字		5			2 10		10 -	101	11
Sedge Wren	1-1-	4		-		1 1-1	TO	354		1
Snow Goose	ATA	# 15			145		製化	1	1	15
Show Goose					-		WID		1-1-34	

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		N.	ligration				Bree	ding Se	ason	
Species	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Snowy Egret		1	2							
Solitary Sandpiper		1			1					
Song Sparrow				2						2
Sora	3	18	6	5	4					
Spotted Sandpiper		5								
Summer Tanager								1		
Swamp Sparrow	13	6	2	8	19					
Tree Swallow	6	133	28	36	13	1				
Tufted Titmouse							1		1	1
Virginia Rail	1									
Warbling Vireo		4				3		6	3	4
White-eyed Vireo								1		
White-throated Sparrow			1	1	1					
Willow Flycatcher		1		P 38						
Wilson's Phalarope		6		Will .		Na Control	Same?		and the same	
Wilson's Snipe	1	7	5	33	29				-	
Wood Duck	No.	3	1	1	6	9	19	10	11	3
Wood Thrush				N. P. Hilliam		1	010	1000	19-	
Yellow Warbler			2 L	A Serve	1111	3		di i		
Yellow-billed Cuckoo	THE PERSON NAMED IN			100		1	4	5	3	2
Yellow-breasted Chat		. 1		(4.3)	- :	1 1	T	· -	1	1
Yellow-rumped Warbler			1	8	10	700				
Grand Total	182	801	1056	2048	351	66	122	123	110	147



Notes: As in previous years, this easement harbored a remarkable amount of avian diversity during this year's surveys. Highlights included many breeding Prothonotary Warblers (left) and good numbers of Wilson's Snipe (right) during migration. Though our survey occurred just two days later than in 2018, due to the extremely variable nature of migration, numbers of several species were significantly different. This does not reflect any detrimental changes in the habitat provided by this site in 2019.

2019 Survey Dates
Migration: May 1st and 2nd.
Breeding Season: June 22nd and 24th.
Acreage: 599

		Migra	ation			Breedin	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Acadian Flycatcher							1	1
Alder Flycatcher						2		
American Avocet	16							
American Coot	57	14	612	12				
American Crow	1		1	2		3	6	3
American Goldfinch		6		2			1	4
American Pipit			1					
American Robin			1			2		2
American White Pelican				62				
American Wigeon	- white							
Baird's Sandpiper	1		5					
Bald Eagle	3	5_	6	1		2		2
Baltimore Oriole	3			5	1	1	3	1
Bank Swallow	9							
Barn Swallow	17	3	4	1	2	2	6	1
Barred Owl		2					1	
Bell's Vireo			THE .			1		2
Belted Kingfisher	2		1	1			1	
Black Tern				WELL		3		
Black-and-White Warbler				1)))				
Black-capped Chickadee	2		2	2	1	3		
Blue Jay	2	5	6	3	4		2	3
Blue-gray Gnatcatcher	2			9	163	1	1	5
Blue-winged Teal	84	357	81	37			2	
Bonaparte's Gull			1		11/1/1			
Brown Thrasher	3		3	1		1	1	1
Brown-headed Cowbird		5	10	3	1	1	13	2
Canada Goose	79	73	57	13	7	43	5	16
Carolina Wren	THE REAL PROPERTY.		4	4	2	2	3	2
Caspian Tern			The state of	£1_	-			
Cattle Egret	THE WAY			1		1	Name of	
Cedar Waxwing				1		23		
Chestnut-sided Warbler	1					1/1		
Chimney Swift				2			2	
Cliff Swallow	105			4		1		
Common Grackle	8	16		9	3	10	5	23
Common Tern	1					1		
Common Yellowthroat	8	2		23	3	15	8	12
Dickcissel				1	4	6	32	7
Double-crested Cormorant		12	1	1				1

		Migra	tion			Breedin	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Downy Woodpecker	1			2			3	4
Dunlin	1		2					
Eastern Bluebird		1						
Eastern Kingbird	6	2		3	1	8	2	2
Eastern Meadowlark	1		1	1	3	1	2	2
Eastern Phoebe			1		1	2	1	
Eastern Towhee			1					
Eastern Tufted Titmouse	2		1		2	1	5	
Eastern Wood-Pewee					1	2	1	4
European Starling		1						
Field Sparrow	1	4	7		1	3	3	
Fish Crow			75	6				
Forster's Tern				1				
Franklin's Gull				18				-
Gadwall	5		10	1	MAIL.	10.000	والكامم	SIA
Gray Catbird	120				2	ANY AND A		
Great Blue Heron	10	19	5	8	18	16	9 -	3
Great Crested Flycatcher	1			1	1	2	3	
Great Egret				10		8		
Great Horned Owl	1						1	
Greater White-fronted Goose			320					
Greater Yellowlegs	18	4	10	4				
Green Heron	1.			Trans		inoles		1
Green-winged Teal		and hardware a runs	72	1 7	The state of the s		Harris J.	1
Hairy Woodpecker	4		100	1	1 34 18 4	4.11	plant.	10 TEV
Hooded Merganser			in the	2	Lugar Fr	W. 8	Select Ser	1190/92
House Wren				1	加州海			. methods
Indigo Bunting					4	9	9	14
Killdeer	11	4	4	2	5	3	17	5
Lark Sparrow	2							海海湖
Least Bittern	1.0							
Least Flycatcher						1		
Least Sandpiper	21		4					
Lesser Scaup	5		24					
Lesser Yellowlegs	28	49	28	2				He H
Lincoln's Sparrow	3		Market No.	1.	- water			
Long-billed Dowitcher	132		ill by the			S. J. Trielly		
Louisiana Waterthrush	3	1.35	166					
Mallard	9	6	12	2	5	9	13	2
Marsh Wren	21	5	4.2	37	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
	July 18 10	AL RIVER	MAL .	THE REAL PROPERTY.	A E M			

		Migr	ation			Breedin	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Meadowlark Sp					3			
Mourning Dove	1	1			1	4	3	7
Nashville Warbler	1							
Northern Bobwhite	5		1	1	2	4	10	2
Northern Cardinal	2	5	5	10	2	5	5	11
Northern Flicker	2	1	1	1				1
Northern Harrier			1					
Northern Parula	1	1	1	3		3	3	2
Northern Rough-winged Swallow	V		3	2				
Northern Shoveler	5	16	112					
Northern Waterthrush				1				
Orchard Oriole	2			4	and the same	1	and the same of th	200
Pectoral Sandpiper	138	131	94	Milds all son	-		5	
Pied-billed Grebe		2	1	5				
Pileated Woodpecker	1	2	1	2	1_	3	1	
Prothonotary Warbler	2			3			2	4
Purple Martin			No. of the last	-1		,1	18	1)
Red-bellied Woodpecker	3	1	1	2	- 1		5	2
Red-eyed Vireo			and the E		1			1
Red-headed Woodpecker		1		- 2		12	2	
Red-shouldered Hawk	1		477	4.	1 100	3	2	-71
Ring-billed Gull		1		1				
Ring-necked Duck		- 2-	38			-y		
Ross's Goose		4		2			27	4
Ruddy Duck	1		2		*	71.		
Rusty Blackbird		23	2	-4		700	1-00	
Savannah Sparrow	5	17	4	3				
Sedge Wren	5 6	1	-	5 7				
Semipalmated Plover	2		1					
Semipalmated Sandpiper	2	-	1	4			1	
Sharp-shinned Hawk	, = 72		1	1				
Solitary Sandpiper	7	8	7	2			2	
Song Sparrow	2	2	V.	2		1	3	
Sora	16	9	1 2	30	7			-
Spotted Sandpiper	11	_ 5	2	4	3		1	
Swainson's Thrush	1.			1	1-1		4	
Swamp Sparrow	20	13	16	6				-
Tennessee Warbler	1			1	1			TRE
Tree Swallow	552	438	136	105		8	2	11
Turkey Vulture	6	2	The state of the s		22	100	7	

		Migra	tion			Breedin	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Unknown Sandpiper				13				
Virginia Rail		1						
Warbling Vireo	7	5		4	3	2	8	11
Western Palm Warbler	2							
White-breasted Nuthatch				1				1
White-crowned Sparrow		9						
White-eyed Vireo								1
White-rumped Sandpiper							55	
White-throated Sparrow	7	49	1	34				
Wild Turkey			1				2	
Wilson's Phalarope	1							
Wilson's Snipe	1	25	15	1				
Wood Duck	7	4	9	2	63	30	81	22
Wood Thrush				1		1		1
Yellow Warbler	2	1	-	2	-1	-	_	_2
Yellow-billed Cuckoo		W.O.		- Survey	2	4	6	5
Yellow-breasted Chat			DANE	1			19460	-1-
Yellow-crowned Night-Heron				Andres				1
Yellow-rumped Warbler	2	33	1	9	1044	1		
Yellow-throated Vireo		M	N	1 N	LL.	1= 10	3	4
Grand Total	1552	1386	1827	365	181	261	387	213
THE TEN MENT OF THE PARTY OF TH	10000000000000000000000000000000000000	THE WAY		AWA		MAN	1 1 1	MAN

Notes: Our migration survey of this site occurred slightly later than usual due to flood conditions on the easement in early to mid-April, which resulted in a somewhat different species composition than in previous years. Shorebirds were largely absent due to both timing and lack of mudflat habitat, while American White Pelicans (below) and Sora were documented in relatively large numbers. In addition to the emergent marsh, this site provides quality breeding habitat for a diversity of forest birds, including vireos (such as Warbling Vireo, background photo on the first page of this easement's report), warblers, and flycatchers.



2019 Survey Dates
Migration: April 21st.
Breeding Season: inaccessible due to high water
Acreage: 293

			3.51				ъ			
	2011		Migration		2010	2011		eding Sea		2010
Species	2014	2016	2017	2018	2019	2014	2016	2017	2018	2019
Acadian Flycatcher						2				
Alder Flycatcher								3		
American Bittern			2	2	2					
American Coot	7									
American Crow		1	6	8	2	5		1	15	
American Goldfinch		7	9	1	7	2		3	5	
American Tree Sparrow				1						
Bald Eagle		2	2		4		1		1	
Baltimore Oriole	Tolar						1	1	2	
Barn Swallow		10	6	3	2			NAME OF THE PERSON NAMED IN	2	
Barred Owl			1	3		1		1	1	
Bell's Vireo									2	
Belted Kingfisher				1			2	1		
Black-capped Chickadee					1		3	1		
Black-crowned Night-Heron					unare de la constante de la co				Grand State	N. S. Wall
Blue Jay		2	43	2	1		. 1			
Blue-gray Gnatcatcher			1	2	8		2		1	
Blue-winged Teal	252	72	82	148	111			3		
Brown Thrasher	1							1	1	CHY W
Brown-headed Cowbird		建 教育	11	8	24	2		4	2	
Canada Goose	5	7	10	18	9		1	2	2	
Carolina Wren	外在用			44.4				1	1	
Chimney Swift				州大人					2	
Chipping Sparrow		+0/1/k			1		1			
Cliff Swallow	r_{i} F_{ij}	18						入力。		
Common Grackle		1117	5	$\langle 1 \rangle_{1}$	3	7	7.7	2		Maria Mila
Common Yellowthroat	11	6	11	k_{-1}	5	15	19	25	22	
Dickcissel	分出等		$\forall i \leq 1$			1	1	15	35	
Double-crested Cormorant	177		3		AND THE		AND A			
Downy Woodpecker			1	2001					1	
Dunlin	25			18/1/2						
Eastern Kingbird						1.	3,	6	3	
Eastern Meadowlark	1	$r_{1/1}$	CHA	5			2	1	5	1/1
Eastern Wood-Pewee			XIV.	人为	4.16		1	1	2	16-2-1
Field Sparrow				2	K (4)				1	
Fish Crow				7		199	學的學樣			
Gadwall				9	1					
Gray Catbird			(1)		产长经	4	5	13	L 8 /	
Great Blue Heron	1	6	10	8	May 1	6	9	5	20	VNI
Great Crested Flycatcher					175	The state of		No.	3	NATE OF
Great Crested Flycatcher	V DY N S S	E V V	TO THE PARTY OF	CONTRACTOR AND ADDRESS	A Partie of the	Market Property	The state of the s	No Part of the last		PSTOR LINE

66642498009BL/6664240800MZ1

Species 2014 2016 2017 2018 2019 2014 2016 2017 2018 2019 Great Egret 20 1 1 13 13 13 13 14 13 14	
Greater Yellowlegs 32 5 1 8 6 Green-winged Teal 3 4 3 2 Hooded Merganser 4 2 6 1 House Wren 1 1 1 Indigo Bunting 1 1 9 10 11 13 Killdeer 1 1 2 2 4 2 11 Lark Sparrow 8 8 8 Least Bittern 1	
Green-winged Teal 3 4 3 2 Hooded Merganser 4 2 6 1 House Wren 1 1 1 1 Indigo Bunting 1 1 9 10 11 13 Killdeer 1 1 2 2 4 2 11 Lark Sparrow 8 8 8 Least Bittern 1 Least Flycatcher 1 <	
Hooded Merganser 4 2 6 1 House Wren 1 1 1 1 Indigo Bunting 1 1 1 9 10 11 13 Killdeer 1 1 2 2 4 2 11 Lark Sparrow 8 Least Bittern 1	
House Wren 1 1 9 10 11 13 Killdeer 1 1 2 2 4 2 11 Lark Sparrow 8 Least Bittern 1 Least Flycatcher 1	
Indigo Bunting 1 1 9 10 11 13 Killdeer 1 1 2 2 4 2 11 Lark Sparrow 8 8 8 4 <td></td>	
Killdeer 1 1 2 2 4 2 11 Lark Sparrow 8 Least Bittern 1 Least Flycatcher 1	
Lark Sparrow8Least Bittern1Least Flycatcher1	
Least Bittern 1 Least Flycatcher 1	
Least Flycatcher 1	
Least Sandpiper 2	
Lesser Yellowlegs 14 45 14 10 1	
Lincoln's Sparrow 2 2	
Long-billed Dowitcher 2	
Louisiana Waterthrush 2	
Mallard 3 3 6 1 2 2	
Marsh Wren 1 2 2 1 1	100
Mississippi Kite 5	
Mourning Dove 1 1 1 2 2 2 2 2	-
Northern Bobwhite 2 1 1	
Northern Cardinal 5 6 10 1 1 3	
Northern Flicker 1 1 2 1 1	
Northern Harrier 3	
Northern Parula	
Northern Rough-winged	
Swallow 1	
Northern Shoveler 21 15 18	Ald
Northern Waterthrush 1	
Orchard Oriole 3 8 2	
Pectoral Sandpiper 10 46 10	213
Peregrine Falcon 1 Pied-billed Grebe 1 4 3	1/49
Pied-billed Grebe 1 4 3 Pileated Woodpecker 1	- 2
Prothonotary Warbler 1 2 1	
	2
Red-bellied Woodpecker 8 3 2 2 5 Red-eyed Vireo 1	100
Red-leaded Woodpecker 1 2 5 4 1 1	
Red-shouldered Hawk 2 2 1 2 2 Red-tailed Hawk 2 2	S
Ring-necked Duck 5	
This iterate but	-

66642498009BL/6664240800MZ1

			Migration			1 1	Bree	eding Sea	son	
Species	2014	2016	2017	2018	2019	2014	2016	2017	2018	2019
Ruby-crowned Kinglet				2	2					
Rusty Blackbird				1		-				
Sandhill Crane	1									
Savannah Sparrow	16-T		1	2				T		
Sedge Wren		2	1			-				DE.
Short-billed Dowitcher	15							-		10
Solitary Sandpiper	31	1	4		2				100	
Song Sparrow	13	8	30	16	20		16	14	21	
Sora	3	1	5	1	10		JI M			
Spotted Sandpiper		7								. .
Swamp Sparrow	3	9	1	22	6				96.	
Tree Swallow		309	8	7	5			1	1	-
Tufted Titmouse	1		1	3	3	1	2	1	3	
Turkey Vulture			3	1				1.		TO.
Virginia Rail	1			1						
Warbling Vireo		1			1		1		1	
White-breasted Nuthatch							1		1	2 1/
White-crowned Sparrow			2							E AL
White-throated Sparrow			2	2						
Willow Flycatcher						3	3	3	2	
Wilson's Snipe	1		1	12	10					
Wood Duck	2	6	13	12	6		13	14	3	
Wood Thrush									2	
Yellow Warbler		3			PG.		4	7	8	
Yellow-billed Cuckoo	3				6-18	2	3	2	9	
Yellow-breasted Chat			200	120	100				3	-
Yellow-crowned Night-Heron	n			1		2	11			
Yellow-rumped Warbler			3	2						
Yellow-throated Vireo									1	
Grand Total	432	627	360	394	312	78	133	187	237	



Notes: MRBO has been surveying this easement longer than almost any other in our site sample. It continues to provide high-quality migration habitat for a variety of species, including the Sora pictured in the background. There were also good numbers of shorebirds, waterfowl and songbirds such as Swamp Sparrow (left). In 2019, due to high water in the surrounding area, surveyors were unable to reach the site during breeding season. Hopefully both migration and breeding season surveys will be possible in future years.

Migration: April 23rd. Breeding Season: inaccesible due to high water.

Acreage: 165

		Migration		Breeding	g Season
Species	2015	2018	2019	2015	2018
American Bittern			2		
American Coot	4	84			
American Crow			1		2
American Goldfinch			2		1
American Redstart					1
Bald Eagle		1	1		
Baltimore Oriole			1		1
Barn Swallow					4
Barred Owl		1		2	2
Blue Jay	وبرمالس	Shumbala	in a Black of the	water Dalage	2
Blue-winged Teal	33	76	14	1	
Bobolink	16.5		TO THE STATE OF TH		1
Brown Thrasher	ale at 1		1.		
Brown-headed		Walley Wall			
Cowbird					
Canada Goose		12/1/1	5		以 公律表
Cliff Swallow				11 11	6//
Common Grackle		A VALE	17		(7) \(\psi \)
Common Yellowthroat	3		5		12
Dickcissel					10
Eastern Kingbird		是作用整			
Eastern Wood-Pewee					汉崇汉先
Fish Crow	加斯	THE WALL		N IN	2
Gadwall	10				1 / V
Gray Catbird					2
Great Blue Heron		14		16	
Great Egret	2		35	7	18
Greater Yellowlegs	VAL S		MAN AND		
Green Heron	2/4-1/2	A DARY D	11/1 - 2	1	SAK KI
Green-winged Teal	WAS	# 11/1/A.	VA /	11	116
Hermit Thrush	THE STATE OF THE S	利用多		- //	
Hooded Merganser	3	2	734	CV	3/11
Mourning Dove		1 3	2	VAN	1
Northern Cardinal	18.1	~ /	5		I A
Indigo Bunting	All		A	1	2
Killdeer	2	TH V.	1	3 V 3	7-125
King Rail	100	1			1 1
Least Bittern	1	1 3		2	
The state of the s		4			

666424010091D

		Migration		Breedin	g Season
Species	2015	2018	2019	2015	2018
Least Sandpiper	2				
Lesser Yellowlegs	9	4	1		
Mallard	1			1	3
Marsh Wren		3			
Mourning Dove					2
Northern Bobwhite	NEW AF				3
Northern Cardinal	0.00	1			1
Northern Rough-		1.00			
winged Swallow		4			
Northern Shoveler		13			
Pectoral Sandpiper	1	12	d.	V	
Pied-billed Grebe		2		I	
Pileated Woodpecker	12.7		1		1
Prothonotary Warbler				1	
Red-bellied					
Woodpecker			2		1 6 2 6
Red-headed Woodpecker	1				1
Red-shouldered Hawk					1
Solitary Sandpiper					Jan Marin
Song Sparrow	2	2	9	er beschauter a	5
Sora Sora	10	10	5		
Summer Tanager				八美角	1 ·
Swamp Sparrow	3	32			
Tree Swallow		112			2
Tufted Titmouse				MENAS	(1)
Turkey Vulture	11,14				
Virginia Rail	3			THE STATE	
White-rumped					为心气
Sandpiper Sandpiper	77		4	MINI	
Wild Turkey	411		CT (SE)		2
Willow Flycatcher	1/17/		自分的	1	NAS
Wilson's Snipe		9/1/	15	44	LC Z K
Wood Duck			NATH I	5	2
Wood Thrush	宣統		2015/11	VIVIA	
Woodpecker Sp			是大片	11/1/	WAR
Yellow Warbler				1/1/1/1/2	
Yellow-billed Cuckoo	4	1	A THE AN		2/
Yellow-crowned Night-	The V	1 / 1		11/4/	
Heron				XI	W.
Grand Total	99	394	130	35	105
		-X/			

Notes: As in 2018, this easement contained an impressive diversity of marshbirds, particularly Sora, Virginia Rail (lower photo) and King Rail (upper photo). King Rail are very rare in the state of Missouri and it is notable that an individual was documented in both 2018 and 2019. As with other sites in the region, this easement was not accessible during the breeding season due to high water in the surrounding area.





2019 Survey DatesMigration: April 9th. Breeding Season: June 4th. **Acreage:** 201

		Migr	ation		Breeding Season				
Species	2015	2016	2018	2019	2015	2016	2018	2019	
American Bittern				1					
American Coot			24	24					
American Crow			2	3		1	5		
American Goldfinch	3	4		1			1	2	
American Robin		1		1					
American Tree Sparrow			1						
American Woodcock							1		
Bald Eagle		1		1				1	
Baltimore Oriole	4					3	2	1	
Bank Swallow						1			
Barn Swallow	5	5	1	2		3	5		
Barred Owl			1				1		
Bell's Vireo	2							1	
Black-capped Chickadee	1			3			2		
Blue Grosbeak	1								
Blue Jay		2	4			3	3		
Blue-gray Gnatcatcher		1	IN THE STATE OF	4		2 444		1 4 5	
Blue-winged Teal	3	36	68	59	N. L. F	4		3	
Bobolink	1				1 . S. (3d to 45)				
Brown Thrasher			1	2					
Brown-headed Cowbird	3		1	6	遊漫	3	2	6	
Canada Goose	2	11	6	18	6		6	14	
Carolina Wren		2	1						
Chestnut-sided Warbler	1			STANK STANK	学们从			MI STAN	
Cliff Swallow			XX	MVV		11	11/1		
Common Grackle			11/11/11			1	(XIV)		
Common Yellowthroat	7	3			4/1/	5	13	<u> </u>	
Dickcissel		/33/1		MARA	THE PERSON NAMED IN	7	5		
Dunlin			1	SIE IN		17/2/		1/11/1/ T.	
Eastern Bluebird					-/21	$\chi_{\gamma\gamma}$	过有差		
Eastern Kingbird	8	2	MA		MIN	5/-	2	1	
Eastern Meadowlark	6	2	4		M	5	3/1/		
Eastern Phoebe	1		XV	11		1			
Eastern Towhee					AV.			//_1/	
Eastern Wood-Pewee			7 2 1/20 1				2		
Field Sparrow	3	3	1	3		1	2	1111	
Gadwall	NO IN		24				- 1	31 V	
Grasshopper Sparrow	3				I had		27/1	20	
Gray Catbird			1			3	/2	1	
Great Blue Heron	5	3	2	2	1	3	(11)	10	
			1	- 1				$\sim /V^{\prime\prime}$	

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666424010090F

		Migr	ration			Breedin	g Season	
Species	2015	2016	2018	2019	2015	2016	2018	2019
Great Crested Flycatcher							1	1
Great Egret	6		1		1			
Greater Yellowlegs	2		16	2				
Green Heron							1	2
Green-winged Teal			1	21				
Hooded Merganser		1						8
Indigo Bunting	5					5	8	11
Killdeer	4	4	3			3	10	
Lark Sparrow		1					1	
Least Bittern							1	2
Least Sandpiper	34		a			and the same	and the same	
Lesser Yellowlegs		12	20	35				
Lincoln's Sparrow	2000			4/1-			1961 L	
Louisiana Waterthrush	3		TO DESCRIPTION	1000		4.800	WELL THE	
Mallard		1001	10	3	2			2
Marsh Wren	3							
Mourning Dove			2			Townstille.	3	THE VEHICLE OF
Nashville Warbler	2			LANGE OF STREET	1444/1			
Northern Bobwhite		1/201		À	-2	5	8	
Northern Cardinal			4			2	7	8
Northern Flicker			NAME OF THE PARTY		1 / 1	1	2	
Northern Mockingbird	100				A A	1	7	HIX
Northern Parula	A VALS				10	1	1/4	
Northern Rough-winged				1 / 20	(14)	1		
Swallow	A WANTED	CAN	1 TAN	13	The state of the s	111	HO IN	6
Northern Shoveler		O'CONTROL OF	8	1-12 47	X			WAY DE
Orchard Oriole		ALL T	VIIINA			LOV /	1 3 9	2
Osprey	翼下			开展"	V 1 1 1/8		1 /2 /3	
Pectoral Sandpiper	8	46	46			W V	1/1/	
Peregrine Falcon				1791		Y MAA	10	
Pied-billed Grebe	WAR AN	1 / 19		IN /EX	MATTER	v. Million	NVM	
Pileated Woodpecker	X X	110	MAN	A VAND	* 10	¥ 1	11	1
Prothonotary Warbler	4	111	1 1 1/1/1/1/1	MA		1	1 X Y. A	
V N N N N N N N N N N N N N N N N N N N	4		HAXY	1 1 1 1 W	1	7 1	(b) V	1111
Purple Martin	1. Al.			I IN YEAR	12		2	
Red-bellied Woodpecker	7 / 11	VIT		MAKE	61	2	4	2
Red-eyed Vireo	/ /	2	HART	THE PARTY	2 1	TA	17 1 31	11/2
Red-headed Woodpecker	4/	Market St.	1/ LAVV	Par ballet		11/	f JI of	13 /
Red-shouldered Hawk		3	1 1 3 1	WILLY.		2	1911	2
Ring-billed Gull		6 8 9 11	1	THY			100	
Ring-necked Duck	A VAL	1 11 1	- California	4 %	8		1	
111 713	1 AVA	1/1/1	1 /31	154112			1	131

666424010090F

Species 2015 2016 2018 2019 2015 2016 2018 2011 Rose-breasted Grosbeak 1			Miş	Breeding Season				
Savannah Sparrow 5 3 1 Sedge Wren 1 Semipalmated Plover 7 Solitary Sandpiper 5 2 1 Song Sparrow 1 2 11 3 5 2 Sora 2 1 12 Spotted Sandpiper 2 <t< th=""><th>es 2</th><th>8 2019 2015</th><th>2015 2016</th><th>2015 2016</th><th>2018 2019</th></t<>	es 2	8 2019 2015	2015 2016	2015 2016	2018 2019			
Sedge Wren 1 Semipalmated Plover 7 Solitary Sandpiper 5 2 1 Song Sparrow 1 2 11 3 5 2 Sora 2 1 12 12 Spotted Sandpiper 2 2 1 2 Swamp Sparrow 8 1 25 2	breasted Grosbeak		sted Grosbeak 1					
Semipalmated Plover 7 Solitary Sandpiper 5 2 1 Song Sparrow 1 2 11 3 5 2 Sora 2 1 12 Spotted Sandpiper 2 2 1 2 Swamp Sparrow 8 1 25 2	nah Sparrow	1	Sparrow 5					
Solitary Sandpiper 5 2 1 Song Sparrow 1 2 11 3 5 2 Sora 2 1 12 Spotted Sandpiper 2 2 1 2 Swamp Sparrow 8 1 25 2	Wren		en 1					
Song Sparrow 1 2 11 3 5 2 Sora 2 1 12 Spotted Sandpiper 2 2 2 Swamp Sparrow 8 1 25	palmated Plover		ated Plover 7					
Sora 2 1 12 Spotted Sandpiper 2 Swamp Sparrow 8 1 25	ry Sandpiper		andpiper 5 2					
Spotted Sandpiper 2 Swamp Sparrow 8 1 25	Sparrow	3	row 1 2		5 2			
Swamp Sparrow 8 1 25		12	2 1					
	ed Sandpiper		andpiper 2					
Tree Swallow 4 3 16 40 3 3	p Sparrow		parrow 8 1					
	Swallow	40	low 4 3	3	3			
Tufted Titmouse 1 1 1 2 1 3 2	d Titmouse	2	mouse 1 1	1	3 2			
Turkey Vulture 6 4 1 1 4	y Vulture		lture 6 4	1	4			
Unknown Swallow 12	own Swallow	12	Swallow					
Vesper Sparrow 1	r Sparrow		arrow					
Virginia Rail 1 2	nia Rail	2	ail					
Warbling Vireo 4 3	ing Vireo	Section 1	Vireo 4	And the last of th	4 3			
Western Palm Warbler 1	rn Palm Warbler		alm Warbler					
White-rumped Sandpiper 1	-rumped Sandpiper		nped Sandpiper					
Wild Turkey 1	Γurkey		ey 1		1			
Willow Flycatcher 1	w Flycatcher	September 2015	ycatcher		always but seath and a			
Wilson's Snipe 8 8 21	n's Snipe	21	Snipe 8	r ve				
Wood Duck 1 8 4 6 19 101 5 25	Duck	6 19	k 1 8	19 101	5 25			
Yellow Warbler 1	w Warbler		arbler 1					
Yellow-billed Cuckoo 1 4 1	w-billed Cuckoo		led Cuckoo					
Yellow-breasted Chat 2 1 2	w-breasted Chat		easted Chat	2	1 2			
Yellow-headed Blackbird 2	w-headed Blackbird	2	aded Blackbird					
Yellow-rumped Warbler 6 2	w-rumped Warbler	2	mped Warbler					
Yellow-throated Vireo 2 1	w-throated Vireo		roated Vireo 2					
Grand Total 179 194 346 328 30 191 158 140	d Total	328 30	tal 179 194	30 191	158 140			

Notes: This site is remarkable for how steady its bird numbers and diversity are across years. As in previous survey years, the easement hosted a variety of shorebirds, marshbirds and waterfowl during both spring migration and the breeding season. Highlights included breeding Hooded Merganser and Green Heron, and high numbers of Wilson's Snipe and Sora during migration along with two Yellow-headed Blackbirds (right).



PERSHING 7564240900P3D

2019 Survey Dates
Migration: April 22nd. Breeding Season: June 3rd.
Acreage: 304

	I	Migratio	n	Breeding Season		ason		Migration		Breeding Season		ason	
Species	2017	2018	2019	2017	2018	2019	Species	2017	2018	2019	2017	2018	2019
Acadian Flycatcher						1	Gray Catbird				3	3	2
American Bittern	1	1	4				Great Blue Heron	3	4	1	1	3	1
American Coot	1	17					Great Crested						
American Crow	1	1	4		5	2	Flycatcher				1	2	1
American Goldfinch		1	13	6	6	3	Greater Yellowlegs			3			
American Robin		15	2		1		Green Heron					1	
Bald Eagle						1	Green-winged Teal		15				
Baltimore Oriole					3		Hairy Woodpecker		1	1			
Barn Swallow		8	2	4	8		Henslow's Sparrow						1
Barred Owl					2		Hooded Merganser					1	
Bell's Vireo				4	2	3	Indigo Bunting				12	10	13
Belted Kingfisher	1						Kentucky Warbler				1		
Black-capped							Killdeer				V		1
Chickadee	1		- could	Saper Mild	1		King Rail	2	1		mal \		26
Blue Jay	2	2	5		164	WIL:	Least Bittern	3			1	3	1
Blue-gray Gnatcatcher		1	6		%1	2	Mallard	5	9	2	2	3	3
Blue-winged Teal	76	30	29		2004	3	Marsh Wren	13	15		N. C		
Brown Thrasher		3			1		Mourning Dove			4	1	4	Mar.
Brown-headed					A MARCIN		Nashville Warbler	1	MALTE				14
Cowbird	2		3		1	3	Nelson's Sparrow	7 - 1	2				
Canada Goose	5	2_	4			46	Northern Bobwhite		1	1	1	15	
Carolina Wren	ALA I		1			- 1	Northern Cardinal	1	4	5	4	6	- 9
Chestnut-sided Warbler							Northern Flicker		5			2	
Common Gallinule				3			Northern Parula	T		2			3
Common Grackle						A LINE	Northern Shoveler		10				1 -
					78	10	Orchard Oriole				3	1	2
Common Yellowthroat				15	28	19	Pectoral Sandpiper		4		和		
Cooper's Hawk	. Mad	XVI	THE PERSON NAMED IN	22	70		Peregrine Falcon		2				
Dickcissel				32	79	24	Pied-billed Grebe	2	5	2			
Downy Woodpecker				I I			Pileated Woodpecker		2				
Duck Sp	所徑			The second	3		Prothonotary Warbler	2	州豐		2		2
Eastern Bluebird			2				Purple Martin					3	2 2
Eastern Kingbird				5	2	3	Red-bellied				S Will		
Eastern Meadowlark			3				Woodpecker			3	1	7	3
Eastern Tufted Titmouse					3		Red-eyed Vireo		1			1	1.1%
Eastern Phoebe							Red-headed			130		S // No.	7×
Eastern Wood-Pewee					3	2	Woodpecker		N. A.	1	2	5	- 1
Field Sparrow	4	7	4	4	2	3	Red-shouldered Hawk			2	1	1	15
Fish Crow		1		情源集	1		Red-tailed Hawk		1		1 1		1
Gadwall		5					Rose-breasted Grosbeak		The state of		7	2	
Cadwan					227		Grosocak			4			

PERSHING STATE PARK 7564240900P3D

	Migration			Breeding Season			
Species	2017	2018	2019	2017	2018	2019	
Ruby-crowned Kinglet		2					
Ruby-throated Hummingbird				1			
		1	1	1			
Savannah Sparrow	1	1	_				
Solitary Sandpiper	1		1	2	1	2	
Song Sparrow	2	6	6	3	1	3	
Sora	29	10	14				
Summer Tanager			10	Mind		1	
Swamp Sparrow	9	12	10	A	v Astron		
Tree Swallow	1		1	2	2	1	
Turkey Vulture	1		17		1		
Virginia Rail		3	1		100		
Warbling Vireo	3/	Carrie 1	3	2	11	1	
White-breasted Nuthatch				1			
White-eyed Vireo	cal all				7	1	
White-throated	1.						
Sparrow	3	1		S COL			
Wild Turkey		1		A U	3		
Wilson's Snipe	11	7	17				
Wood Duck	9	23	12	42	36	8	
Wood Thrush	1	4	1		NEJ	CV I	
Yellow Rail			1	11/4	7	Marke.	
Yellow-billed Cuckoo	Te ji		A	4	7_ (2	
Yellow-breasted Chat	1			3	2	6	
Yellow-crowned Night-Heron			dir.		4		
Yellow-rumped Warbler	4				4	34	
Yellow-throated Vireo	1	0		1		1/	
Grand Total	213	226	196	170	288	189	
(4) N = 2 (4)	1 1 1 1	VIII STOR	LE CON	St 12 /18	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	

Notes: This wetland site, located at Pershing State Park, is accessible to the public and represents an excellent example of wetland restoration. Since hydrological function and vegetation restoration occurred at this site, it has consistently provided high-quality migration and breeding habitat for a variety of waterbirds. Sora, Wilson's Snipe and Swamp Sparrow are regular visitors and King and Virginia Rails have been documented here. The drier, upland portion on the east side of the site also provides habitat for breeding grassland birds, such as Dickcissel, Field Sparrow, and Yellow-breasted Chat (below).



6664241000Z0F

2019 Survey Dates

Migration: April 16th. Breeding Season: June 1st. *Acreage:* 428

		D. III
Species	Migration	Breeding Season
American Bittern	7	
American Coot	11	
American Crow	6	1
American Goldfinch	16	2
Bald Eagle	1	1
Baltimore Oriole		1
Barn Swallow	1	2
Bell's Vireo		12
Black-capped Chickadee	2	
Blue Grosbeak		1
Blue Jay	3	
Blue-gray Gnatcatcher	3	1
Blue-winged Teal	183	4
Brown Thrasher	2	
Brown-headed Cowbird	6	3
Canada Goose	16	
Carolina Wren	2	1
Common Grackle	7	2
Common Yellowthroat		19
Dickcissel		- 11
Downy Woodpecker	1	Carried States
Eastern Kingbird	To My	5
Eastern Meadowlark	3	2
Eastern Phoebe	ARREST .	1
Eastern Wood-Pewee	100	1
Field Sparrow	34	17
Great Blue Heron	2	2
Great Crested Flycatcher	THE PARTY	2
Great Egret	40000	13
Great-tailed Grackle	2	
Greater Yellowlegs	2	
Green Heron		701
Grey Catbird	Mar 1	3
House Wren	-4	1
Indigo Bunting	12	15
Killdeer	100 I	1
Lesser Yellowlegs	1	
Mallard	5	6
Mourning Dove	3	
Northern Bobwhite	9	4
Northern Cardinal	9	12

Species	Migration	Breeding Season
Northern Flicker	1,116,111011	1
Northern Parula	1	1
Northern Shoveler	4	
Orchard Oriole		3
Pied-billed Grebe	2	
Pileated Woodpecker	A . A	1
Red-bellied Woodpecker	5	2
Red-eyed Vireo		1
Red-headed Woodpecker		1
Ring-necked Duck	3	
Ruby-crowned Kinglet	4	
Scissor-tailed Flycatcher	1	
Snow Goose	4	
Solitary Sandpiper	1	
Song Sparrow	3	
Sora	12	
Swamp Sparrow	17	-
Tree Swallow	19	2
Tufted Titmouse	1	2
Turkey Vulture	6	
Warbling Vireo	4000	4
White-throated Sparrow	11	
Wild Turkey		2
Wilson's Snipe	9	1 2
Wood Duck	7	26
Yellow-billed Cuckoo	1111	1
Yellow-breasted Chat		4
Yellow-rumped Warbler	100	
Grand Total	456	203

Notes: This easement was surveyed for the first time in 2019, and displayed high diversity and numbers of both marsh-dependent and upland species. Highlights included large flocks of Blue-winged Teal and many American Bitterns (background photo) during migration, and robust populations of breeding Common Yellowthroat, Dickcissel, Field Sparrow and others.

66642498009Z6

Species 2016 2017 2018 2019 2016 2017 2018 2019 American Bittern 1 1 4 1 4 4 4 1 4 4 1 4 2 1 4 2 4 4 1 2 4 4 1 2 1 4 1 2 1 4 1 2 1 4 1 1 2 1 3 1 1 1 1 3 1 1 1 1 3 1 1 1 3 1 1 1 3 1 1 1 3 1 1 1 3 1<			Migr	ation			Breedin	ng Season	
American Coot	Species	2016	2017	2018	2019	2016	2017	2018	2019
American Grow 2 7 9 2 American Goldfinch 8 3 2 1 1 1 2 American Robin Baltimore Oriole 1 3 1 1 Barn Swallow 1 1 1 8 Barred Owl 1 1 1 8 Barred Owl 1 1 1 1 8 Barred Owl 1 1 1 1 1 8 Barred Owl 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	American Bittern			1					
American Goldfinch American Robin Baltimore Oriole Baltimore Oriole Bank Swallow Barn Swallow Barn Swallow 2	American Coot		5	28	1				
American Robin Baltimore Oriole 1	American Crow	2		7				2	
Baltimore Oriole	American Goldfinch	8	3		2	1		1	2
Bark Swallow	American Robin				1				
Barn Swallow	Baltimore Oriole	1				3		1	1
Barred Owl	Bank Swallow					1			
Belted Kingfisher 1	Barn Swallow		2	1		1	1	8	
Belted Kingfisher	Barred Owl			1			1	1	
Black-capped Chickadee 3	Bell's Vireo					1			
Blue Jay 2	Belted Kingfisher	1			1				
Blue-gray Gnatcatcher 1	Black-capped Chickadee		3	1	4	1			1
Blue-winged Teal 30 59 21	Blue Jay			2	1		3		
Brown Thrasher 1	Blue-gray Gnatcatcher				1		2		
Brown-headed Cowbird	Blue-winged Teal		30	59	21				
Canada Goose 2 9 6 4 16 Cedar Waxwing 3 3 Common Yellowthroat 14 3 1 6 7 3 8 22 Commong Grackle 182 2 4 11 Dickcissel 1 2 2 1 2 Downy Woodpecker 1 1 2 2 1 Eastern Kingbird 2 2 2 1 1 Eastern Meadowlark 1 1 1 2 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 2 2 4 1 2 2 3 1 1 2 3 3 4 5 2 2 3 <	Brown Thrasher	Cal to	V X	1	1	J.J.			y "
Cedar Waxwing 3 Common Yellowthroat 14 3 1 6 7 3 8 22 Commong Grackle 182 2 4 11 Dickeissel 1 2 2 Downy Woodpecker 1 1 1 Eastern Kingbird 2 2 1 Eastern Meadowlark 1 1 1 Eastern Phoebe 1 1 1 2 Eastern Towhee 1 1 1 2 1 Eastern Wood-Pewee 1 1 1 2 1 1 1 2 Field Sparrow 2 2 4 1 2 2 1 1 2 2 3 4 5 2 2 3 4 5 2 2 3 4 5 2 3 1 3 4 5 2 5 1 3 4 5 2 2 5 1 3 4 5 2 2 4 <td< td=""><td>Brown-headed Cowbird</td><td>4</td><td></td><td>1</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1 1</td></td<>	Brown-headed Cowbird	4		1	2	1	1	1	1 1
Common Yellowthroat 14 3 1 6 7 3 8 22 Commong Grackle 182 2 4 11 Dickeissel 1 2 1 2 Downy Woodpecker 1 1 1 2 2 1 Eastern Meadowlark 2 2 2 1 1 1 1 1 1 1 1 1 2 2 1 2 1 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 2 2 4 1 2 2 4 1 2 2 4 1 2 2 3 1 3 4 5	Canada Goose	2	9	-6	4	三量製瓦	16	Total *	Por Land
Commong Grackle 182 2 4 11 Dickcissel 1 1 2 1 Downy Woodpecker 1 1 1 1 1 Eastern Kingbird 2 2 1 2 2 1 Eastern Meadowlark 1 1 1 2 1 1 Eastern Phoebe 1 1 1 2 1 <t< td=""><td>Cedar Waxwing</td><td>h En</td><td></td><td>1</td><td></td><td></td><td>3</td><td></td><td></td></t<>	Cedar Waxwing	h En		1			3		
Dickcissel 1 2 Downy Woodpecker 1 1 Eastern Kingbird 2 2 Eastern Meadowlark 1 1 Eastern Phoebe 1 1 1 Eastern Towhee 1 1 1 2 1 1 Eastern Wood-Pewee 1 1 1 2 1 1 1 2 1 1 2 1 1 2 1 1 2 2 4 1 2 2 3 4 5 2 2 3 4 5 2 3 1 3 4 5 2 3 1 3 4 5 2 3 1 3 4 5 2 5 1 3 4 5 2 5 1 3 4 5 2 2 4 4 2 1 2 2 4 1 2 2 <td>Common Yellowthroat</td> <td>14</td> <td>3</td> <td></td> <td>6</td> <td>7</td> <td>3</td> <td>8</td> <td>22</td>	Common Yellowthroat	14	3		6	7	3	8	22
Downy Woodpecker	Commong Grackle			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	182	2	4		-11
Eastern Kingbird Eastern Meadowlark Eastern Phoebe	Dickcissel		TO THE			min /		2	
Eastern Kingbird Eastern Meadowlark Eastern Phoebe	Downy Woodpecker		1	1			000 100	1	Minimum .
Eastern Phoebe				1	238m		2	2	1
Eastern Towhee	Eastern Meadowlark		28		52			1	The state of the s
Eastern Wood-Pewee 1 Field Sparrow 2 2 4 1 2 Gray Catbird 2 1 3 4 5 2 Great Blue Heron 1 3 2 5 1 Great Crested Flycatcher 1 1 2 Great-tailed Grackle 1 2 Green Heron 1 1 1 House Wren 3 4 2 1 2 2 Indigo Bunting 2 6 2 3 1 1 Killdeer 1 2 2 2 2 2 2 3 1 1 1 2 2 3 1 1 1 1 1 1 3	Eastern Phoebe		FILE	4		Tables A			1
Field Sparrow 2 2 4 1 2 Gray Catbird 2 1 3 4 5 2 Great Blue Heron 1 3 2 5 1 Great Crested Flycatcher 1 1 2 Great-tailed Grackle 1 1 2 Greater Yellowlegs 2 4 2 1 2 2 Green Heron 1	Eastern Towhee	1		1	1	2	1	5	1
Gray Catbird 2 1 3 4 5 2 Great Blue Heron 1 3 2 5 1 Great Crested Flycatcher 1 1 2 Great-tailed Grackle 1 1 2 Green Heron 1 1 1 House Wren 3 4 2 1 2 2 Indigo Bunting 2 6 2 3 1 Killdeer 1 1 1 1 1	Eastern Wood-Pewee	A	1	NA Z				1	1
Great Blue Heron 1 3 2 5 1 Great Crested Flycatcher 1 1 2 Great-tailed Grackle 1 1 1 Greater Yellowlegs 2 2 1 Green Heron 1 1 1 House Wren 3 4 2 1 2 2 Indigo Bunting 2 6 2 3 1 Killdeer 1 1 1 1	Field Sparrow	72		2		4			2
Great Crested Flycatcher 1 2 Great-tailed Grackle 1 1 Greater Yellowlegs 2 1 Green Heron 1 1 House Wren 3 4 2 1 2 2 Indigo Bunting 2 6 2 3 1 Killdeer 1 1 1 1	Gray Catbird	2	1		Par	3	4	5	2
Great-tailed Grackle 1 Greater Yellowlegs 2 Green Heron 1 1 House Wren 3 4 2 1 2 2 Indigo Bunting 2 6 2 3 1 Killdeer 1 1 1 1	Great Blue Heron	1		3		2		5	1
Greater Yellowlegs 2 Green Heron 1 House Wren 3 4 2 1 2 2 Indigo Bunting 2 6 2 3 1 Killdeer 1 1 1 1	Great Crested Flycatcher	S I	32	MI	1 / 5	To obtain			2
Green Heron 1 1 House Wren 3 4 2 1 2 2 Indigo Bunting 2 6 2 3 1 Killdeer 1 1 1 1	Great-tailed Grackle		V		1				
Green Heron 1 1 House Wren 3 4 2 1 2 2 Indigo Bunting 2 6 2 3 1 Killdeer 1 1 1 1	Greater Yellowlegs			2		VAC			-
Indigo Bunting 2 6 2 3 1 Killdeer 1 1 1 1	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW	1,000	1				-	2	# A -
Killdeer 1 1 1	House Wren	3	N/X	1	4	2	1	2	2
Killdeer 1 1 1	Indigo Bunting	2	THE B			6	2	3	11 =
King Rail		1000	1	(415	1			1	
King Kun	King Rail	ALE T	1				1		

66642498009Z6

		Migra	tion			Breedin	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Least Bittern						2	1	
Least Flycatcher						1		
Lesser Yellowlegs		18						
Long-billed Dowitcher		6						
Mallard		1	1	1		3		
Marsh Wren		1	2	1				
Mourning Dove	2		1	1		2	2	1
Nashville Warbler	1	1						
Northern Cardinal		1/	1	4	, 1	1	2	4
Northern Flicker				1	500	And the state of	1111	2 1
Northern Harrier	Str. 18		1	4 11		1		
Northern Parula	17		17	2 /	i i			2
Northern Rough-winged Swallow		2			/			
Northern Waterthrush	1	S Carlotte			N THE	arati nasis		
Pied-billed Grebe			3	/ 排制		1	Della si	
Pileated Woodpecker			AL WILL	#MILLA	A	LUSSET	1	
Prothonotary Warbler	AND AND			hild II			1	
Purple Martin		18 N 01		* 1			3	
Red-bellied Woodpecker		NA NA	LU.	1			2	2//-
Red-eyed Vireo	$f_{i,j}$			8	110			
Red-headed Woodpecker	2\1		TIE		11			
Red-shouldered Hawk		制 [2]			1			
Red-tailed Hawk			177				44/2	
Rose-breasted Grosbeak	2)				in Till	14/1/1/	1	
Ruby-crowned Kinglet	/ I	国图像 /	1			1. 1.	方公園	
Rusty Blackbird			2					
Sedge Wren	1		V KM	川岸鎮東			2	WINE
Solitary Sandpiper		1	XI	1	X CAR	17///8		THE THE
Song Sparrow	2		5	5/10/	4//		4	2
Sora	8	5//	2	16		Y		1 1/34
Spotted Sandpiper		1	1	VIVA		MV	MY N	T' T'
Swamp Sparrow	2	2	21	1/1	MAM	RIX		
Tree Swallow	N / W	53	5				2	
Tufted Titmouse	N	4		1			NI	1
Turkey Vulture	M	6	W.				101	
Virginia Rail			3 -	2	172 8		11	7"
Warbling Vireo	3			TINE SE	1		AIN	1
Western Palm Warbler	1	No.			4 7 7	N. T.		1
White-throated Sparrow	2	2	11	2	A W	The same	11/15	
	West of the	C. Marie	A Cal	STATE OF	P 30 8	1200	120	1

66642498009Z6

		Migr	ation			Breedin	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Wild Turkey		1	1	1	3	_ 1		
Willow Flycatcher							2	
Wilson's Snipe		1	5					
Wood Duck		2	3	2		8	1	2
Yellow Warbler	2					1		1
Yellow-billed Cuckoo	1						2	2
Yellow-breasted Chat					2			
Yellow-crowned Night-Heron							1	
Yellow-rumped Warbler			1	1				
Yellow-throated Vireo					1			
Grand Total	78	170	192	285	53	66	76	78

Notes: This easement had higher numbers of birds during both migration and breeding season in 2019 than in any previous year. Migration highlights included a substantial number of Sora (left), Swamp Sparrow, American Coot and Blue-winged Teal. The wetland also provided quality breeding habitat for a number of species dependent on both wetland and forest, such as Common Yellowthroat (right, photo from this easement in 2018).



666424040099C

2019 Survey Dates

Migration: April 23rd.

Breeding Season: inaccessible due to high water.

Acreage: 237

	N
Species	Migration 2019
American Bittern	5
American Coot	3
Bald Eagle	Bung Laborate
Blue-winged Teal	57
Common Gallinule	2
Eastern Meadowlark	19
Grasshopper Sparrow	3
Greater Yellowlegs	29
Nelson's Sparrow	1.
Pied-billed Grebe	4
Red-headed Woodpecker	2
Savannah Sparrow	137
Sora	41
Solitary Sandpiper	1
Swamp Sparrow	5
Virginia Rail	1
Wilson's Snipe	8
Wood Duck	2
Yellow Rail	
Grand Total	193





Notes: This is an exciting new property that was added to our survey schedule in 2019. Though the species list may appear short, there are several species of conservation concern represented, along with high numbers of secretive marshbird species. Sora and American Bittern (top right) were present in significant numbers, and the counts of Greater Yellowlegs, Pied-Billed Grebe (lower right) and Wilson's Snipe indicate that this easement has a variety of habitat structure available for other wetland-dependent migrants. Eastern Meadowlark (below), Grasshopper Sparrow and Nelson's Sparrow are all grassland-dependent species, showing that this site has the potential for supporting a wide variety of birds. High water in the vicinity rendered the site inaccessible to surveyors during the breeding season.



WET REGION 2 OVERVIEW

Survey coverage in WET Region 2 in 2019.

Easement	County	Site Acreage	# Transects	Migration Visit	Breeding Visit
6664241000NKC	Randolph	788	15	4/25 & 4/26	6/8 & 6/9
66642412018GC	Shelby	73	2	5/4	6/24
66642411014GR	Clark	76	2	5/5	6/10
6664241101527	Saline	49	2	4/15	6/17
66642495009DQ and 666424100YC6	Howard	213	3	5/6	6/18
6664241201973	Lewis	98	3	5/3	6/21
66642411015RZ	Macon	52	2	4/28	6/7
66642412018GC	Shelby	98	2	5/4	6/24
66642495009CD and 66642498009YF	Knox	94	× 4	5/4	6/11
66642412018JK	Shelby	. 44	2	5/6	6/9
66642405009HG	Macon	127	1	4/27	6/7
5464241501JT8	Clark	241	4	5/5	6/25
66642496009R9	Adair	151.3	3	5/3	6/26
5464241501G4D	Monroe	132	3	5/5	6/11

2019 Survey Dates
Migration: April 24th & 25th. Breeding Season: June 8th & 9th.
Acreage: 788

	201	.9
Species	Migration	Breeding Season
American Coot	91	Scason
American Crow	3	1
American Goldfinch	6	2
		2
Bald Eagle Balimore Oriole	2	2
		3
Bank Swallow	4	1
Barn Swallow	15	1
Barred owl	2	2
Bell's Vireo		5
Black-capped Chickadee	Levil with	
Black-crowned Night-Heron	$\frac{1}{2}$	
Blue Jay	2	
Blue-gray Gnatcatcher	5	以 清配数
Blue-winged Teal	161	A CARL
Brown Thrasher	4	5
Brown-headed Cowbird	22	100
Canada Goose	13	
Carolina Wren	5	2
Chipping Sparrow		1-
Cliff Swallow	6	
Common Grackle	4	10
Common Yellowthroat	_14	20
Dickcissel		47
Double-crested Cormorant	8 -	
Downy Woodpecker		1
Eastern Bluebird	1	4
Eastern Kingbird	#1	9
Eastern Meadowlark	2	12
Eastern Phoebe	3	1
Eastern Towhee	4	1 -
Eastern Wood-Pewee		2
European Starling	11	7
Field Sparrow	8	7
Grasshopper Sparrow	2	*
Gray Catbird	1	1/1
Great Blue Heron	2	9
Great Crested Flycatcher		3
Green Heron		2

	201	19
Species	Migration	Breeding Season
Henslow's Sparrow	1	
House Sparrow		2
House Wren	6	2
Indigo Bunting		22
Killdeer	10	20
Least Bittern		2
Least Flycatcher	1	
Lesser Yellowlegs	13	
Long-billed Dowitcher	4	STATE OF THE PARTY
Louisiana Waterthrush	2	
Mallard	5	7
Marsh Wren	3	Company of
Mourning Dove	2	7
Norther Parula	7	5
Northern Cardinal	5	11
Northern Flicker	1	
Northern Rough-winged Swallow	5 7115/1	4
Northern Shoveler	+ 11	VI VI



6664241000NKC

2019

Species	Migration	Breeding Season
Orchard Oriole		3
Pectoral Sandpiper	1	
Pied-billed Grebe	17	7
Pileated Woodpecker	1	
Prothonotary Warbler	2	2
Purple Martin		5
Red-bellied Woodpecker		2
Red-shouldered Hawk	1	
Red-tailed Hawk	1	
Ring-necked Duck	2	
Rose-breasted Grosbeak	naged Physic	a Strongled
Ruby-crowned Kinglet	1	
Savannah Sparrow	5	
Scarlet Tanager	1	
Solitary Sandpiper	2	
Song Sparrow	12	22
Sora	39	
Swamp Sparrow	2	
Tennessee Warbler	1	
Tree Swallow	277	
Tufted Titmouse	3	180 B
Turkey Vulture	7	2
Virginia Rail	/ 1 / ·	
Warbling Vireo	4 /	3
White-eyed Vireo	14129	及此人學
White-throated Sparrow	i in	10 14 1
Wild Turkey	2	
Wilson's Snipe	1/51/5	
Wood Duck	6	18
Yellow Warbler	<i>从为</i> 人	4
Yellow-billed Cuckoo		2
Yellow-breasted Chat	为 假证人	3,
Yellow-crowned Night-Heron	1/	
Yellow-rumped Warbler		
Yellow-throated Vireo	/// 1	1
Grand Total	895	318

Notes: This easement, surveyed for the first time in 2019, displayed its habitat quality by the diversity of birds doucmented. It provided an important haven for aerial insectivores (birds that hunt insects on the wing) such as Tree Swallow and Barn Swallow, while also providing habitat for waterfowl and songbirds. Highlights included large numbers of Pied-billed Grebe and Sora, two marsh-dependent species that are targets of our surveys. There were also large numbers of songbirds during the breeding season, such as Common Yellowthroat, Indigo Bunting, and grassland-obligates like Eastern Meadowlark (top photo) and Dickcissel (bottom photo).





66642412018GC

2019 Survey DatesMigration: May 4th. Breeding Season: June 24th **Acreage:** 73

~	^	4	Λ
Z	u	ı	4

	20.	19
	Migration	Breeding Season
American Bittern	1	
American Goldfinch		1
American Robin	1	
American Woodcock	3	
Barred Owl	1	
Bald Eagle	2	
Baltimore Oriole	1	
Barn Swallow	5	1
Black-and-White Warbler	2	
Brown-headed Cowbird	1	
Blue Jay	1	
Brown Thrasher		1
Blue-winged Teal	40	
Canada Goose	12	
Carolina Wren	ESA.	1
Common Grackle	3	Marie
Common Yellowthroat	4	4
Eastern Kingbird	3	1 4
Eastern Wood-Pewee		1
Great Blue Heron	1.	
Great Crested Flycatcher		1
Gray Catbird	1 =-	2
Green Heron		1
Golden-winged Warbler	2	
Indigo Bunting		2
Killdeer	SSIVILLE	1
Northern Cardinal	1	1
Northern Parula	1	1 110
Northern Waterthrush	2	
Northern Rough-winged Swallow	5	2017
Pileated Woodpecker		4
Red-bellied Woodpecker	ROTE N	1000
Red-headed Woodpecker	1	2
Sedge Wren	2	
Sora	14	
Solitary Sandpiper	2	
Song Sparrow	1	4
Spotted Sandpiper	2	

	201	19
	3.51	Breeding
	Migration	Season
Swamp Sparrow	1	
Tree Swallow		4
Tufted Titmouse	1	
Warbling Vireo	2	
Wild Turkey	1	
Wilson's Warbler	1	
Wood Duck	3	1
Western Palm Warbler	1	
White-throated Sparrow	1	
Yellow-billed Cuckoo		1
Yellow Warbler	2	
Yellow-rumpted Warbler	2	
Yellow-throated Vireo	2	2
Grand Total	135	34

Notes: For its size, this easement provided habitat for a wide diversity of bird species. Waterfowl, marshbirds and forest birds were all present, indicating a good variety in available habitat. Highlights included a high density of Sora, good numbers of Blue-winged Teal, and an interesting representation of migrating warblers. Wilson's, Golden-winged (below) and Black-and-White Warblers are not often documented on our surveys.



66642411014GR

2019 Survey DatesMigration: May 5th. Breeding season: June 10th. **Acreage:** 76

2019

Species	Migration	Breeding Season
American Crow	1	1
American Goldfinch	2	
Barred Owl		1
Baltimore Oriole	1	
Blue-gray Gnatcatcher	2	
Brown-headed Cowbird	5	2
Blue Jay		1
Blue-winged Teal	2	
Canada Goose	2	
Chipping Sparrow	1	
Common Yellowthroat	7	4
Downy Woodpecker	1	
Eastern Kingbird		1
Eastern Meadowlark	1 = 1	
Eastern Phoebe		1
Eastern Wood-Pewee	A THE	1
Field Sparrow		2
Great Blue Heron	LINE THE SE	4
Great Crested Flycatcher	1	1
Gray Catbird		1 =
Grasshopper Sparrow	2	2
Hairy Woodpecker		1
Indigo Bunting	1	7
Killdeer		1
Least Flycatcher	1	1777
Louisiana Waterthrush		1
Mallard	3	2 (37)
Northern Cardinal	2	1
Northern Flicker		1
Northern Parula	1	
Ovenbird	1	
Pied-billed Grebe	1	
Pileated Woodpecker		1
Purple Martin		1
Red-bellied Woodpecker		1.
Red-headed Woodpecker	1	
Red-shouldered Hawk	1	1
Ruby-throated Hummingbird		1
Song Sparrow	4	2
•		

	2019			
Species	Migration	Breeding Season		
Tufted Titmouse		2		
Turkey Vulture	2	16		
White-breasted Nuthatch	2	1		
Wood Duck		3		
Yellow-throated Vireo	1			
Grand Total	50	63		

Notes: Another new survey site for 2019, this easement contained an interesting mix of marsh, forest and grassland birds. The Ovenbird (top photo, taken on-site) is a migrant uncommonly encountered on surveys. Grasshopper sparrow (lower photo) is also atypical, and is a species of conservation concern. The presence of a large number of Turkey Vultures suggest that there may be an important roost site in the area. This species, which is often misunderstood, provides the valuable ecological service of removing disease from the environment. We look forward to further surveys on this site.





2019 Survey DatesMigration: April 15th. Breeding Season: June 17th. **Acreage:** 49

	Migr	ration	Breeding	g Season	
Species	2018	2019	2018	2019	
American Bittern	1				
American Coot	8				
American Crow	3	2	3		
American Goldfinch			2		
American Redstart		A STATE OF THE PARTY OF THE PAR	Adama	1	
Bald Eagle		in in the			
Bank Swallow	1		8		
Barn Swallow	1	1			
Barred Owl		2			
Belted Kingfisher	1	1	1	1	
Blue Jay		2			
Blue-gray Gnatcatcher		la de la companya de	1		
Blue-winged Teal	33				
Brown Thrasher			A PARTY	1	
Brown-headed Cowbird	1	3	1		
Canada Goose	2	2			
Carolina Wren		3	1/		
Common Yellowthroat			7	5	
Dickcissel			12	13	
Double-crested Cormorant	2		187 307 111	A COUNTY	1
Downy Woodpecker	NO POR			1	
Eastern Bluebird	1	1			3
Eastern Kingbird	VE TV		1	149 million 1	The same
Eastern Meadowlark	I THE		游道器		
Eastern Phoebe					
Eastern Towhee	1/1	TO BE IN		经工程	97
Eastern Wood-Pewee				1	1
Field Sparrow	17.	2	A THE PARTY	2	V.
Gadwall	2	The same of the sa			8
Gray Catbird	19/		2	4	9
Great Blue Heron		//1			
Great Horned Owl	1			7	
Greater Yellowlegs	4	1			
Green-winged Teal	1	1 36			(-
Indigo Bunting		11	5	6	N
Killdeer	1		1	1-1-	
Lesser Scaup	6	R. C.		LATE)	
Lesser Yellowlegs	1	1	*		
Louisiana Waterthrush		1			
Mallard	20				

	Mig	ration	Breeding Season		
Species	2018	2019	2018	2019	
Marsh Wren	1				
Mourning Dove				1	
Northern Bobwhite			2	1	
Northern Cardinal	1	3	3	1	
Northern Flicker	1		1		
Northern Parula			1	2	
Northern Shoveler	2				
Orchard Oriole			1		
Pied-billed Grebe	1				
Pileated Woodpecker	1			1	
Red-bellied Woodpecker	: 1	2	5	1	
Red-shouldered Hawk	1				
Red-tailed Hawk	1		1	1	
Ruby-crowned Kinglet		1			
Song Sparrow	3	2	1		
Sora	1	4			
Swamp Sparrow	6	23			
Tree Swallow	4	1		2	
Tufted Titmouse		1	1		
Turkey Vulture	الرض	Pass	MGC.		
Unknown Rail	21		THE . 45	1-40000	
White-throated Sparrow	2	1	The same		
Willow Flycatcher			1		
Wilson's Snipe	4	4			
Wood Duck	1	2	9	2	
Wood Thrush			1	1	
Yellow Warbler			3	3	
Yellow-billed Cuckoo				1	
Yellow-breasted Chat				1	
Yellow-throated Vireo				0 1	
Grand Total	127	70	76	55	

6664241101527

Notes: Our second year of surveys on this easement yielded slightly fewer birds simply due to timing and local conditions. However, the suite of birds present indicated that the site is providing important habitat for migrating marshdependent birds. Swamp Sparrow was abundant and more Sora were detected this year than in 2018. The easement also provided breeding habitat for several species that are associated with marsh or wet forest, such as Yellow Warbler (lower left photo), Yellow-billed Cuckoo (lower right photo) and Common Yellowthroat. The site's drier areas provided habitat for Dickcissel (photo below) and Field Sparrow, species associated with prairies.







Migration: May 6th. Breeding Season: June 18th. *Acreage:* 213

	Migra	ation	Breeding	g Season
Species	2018	2019	2018	2019
American Bittern		4		
American Crow	2	1	1	
American Goldfinch	2	1		1
Barred Owl	1			
Baltimore Oriole		1		2
Barn Swallow		2		5
Black-capped Chickadee	1			
Blue-gray Gnatcatcher		1		1
Brown-headed Cowbird	1	1	2	
Blue Jay	1	1 2	AND THE	
Brown Thrasher		1 33		
Blue-winged Teal		23		
Canada Goose	2	35	1	
Carolina Wren	= 1	2		4
Common Grackle		7		6
Common Yellowthroat		15	3	7
Dickcissel		1		3
Downy Woodpecker	600 1 ms	1		4
Eastern Bluebird	COLUMN TAXABLE	4		
Eastern Kingbird		3		3
Eastern Meadowlark		Sandy Sandy	1 2	2
Eastern Wood-Pewee	A STATE OF THE PARTY OF THE PAR		AL M	3
Field Sparrow	3	2	161 161	THE PARTY
Forster's Tern		1	SAUA	
Great Blue Heron	分形 此人		ON	4
Great Crested Flycatcher	THE STEEL STATE		PARTIE STATE	11 3
Gray Catbird		1		1
Green Heron	AND WAY	THE STATE OF THE S	A STATE OF	
Greater Yellowlegs	A STATE OF THE STA	5	KIND I	TANKS.
Green-winged Teal	AND THE PERSON	2 1	DE DE	2
Hooded Merganser		3	12/6	1000
House Wren	THE STATE OF	3	A I	TO COM
Indigo Bunting	TO MISSIE	5	5	9
Killdeer	S. HER LAND	3		
Least Flycatcher		1	AL SOL	
Lesser Yellowlegs		6		
Louisiana Waterthrush		AST YOU B	M Hicks	1
Mallard		3	1/60	2
Marsh Wren		3		
Mourning Dove	12	S = () =)		
		1	No.	

66642495009DQ AND 666424100YC6

	Migr	ation	Breedin	g Season
Species	2018	2019	2018	2019
Northern Bobwhite		3	4	1
Northern Cardinal	3	4		5
Northern Flicker	1			
Northern Parula				1
Northern Waterthrush		3		
Northern Rough-winged				
Swallow		6		1
Orchard Oriole		1		
Ovenbird		1550	1	
Pied-billed Grebe		4		5
Pectoral Sandpiper		2		
Pileated Woodpecker		1	250	1
Rose-breasted Grosbeak		5	4	
Red-bellied Woodpecker	1	white.	1001	
Ruby-crowned Kinglet	1	1000 12	Pa N	
Red-headed Woodpecker	1	· · · · · · · · · · · · · · · · · · ·	35.0	20
Red-shouldered Hawk		1877		1
Savannah Sparrow		2	353 ·	1500
Sora		20	E SE	5 A
Solitary Sandpiper		3	5123	N. Coll
Song Sparrow	1	2		
Summer Tanager		65		22
Swamp Sparrow	1		1	TO YE
Tree Swallow		10	1	5
Tufted Titmouse	1	10		100
Virginia Rail	in Princip	8		-
Warbling Vireo		3	market #9	1
White-breasted Nuthatch	1	23	1 AND	700/
White-eyed Vireo		4	1200	STEEL ST
Wild Turkey	100	10.000		7
Wood Duck			1	
Western Palm Warbler	11/1	3	4/04	24
	11/1	0/3//	A face	and and
White-throated Sparrow	10000			
Yellow-breasted Chat	2/10	2		2
Yellow-billed Cuckoo		47	2	2
Yellow Warbler	Const.	2	The second	2
Yellow-rumped Warbler		3	1	126
Yellow-throated Vireo			KIN RIS	V250
Grand Total	32	240	28	113
13/1/150		100/	The state of	

Notes: MRBO surveyed one small portion of this dual-easement property in 2018, and the entire property in 2019; this is the primary reason for the significantly higher number of birds documented in 2019. Taken together, these two easements comprise an important habitat complex. Highlights included relatively large numbers of Sora and Virginia Rail (top photo), American Bittern, Pied-billed Grebe, Wood Duck and other wetland-dependent species. Upland species included Northern Bobwhite (background photo) and Rose-breasted Grosbeak (bottom photo).





6664241201973

Greater Yellowlegs

House Wren

Marsh Wren Mississippi Kite Northern Bobwhite Northern Cardinal

Killdeer

Indigo Bunting

Lincoln's Sparrow

Northern Flicker Northern Parula Northern Waterthrush

Northern Rough-winged Swallow

Golden-winged Warbler

2019 Survey Dates

Migration: May 3rd. Breeding Season: June 21st. Acreage: 98

2019

	20	119			
		Breeding		20	19
Species	Migration	Season			Breeding
American Bittern	4		Species	Migration	Season
American Coot	1		Orchard Oriole		4
American Crow	1		Pied-billed Grebe	1	
Barred Owl	1		Pileated Woodpecker	1	
Baltimore Oriole	3	4	Prothonotary Warbler		2
Barn Swallow	6	1	Red-bellied Woodpecker	1	2
Black-and-White Warbler	3	The second	Red-eye Vireo	1	
Black-capped Chickadee	the management		Red-headed Woodpecker	5	
Belted Kingfisher	1		Sedge Wren	1	
Blue-gray Gnatcatcher	1		Sora	9	
Brown-headed Cowbird	1	1	Solitary Sandpiper	5	NAME OF THE OWNER OW
Blue Jay	45		Song Sparrow	4	2
Brown Thrasher	2		Swamp Sparrow	2	
Blue-winged Teal	75		Tree Swallow	1	121
Canada Goose	7		Tufted Titmouse	2	
Carolina Wren	T		Warbling Vireo	1	
Common Grackle	5)		White-breasted Nuthatch	3	
Common Yellowthroat	19	17	Wild Turkey	1	
Downy Woodpecker	1/1	1 in the	Wood Duck	3/-	14
Eastern Bluebird	2		Wood Thrush		10.076
Eastern Kingbird	2		Yellow-breasted Chat	L	
Eastern Towhee	3		Yellow Warbler	1 707	
Eastern Wood-Pewee		2	Yellow-throated Vireo	/ \/ \1 \/ \	
Great Blue Heron		1	Grand Total	272	63
Great Crested Flycatcher	2	2	MANAGER AND	A Property of	
Gray Catbird	1		Notes: This new survey site contains of species for its size. Of particular	COLARS MODEL BUT COLORS DESCRIPTION OF STANDARD AND AND AND AND AND AND AND AND AND AN	ALBERT DESCRIPTION OF A PRINT
Green Heron	5		marshbirds and shore birds, such		

rsity marshbirds and shore birds, such as Sora, Solitary Sandpiper and American Bittern. The presence of a Mississippi Kite (photo below) on this easement during breeding season is also remarkable.



10

5

2019 Survey Dates

66642411015RZ

Migration: April 28th. Breeding Season: June 7th. *Acreage:* 52

2019

	201	
Species	Migration	Breeding Season
American Goldfinch	1	
Bald Eagle	1	
Blue-gray Gnatcatcher	2	1
Brown-headed Cowbird		1
Brown Thrasher	1	
Blue-winged Teal	22	
Canada Goose	2	4
Chipping Sparrow		1
Common Grackle	1	
Common Yellowthroat	1	1
Eastern Meadowlark	3	2
Eastern Phoebe	1	
Eastern Wood-Pewee		1
Great Blue Heron	1	2
Great Egret	1	
House Wren	1	
Indigo Bunting		1
Killdeer	4	2
Lesser Yellowlegs	5	
Mourning Dove	1	
Northern Cardinal		1 -1
Northern Parula		1
Pileated Woodpecker		1
Prothonotary Warbler		1
Red-bellied Woodpecker	1	2
Red-headed Woodpecker		1
Solitary Sandpiper	1	
Song Sparrow		3
Spotted Sandpiper	2	
Tree Swallow	3	3
Tufted Titmouse	1	
Wood Duck	1	3
Yellow-billed Cuckoo		1
Yellow-rumped Warbler	2	
Grand Total	59	33

Notes: Another new property in the MRBO survey sample, in 2019 this easement provided open mudflat habitat for migrating shorebirds. This was unusual due to the extreme flooding in most locations in Missouri. Species using this property included Lesser Yellowlegs (top photo) and Solitary Sandpiper (bottom; both photos taken on site). A mix of open water and emergent marsh resulted in the presence of Blue-winged Teal, Canada Geese, and wading birds such as Great Blue Heron. This easement is under new ownership and we look forward to keeping the new landowner apprised of project findings.





2019 Survey Dates

Migration: May 4th. Breeding Season: June 24th.

	2019		
a .	3.51	Breeding	
Species	Migration	Season	
American Bittern	2		
American Crow	1		
American Goldfinch			
American Redstart	1	diam.	
Bald Eagle	1		
Baltimore Oriole	4	CHARL SE	
Barn Swallow	5		
Black-and-White Warbler	2		
Blue-gray Gnatcatcher			
Blue Jay	Z		
Brown Thrasher		1	
Blue-winged Teal	3		
Blue-winged Warbler	3.	W	
Canada Goose	14		
Carolina Wren			
Common Yellowthroat	8	HV P	
Downy Woodpecker	1	11	
Eastern Kingbird]) 1		
Eastern Wood-Pewee		1	
Great Blue Heron	1	1	
Great Crested Flycatcher	1 2	1 3	
Gray Cathird	1	3	
Great Egret Green Heron	2		
	11		
Greater Yellowlegs			
Golden-winged Warbler	1	2	
Indigo Bunting Marsh Wren	1	2	
	2	1	
Mourning Dove Northern Cardinal	2	4	
Northern Parula	3	1	
Northern Waterthrush	3 7	1	
Northern Rough-winged	/		
Swallow	5		
Orchard Oriole	1		
Pied-billed Grebe	1		
Purple Martin		3	
Rose-breasted Grosbeak	1		
Red-bellied Woodpecker	1	- 1	
Red-headed Woodpecker	2		

	20:	19
Species	Migration	Breeding Season
Red-shouldered Hawk	1	
Sedge Wren	1	
Sora	10	
Solitary Sandpiper	2	
Song Sparrow	4	
Summer Tanager		
Swamp Sparrow	5	
Tufted Titmouse	1	Francisco de la companya del companya del companya de la companya
Turkey Vulture	3	小哥哈纳奇纳特别
Warbling Vireo	2	
White-eyed Vireo	1 111	
Wood Duck	5	
Western Palm Warbler	3/2/1	
White-throated Sparrow	2	一种
Yellow Warbler		2
Yellow-rumped Warbler	6	
Yellow-throated Vireo	3	400
Yellow-throated Warbler)	1
Grand Total	137	25
24		

Notes: This new survey site was largely flooded during the migration season, providing habitat for wetland-dependent birds such as Greater Yellowlegs, Solitary Sandpiper (photo below) and Sora. During the breeding season, a dearth of water on most of the easement resulted in habitat for forest birds including Eastern Wood-Pewee, Northern Parula and Gray Catbird. The presence of water in some few areas resulted in the presence of breeding Common Yellowthroat, Yellow Warbler, and Great Blue Heron.



66642495009CD & 66642498009YF

2019 Survey Date Migration: May 4th. Breeding Season: June 11th. Acreage: 98

•	^	4	Λ
1.	"	•	ч

Species	Migration	Breeding Season
American Bittern	2	
American Crow	1	1
American Goldfinch	3	5
Baltimore Oriole	1	
Belted Kingfisher	1	
Black-capped Chickadee	1	
Black-throated Green Warbler	1	
Blue Grosbeak		1
Blue Jay	2	
Blue-gray Gnatcatcher	2	3
Brown Thrasher		
Brown-headed Cowbird	2	6
Canada Goose	4	
Cedar Waxwing		2
Common Yellowthroat	26	11
Downy Woodpecker	1	
Eastern Kingbird	2	3
Eastern Meadowlark	1	
Field Sparrow	2	1
Grasshopper Sparrow	1	
Gray Catbird	2	6
Great Blue Heron		ose i
Great Crested Flycatcher	2	2
Green Heron	2	等多字 。
House Wren	1	
Indigo Bunting		10
Killdeer	1.7	1 2
Louisiana Waterthrush		
Mallard		2
Marsh Wren	11	
Mourning Dove	2112	1
Nashville Warbler	1	4.1
Northern Cardinal	3	4
Northern Parula	Date !	7874
Northern Waterthrush	1, 201	V
Orange-crowned Warbler	1.	10
Orchard Oriole	2	
Ovenbird		1

	2019	
		Breeding
Species	Migration	Season
Pileated Woodpecker		1
Red-bellied Woodpecker		1
Red-eyed Vireo	1	
Red-headed Woodpecker	1	
Sedge Wren	3	
Solitary Sandpiper	8	6
Spotted Sandpiper	3	
Tufted Titmouse	2	2
Turkey Vulture	11	
Warbling Vireo	2	3
Western Palm Warbler	1	
White-breasted Nuthatch	1	
White-eyed Vireo	1	
White-throated Sparrow	1	
Willow Flycatcher		1
Wood Duck	1,000	6
Yellow Warbler	1	
Yellow-breasted Chat		1
Yellow-throated Vireo		1
Grand Total	100	85

Notes: This easement, also new to our survey sample, was unique in having Solitary Sandpiper and Ovenbird still present during the breeding season; these species merely stopped over at most sites during migration. Other notable species included two American Bittern (below) and a large number of Common Yellowthroat during both migration and breeding season.



66642412018JK

2019

	201	9
Species	Migration	Breeding Season
American Crow	1	1
American Goldfinch	2	1
American Robin		2
American White Pelican	31	
Barred Owl		1
Baltimore Oriole	1	
Blue-gray Gnatcatcher		2
Brown-headed Cowbird	2	1
Blue Grosbeak		1
Blue-winged Teal	9	
Canada Goose	2	
Common Yellowthroat	8	-3
Dickcissel	1	2
Eastern Kingbird	1	1
Field Sparrow		1
Great Blue Heron	1	1
Great Crested Flycatcher		2
Gray Catbird	1	2
Indigo Bunting	2	6
Lesser Yellowlegs	20	- Charles
Mallard	14	
Mourning Dove	2	> i
Northern Cardinal	k 3	4
Northern Flicker		1
Northern Parula	A	1
Northern Waterthrush		
Red-headed Woodpecker	1	
Sora	1	TO THE T
Solitary Sandpiper	6	
Song Sparrow	2	5
Tufted Titmouse	1	
Warbling Vireo	1	No.
Wood Duck	2	2
White-throated Sparrow	2	
Yellow-billed Cuckoo	XXXX	2//
Grand Total	105	44

2019 Survey Dates

Migration: May 9th Breeding Season: June 6th. *Acreage:* 44

Notes: This easement contained good wetland species diversity, particularly for its size. Highlights included flocks of American White Pelicans (top photo) and Lesser Yellowlegs (lower photo) during migration as well as Solitary Sandpiper and Blue-winged Teal. During the breeding season, several songbirds were present including Common Yellowthroat, Indigo Bunting (middle photo) and Song Sparrow.







2019 Survey DatesMigration: April 27th. Breeding Season: June 6th. **Acreage:** 127

66642405009HG

2019

	201	L
Species	Migration	Breeding Season
American Crow	1	
American Goldfinch	5	
Bald Eagle	2	3
Blue-gray Gnatcatcher	3	
Brown-headed Cowbird	1	1
Canada Goose	5	4
Common Yellowthroat	4	1
Eastern Towhee	2	
Great Blue Heron		1
Great Crested Flycatcher	1	3
Gray Catbird		1
House Wren	3	
Indigo Bunting		1
Northern Cardinal	4	
Northern Parula	2	
Pileated Woodpecker	to i //	
Prothonotary Warbler	mon of	1
Rose-breasted Grosbeak	THE REAL PROPERTY.	
Red-bellied Woodpecker	111	
Red-headed Woodpecker	3	3
Sora	701 76	
Song Sparrow	1-1-5	2
Swamp Sparrow	1	AND TO
Tree Swallow	2	3
Tufted Titmouse	2	
White-eyed Vireo	1	
Wood Duck	3	2
White-throated Sparrow	3	THE STATE OF
Yellow-breasted Chat		2
Yellow-rumped Warbler	2	
Grand Total	55	28

Notes: Another new site in our survey sample for 2019, this easement held some notable species during both migration and breeding season. Bald Eagles (top photo) were present during both surveys. In migration, we documented birds with a variety of different habitat affinities, such as Sora, Pileated Woodpecker, and Rose-breasted Grosbeak (bottom photo, taken on site).





5464241501JT8

2019 Survey DatesMigration: April 27th. Breeding Season: June 6th. **Acreage:** 241

2019

	201	19
Species	Migration	Breeding Season
American Crow	5	
Bald Eagle	2	
Baltimore Oriole	2	1
Barn Swallow	2	
Black-capped Chickadee	1	
Black-crowned Night-Heron	2	
Brown-headed Cowbird	1	- Andrews
Black-and-white Warbler	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ser Detrois
Blue Jay	2	The state of
Blue-winged Teal	64	
Canada Goose	3.	
Common Grackle	1	3
Common Yellowthroat	19	9
Dickcissel	2	4
Downy Woodpecker	2	
Eastern Kingbird	5	HILL
Eastern Meadowlark	3	VA L
Eastern Wood-Pewee		N i
Great Blue Heron	1	2
Great Crested Flycatcher	i land	
Gray Catbird	2	V VI
Green Heron	THE	MINE
Greater Yellowlegs	TAN TANK	
House Wren	对形	
Indigo Bunting	128/1-10 -	5
Killdeer		MET/N
Least Bittern	OVID A	
Mallard	2	7/7/
Northern Cardinal	4	3
Pileated Woodpecker		APWAY!
Prothonotary Warbler		11/
Red-bellied Woodpecker	3	
Red-headed Woodpecker		3
Red-shouldered Hawk	1/1/1/	/ /
Sora	9	72/2/1
Song Sparrow	12	/12
Tree Swallow	53	2
Warbling Vireo	1	

	20	19
Species	Migration	Breeding Season
White-breasted Nuthatch	1	
Wood Duck	2	15
Western Palm Warbler	1	
White-throated Sparrow	1	
Yellow-rumped Warbler	and a second second	-0.000
Yellow-throated Vireo	2	1
Grand Total	220	74

Notes: As the background photo shows, this easement had an abundance of emergent marsh habitat, which resulted in robust concentrations of waterbirds such as Sora, Blue-winged Teal and Black-crowned Night-Heron (top photo). During the breeding season, the presence of Least Bittern, Green Heron and Great Blue Heron indicate that quality habitat was maintained throughout the season.



66642496009R9

Hairy Woodpecker

House Wren

Marsh Wren

Mourning Dove
Nashville Warbler
Northern Cardinal
Northern Flicker
Northern Waterthrush
Northern Shoveler
Orchard Oriole
Pied-billed Grebe
Purple Martin

Rose-breasted Grosbeak
Red-bellied Woodpecker

King Rail

Mallard

2010

2019 Survey Dates

Migration: May 3rd. Breeding Season: June 26th. *Acreage:* 151

2019

	201	19		20.	19
		Breeding			Breeding
Species	Migration	Season	Species	Migration	Season
American Coot	7		Ruby-crowned Kinglet	1	
American Robin	1	2	Red-headed Woodpecker		4
Bald Eagle	2	1	Ring-necked Duck	2	
Barn Swallow	1		Sedge Wren	2	
Brown-headed Cowbird	1		Sora	24	
Blue Jay	2	1	Song Sparrow	4	3
Brown Thrasher	1		Spotted Sandpiper	1	
Blue-winged Teal	45		Swamp Sparrow	5	
Canada Goose	6		Tree Swallow	49	
Chimney Swift	9		Virginia Rail	10	
Cliff Swallow	1		Warbling Vireo	3	3
Common Grackle	1		White-breasted Nuthatch		2
Common Yellowthroat	22	11	Wood Duck	2	3
Double-crested Cormorant	ALC: NO.	Mark with	Western Palm Warbler	2	
Eastern Kingbird	2	1	White-throated Sparrow	Mary America	
Eastern Wood-Pewee		2	Yellow-billed Cuckoo		E/C
Great Blue Heron		1	Yellow Warbler	2	
Great Crested Flycatcher	2	1.	Yellow-rumped Warbler	3	200,002,000
Great Horned Owl	1		Grand Total	271	46
Gray Catbird	3	3			
Green Heron		1	Notes: This site supported exc		

Notes: This site supported excellent diversity during migration, with highlights that included large numbers of Marsh Wren, Common Yellowthroat and Blue-winged Teal. A single King Rail, one of the rarest marshbird species in Missouri, was also documented, along with songbirds such as Northern Waterthrush (below; photo taken on site). During the breeding season, MRBO surveyors had to walk the perimeter of the easement due to high water in the interior.



5464241501G4D

2019 Survey Dates

Migration: May 5th. Breeding Season: June 11th.

Acreage: 132

2019

2019

			Breeding
	Species	Migration	Season
	American Crow		Military
	American Goldfinch	1	1
	American Redstart	1	
	Barred Owl	1	
	Baltimore Oriole	2	
	Barn Swallow	4	
	Belted Kingfisher	1	
	Blue-gray Gnatcatcher	1 34	AL TON
ĝ	Brown-headed Cowbird	、為一種广	1100
	Blue Jay	4 11	杨龙期
	Blue-winged Teal	30	1
	Blue-winged Warbler	2	THE W
	Canada Goose	6	THE PERSON
h	Carolina Wren	1 3000	
	Chimney Swift	1	1/1/1/
	Common Grackle	4	17
	Common Yellowthroat	9	1
	Dickcissel	3	13
	Downy Woodpecker		2
í	Eastern Kingbird		3
١	Eastern Meadowlark	1	1
	Eastern Wood-Pewee		2
	Gadwall	. 1	
ė	Great Blue Heron	3	3
	Great Crested Flycatcher	2	1
	Great Horned Owl	1	
	Gray Catbird	3	2
	Great Egret	2	
	Green Heron	(1	
	Golden-winged Warbler	2	
	House Wren	- 1	2
	Indigo Bunting	1	9
	Killdeer	3	5
	Least Bittern		1
	Least Sandpiper	1	
	Lesser Yellowlegs	7	
	Lincoln's Sparrow	1	
	Mallard	3	1
	Marsh Wren	1	
	Northern Cardinal	1	1

pecies	Migration	Season
Northern Parula	D-d	2
Northern Waterthrush	1	
Jortharn Dough winged		

	species	Migration	Season	-
	Northern Parula	I I	2	4
	Northern Waterthrush	1		
	Northern Rough-winged	SA TON		
	Swallow	1		
	Orchard Oriole		1	
	Pileated Woodpecker	1 500		
	Prothonotary Warbler	St Freehold	1	
	Red-bellied Woodpecker	A MINOR	2	
	Red-eyed Vireo	1		
	Red-shouldered Hawk	1		
1	Savannah Sparrow	1		
	Sedge Wren	1	101/1	1000
(Sora	1-0	110-00	
d	Song Sparrow	4	A	1.8
26	Spotted Sandpiper	4	2/13	
1	Swamp Sparrow	1 /	XIV	10 No
3	Tufted Titmouse	2	1/1//	113
	Warbling Vireo	41	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	質劇
	White-breasted Nuthatch	1 /		MA
	Wild Turkey	1	是 温度	MYR
	Wood Duck	17	5	1
	Yellow Warbler	1	WALL Y	
	Yellow-rumped Warbler			Bell'ar
	Yellow-throated Vireo	I		JE O
	Grand Total	154	67	
		THE RESERVE OF THE PERSON NAMED IN		

Notes: This easement hosted a broad diversity of species during both migration and the breeding season. Highlights included several warbler species along with good numbers of marshbirds and waders, such as Green Heron (below; photo taken on site). The large number of Dickcissels present in June indicates that this site provides breeding habitat for grassland-dependent birds as well as marsh-dwelling species.



WET REGION 3 OVERVIEW

Survey coverage in WET Region 3 in 2019.

ACCRECATE OF THE PARTY OF THE P		STATE OF THE PARTY.	BLANCO.	Indinto	STATE OF	1000
Easement	County	Site Acreage	# Transects	Migration Visit	Breeding Visit	Vinistry.
66642407009TC	Pemiscot	5570	31	inaccessible	inaccessible	
666424000B3V	Bollinger	88	4	4/4	5/18	
66642412018ZW	New Madrid	66	3	4/1	5/24	2 40
66642412018DW, 6664240900X2K and 666424010090Y	Bollinger	206	10	4/3	5/20	
6664241000ZN0	Stoddard	80	2	4/2	5/18	
66642496009JJ	New Madrid	232	4	inaccessible	5/26	
66642407009TT	New Madrid	270	7	3/29	5/25	
5464241601L6G	New Madrid	292	6	inaccessible	inaccessible	
66642496009JZ	Stoddard	132	3	4/1	5/22	
66642496009J5	New Madrid	147	3	4/4	5/26	
5464241601L6T	New Madrid	181	3	inaccessible	inaccessible	
6664240000B4V	Scott	435	V 5.	inaccessible	inaccessible	
6664240800MYJ	New Madrid	147	5/	4/2	5/21	
5464241801QFT	New Madrid	263	10	3/29	5/23	- \//
666424005009GX	New Madrid	386	8	3/31	5/23 & 5/24	

666424000B3V

2019 Survey Dates
Migration: April 4th. Breeding Season: May 18th.
Acreage: 88

	M	Migr	ation	AK	L	Breeding		
Species / Specie	2016	2017	2018	2019	2016	2017	2018	2019
Acadian Flycatcher		160		Ley	600		3	1
Alder Flycatcher	X				6			2
American Bittern			XXX		1	-/ /		
American Coot	=1	VA ST	95	總統		1	XXX	
American Crow	1	3	7	2	8	10	10	XXII.
American Goldfinch	1	3	MILE		2/		1	1
American Redstart			N. Carlo		1/	2		
American Robin				1			X	
American Wigeon			10			NASS	SAME	V W
Bald Eagle		ZA			* VA		1	1 /
Barn Swallow			1	Valle	AL CONTRACT	2	3	
Barred Owl			2	A1	1		1	
Belted Kingfisher			1	1	1			
Black-crowned Night-Heron			3				2	
Blackpoll Warbler				ATT I'm	YAXILE.	1		
Blue Jay	5	1	1	116	1	2	3	1
Blue-gray Gnatcatcher	1 1	2	6	1	1		2	1 3
Blue-winged Teal	15		62	4 4	1	12		
Brown Thrasher	5.111	建设		2			學的政治	1
Brown-headed Cowbird	Man Z			5		1	4	
Canada Goose	5/	2	2	2	19	6	1	
Carolina Chickadee		4	1	3	2	3	3	//1
Carolina Wren			2	MATERIAL				10
Chimney Swift					1			
Common Grackle		(1)		9	17	41	1	1
Common Merganser	9		*		1/02	211	JA	
Common Nighthawk				CHAR		2		1
Common Yellowthroat		17	TO T	200	To Ko		2	9
Dickcissel		No de	(Little)		- 1/1/2 P		I I	
Double-crested Cormorant	10	300	自然	12/2				
Downy Woodpecker	PURE TO S	2/10	The Aller	2			3-	
Eastern Kingbird		37	1	ASK		2	A COLUMN	
Eastern Wood-Pewee		1			2			I WAS
Fish Crow	4 3	400	2	3/	A LA	The state of		
Gadwall		8 10	861				130	
Golden-Crowned Kinglet		2	1/1	4716	W HO		Property	
Gray Catbird	20		1//	1 38	2		1	
Great Blue Heron	20		4		9	3	2	10 4
Great Crested Flycatcher						2		

666424000B3V

			Migr	ation			Breeding	g Season	
	Species	2016	2017	2018	2019	2016	2017	2018	2019
	Great Egret					22	20	1	
	Great-tailed Grackle						2		
	Greater Yellowlegs	15		10	1				
	Green Heron					1	1		1
	Green-winged Teal			500					
	Hooded Merganser			1					
	Indigo Bunting					2	5	7	4
	Killdeer						1	2	
	Least Bittern							1	
	Least Flycatcher					1			
	Lesser Yellowlegs			1					
	Little Blue Heron						23	2	X. 8
1000	Louisiana Waterthrush				Sec. 1	1	2	amula.	THE PARTY OF THE P
	Mallard	6	-	4	THE STATE OF	MAN DE	2	2	
	Mourning Dove		Park San		3			1	
	Northern Cardinal		4	2	6		9	5	4
	Northern Parula			1				1	
9	Northern Shoveler	-	- N.	6			15		
	Northern Waterthrush						1		
	Orchard Oriole			- 1 N	The state of the s			1- 1-	
	Pectoral Sandpiper	77.5	Shrain	300	2000	The Later La		大 赤。	
	Peregrine Falcon			1111		A PARTY OF THE			
	Pied-billed Grebe		REMANDA	3.000	THE PARTY	e and			
	Prothonotary Warbler	- A	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	A STATE OF THE STA	A STORY	3 1		4	4
	Purple Martin	7.75	True .	The second			4 75 15	2	2
	Red-bellied Woodpecker		1 0	* 1	是都是	2	1,		
1	Red-eyed Vireo	Marie Ball	di di	e to the	43-40	T T	- 24 Ho	3	a 1
1	Red-shouldered Hawk	光 气体	3	Ť.	10 P	2	71-4-	391g"	
	Red-tailed Hawk	- A		* 14	蒙	- 4	+1	+	<u>.</u>
	Ring-necked Duck	-6		6	2		4 <u>1</u>	70	VI.
	Ruby-crowned Kinglet		1 *		- 12		2	=+	-
	Ruby-throated Hummingbird						1		
	Rusty Blackbird	- 4		270	4				- {
	Solitary Sandpiper	*	. 1	2		-			· · · · ·
	Song Sparrow				1			-	1
	Summer Tanager					1		The second	
	Swamp Sparrow				6			45.4	
	Tennessee Warbler						1 -	37	- 1
	Tree Swallow	10						X 5	100
	Tufted Titmouse		3	1		1		2 1	17.8-1
									THE RESERVE OF THE PARTY OF THE

666424000B3V

	Migration					Breeding Season				
Species	2016	2017	2018	2019	2016	2017	2018	2019		
Unknown Duck	2			7						
Unknown Woodpecker	Sales of the	Sam Dis.	-5	1						
Warbling Vireo			AND A JEW	A PARTY	9.0	March and	del	and the sail of		
Western Palm Warbler		5								
White-eyed Vireo						A 4/4	2	1		
White-throated Sparrow				2						
Wild Turkey	-				1			PARTY II. II. N		
Willow Flycatcher		1 100				1				
Wilson's Snipe			1	1						
Wood Duck	2	V-	9	5	3	7				
Wood Thrush		2		80	2	2	3	1		
Yellow-billed Cuckoo					5	2	4	1		
Yellow-crowned Night-Heron						1	36			
Yellow-rumped Warbler			19	6						
Yellow-throated Warbler	1		4							
Grand Total	107	35	2205	83	123	192	90	45		

Notes: This easement provides a good example of the variability of migration. In 2018, surveyors happened to arrive at this site at exactly the right time for documenting hundreds of birds as they used the area for temporary stopover habitat. In 2019, though surveys were conducted just two days later than in the previous year, the "snapshot" we got of bird use was far lower. However, during both seasons the diversity of species using this easement was high, particularly among songbirds. Wood Thrush (lower left) and Prothonotary Warbler (lower right; both photos taken on site) were among these species, along with birds like Common Yellowthroat, Indigo Bunting and Yellow-billed Cuckoo.





2019 Survey Dates Migration: April 1st. Breeding Season: May 24th. Acreage: 66

		Migr	ation			Breeding	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
American Bittern				2				1
American Coot			12					
American Goldfinch						2		
American Kestrel					1			
American Robin	1		1	3		1	1	1
Barred owl				1				
Bald Eagle		2						
Baltimore Oriole				100		3	4	
Barn Swallow	A 100	4	3		10	10	5	4
Belted Kingfisher		Editor Anda	alyzon milateli.	e#11	10-1-00-	IN A		
Brown-headed Cowbird			2	2			a Machine	1 1
Blue Jay		3		BANKARA	山坡北省		2	2
Black-necked Stilt					2			
Bobolink				1		MATERIAL PROPERTY.	i i	
Brown Thrasher	1		1	MA ST				
Blue-winged Teal	8	111	72	10	T			
Canada Goose	6		3					
Carolina Wren	1		2	1	1	11	3	
Cedar Waxwing								20
Chipping Sparrow		6	1					
Cliff Swallow					5	10/	15	12
Common Grackle		10	3	9	4	6	2	11/2
Common Nighthawk		4			14 1		1	
Common Yellowthroat				N			6	3
Double-crested Cormorant			\/.	25	, and A			
Dickcissel	11				14	16	18	9 1
Downy Woodpecker						4. 1	Addien in	1,*
Eastern Kingbird					SP E	1,		Y Z
Eastern Meadowlark		811		1	1		1/	17 X
Eastern Towhee	X		à 1	2				1-10
European Starling		5		11 1	2	/ T		
Field Sparrow	3/\	6	(5)	5/x	$\Lambda_{1//}$		2	2
Gadwall	The V	1	8 4	W/A			//	
Great Blue Heron	dil la			M. W.	5-		16 - 1	ė)
Great Crested Flycatcher	FV NV	1	XX		1		1	1
Great Egret	JAN TON	NIV	MAN		14	4		
Green Heron	*		XILX	100	2		3	1 1
Grasshopper Sparrow	- XX	YHY	KA !!	7	3 /	3	5	1
	4/14	11/07/	11					X

66642412018ZW

		Migr	ation			Breeding	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Greater Yellowlegs	16	14	2				1	
Green-winged Teal		3	2					
Horned Lark		1					2	
House Wren				1		1		
Indigo Bunting					2		5	5
Killdeer	2	2	1		2		4	1
Little Blue Heron					4			
Least Bittern							3	1
Lesser Yellowlegs	16	12	1					
Lincoln's Sparrow	2	1						
Loggerhead Shrike		1						
Mallard		4	2	2	5	Albert.	5	9
Mourning Dove	2	3	3	7	4	6	2	1.1
Northern Bobwhite	A . W. (1)	7	The	an all or	1	3	3	3
Northern Cardinal	1	10	2	4	6	3	5	6
Northern Flicker		V / Same	1					
Northern Harrier		1/1	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\					有权的选
Northern Mockingbird		1	1/4/01			1		
Northern Parula	2							
Northern Rough-winged Swallow	1				3		4	
Northern Shoveler	33	12			musas si di			
Pied-billed Grebe			的資訊。	3	1-1-19	1 114		
Pectoral Sandpiper	6							
Ring-billed Gull				3		作 沙勒洛		THE SALE
Red-bellied Woodpecker				i			ET I	
Red-headed Woodpecker		Manual Market	WINAN			1		
Rock Pigeon			14		5	11	ica de la compania de	21
Red-tailed Hawk				1	数型数数			164
Savannah Sparrow		22	2	1.2			1	
Semipalmated Plover	1 1	17/1/-	Y - //		TANAMA		数作的特	
Semipalmated Sandpiper		TAN	lli/:``\\ <i></i>	1	}_}/\X\X ^•		10	
Snowy Egret		-/ 1 //s/J f	14 / 1/	J) to	\ <u> </u>	/ /	VI	
Sora	1	 		3		/ <u>/</u> (-	W 4 1	$\mathcal{L} \setminus \mathcal{L} \setminus $
Solitary Sandpiper	2	7 4 1/1		1 1 1		1 1/1	N/M	/ / / / / / / / / / / / / / / / / / /
Song Sparrow	1	1 7 7		// /2		$\backslash M / \backslash J$	14/1/1	
Swamp Sparrow	1 2	. 14	13/	31/		W///////////	1 11/1/11	
Tree Swallow	5	3	5.1	1 /5	5	. 1 1/ ///////	117	
Tufted Titmouse	41/1	1	2	1		11/1/1/	1,3	Î
Virginia Rail			1	4		1		Te

66642412018ZW

		Migration				Breeding Season			
Species	2016	2017	2018	2019	2016	2017	2018	2019	
Wilson's Snipe	4	15			0	111			
Wood Duck		10	3	8		6	9	2	
Yellow-rumped Warbler	1				19-1		4		
Yellow-throated Vireo					10		1		
Yellow-throated Warbler		2		Bis.	641	No. of Line			
Grand Total	118	306	171	163	//111	90	141	109	
			10	0.00			1		
THE REAL PROPERTY.	W /	1		y one		1			

Notes: This easement has consistently provided high quality habitat for wetland-dependent birds for the past four survey years. Species such as American Bittern (background photo, taken on site), Least Bittern and Pied-billed Grebe find migration and breeding habitat here. The site also supports a diversity of swallows, such as Northern Rough-winged Swallow (below) as well as Barn and Cliff Swallows. Also typically present are several species of waterfowl along with upland prairie birds such as Dickcissel and Northern Bobwhite.



66642412018DW, 6664240900X2K and 666424010090Y

2019 Survey Dates
Migration: April 3rd. Breeding Season: May 20th.
Acreage: 206

		Migr	ation			Breeding	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
American Bittern			1		1	2		1
American Coot			137	1	11			
American Crow	6	8	8	4		Luci	4,	126
American Goldfinch		1			1	8		
American Golden-Plover		1		A SAN				
American Pipit			5					
American Robin				1	Marie			
American Wigeon		2						
American White Pelican	330							
Barred Owl				3	2	212 1		
Bald Eagle	2		2	1:			1	1
Bank Swallow			10	1000	13	8		
Baltimore Oriole	A TOTAL			San VARIA			2	
Barn Swallow		14	10	2	6	27	4	3
Belted Kingfisher	3	- I		1	SI VA			
Bell's Vireo		and the same	Service Control			1	WAR !	3
Blue-gray Gnatcatcher	- 1		2	1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Will be	2	2	4
Brown-headed Cowbird	4	-	5	43		yw Traban	5	5
Blue Grosbeak	> ()			. \			- 相對	1 1
Blue Jay	3		2		1	10 -8 -1	5	
Black-necked Stilt		10		of i		2 4	4	
Bobolink		1		-	1	-		
Brown Thrasher			1	2		2	2	11
Bufflehead		1	1	REE!	BI I	1	THE REAL PROPERTY.	
Blue-winged Teal	33	41	320	22	8	3		墨1
Carolina Chickadee	3	1		3				- 1
Canada Goose	6		10	4	11	174	13	15
Carolina Wren			1	2		1	4	
Clay-colored Sparrow			V	2 1 2	1200	1		100
Cedar Waxwing					40	19	1534	5
Chimney Swift					8	13/		2
Cliff Swallow					12	16	1	197
Common Grackle	15		3		1	4	4	1
Common Yellowthroat					1	9	12	27
Dickcissel			-		6		119	36
Downy Woodpecker			1	1215				1
Dunlin		7					4	
Eastern Bluebird		1	2	1			1	
Eastern Kingbird					4	5	1	2

66642412018DW, 6664240900X2K AND 666424010090Y

		Migra	ation			Breedin	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Eastern Meadowlark		1		11			2	
Eastern Phoebe			2					
Eastern Towhee				1				
Eastern Wood-Pewee						4	6	2
European Starling			1	30				
Fish Crow		2		8	3	2		
Field Sparrow	6	2	1	8		4	3	3
Gadwall			12					
Great Blue Heron	6	5		1	8	2	3	2
Great Crested Flycatcher							1	1
Great Horned Owl				1				
Great Egret				6		1	14	
Green Heron						2	2	in anti-
Greater Yellowlegs	33	26	24	2			1	
Green-winged Teal	6	1 400	197	经收入				
Henslow's Sparrow						Manage Sept	March Co.	1
Hermit Thrush			1			Sur Sur Con		
Horned Lark		1		Charles A. Co.		- W-OHT		
Indigo Bunting						4	5	12
Killdeer	6	13				7	7	3
King Rail					2			1
Long-billed Dowitcher		13		No or F. C	AVERAGE TO			
Little Blue Heron	i siring	and selected				8		
LeConte's Sparrow		1 1	1		2.5%			Marin.
Least Bittern					1	, W	1	4
Least Flycatcher							1	
Least Sandpiper		45				1		
Lesser Yellowlegs		53	14			2	1/	
Lincoln's Sparrow		1						
Louisiana Waterthrush	9							/ 1, >
Mallard			26	3	1.16.76.76	3		
Marsh Wren					2	2	1.16	2
Mourning Dove			2	4	1. 1. Sec. 1.	1	3	1
Northern Cardinal		$\frac{1}{2}$		6		2	5	6
Northern Flicker				1			$\frac{1}{2}$, $\frac{1}{4}$	
Northern Harrier			8 1 4	3				
Northern Rough-winged Swallow				1				
Northern Shoveler	42	7	35	16		(14)	Man of	1. 1. [4]
Ovenbird	A. Carlo							3
is a company of the same			11		34 . (1) 874	No.	A CAMPANA	WALL TO A

66642412018DW, 6664240900X2K AND 666424010090Y

		Migr	ation			Breedin	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Palm Warbler						1		
Pied-billed Grebe	6		2		2	2		5
Pectoral Sandpiper		362	2	22		38	1	
Pileated Woodpecker					1			
Prothonotary Warbler								1
Purple Martin							3	
Red-breasted Merganser						3		
Red-bellied Woodpecker			1		-	2	4	2
Ruby-crowned Kinglet		1		£2	- B	Spill and	-	
Red-headed Woodpecker	6			Let	and a	-	1	
Ring-necked Duck			1	100		255		
Red-shouldered Hawk				Para		1	1	
Red-tailed Hawk			1	100	1			
Rusty Blackbird			2			7		
Savannah Sparrow		14	6	7		1		
Snow Goose			45 14	1/1/				
Sora		5	1/1	1	4	2		
Solitary Sandpiper		32	//1					
Song Sparrow		1	3	2		3		
Spotted Sandpiper		6				8		
Summer Tanager		113/10				1	1	1
Swamp Sparrow	9	10	54	25	45			
Tree Swallow	90	117	12	57	15	12	7	
Tufted Titmouse	100	1	1	1		1	1	
Unknown Sandpiper	6	8		5			16	
Warbling Vireo			1				1	
White-eyed Vireo								2
Willow Flycatcher				THE RES				1
Wilson's Snipe	3	38	49	52				
Wild Turkey			4	1.00				
Wood Duck			16	3	20	5	5	2
White-throated Sparrow	- 1			3-				
Yellow-breasted Chat	- 1		1		1		1	1
Yellow-billed Cuckoo	- 1	No.		1	1			2
Yellow Warbler			18			3		1
Yellow-rumped Warbler			1/1/	1				
Grand Total	638	854	994	383	139	226	287	181
	-		60					

Notes: As it has in past years, this easement provided good migratoary stopover habitat for a variety of shorebirds and waterfowl, and offered breeding habitat to marsh birds and grassland birds. Though the site did not contain as many Dickcissels (background photo, taken on site) due to water levels, this is an example of a grassland bird benefitting from a wetland easement. Other highlights included high numbers of Wilson's Snipe and Eastern Meadowlark during migration.

6664241000ZN0

2019

Species	Migration	Breeding Season
American Crow	1	Season
American Pipit	1	
Barn Swallow	1	4
Belted Kingfisher	2	1
Blue-gray Gnatcatcher	2	1
	4	1
Brown-headed Cowbird	2	1
Blue Jay		
Brown Thrasher	2	
Blue-winged Teal	14	
Carolina Chickadee	2	7
Canada Goose	2	7
Common Grackle		1
Common Yellowthroat		3
Dickcissel	Wan	7
Downy Woodpecker	1	AL COM
Eastern Bluebird	2	are Install
Eastern Kingbird	m India	3
Eastern Meadowlark		1
Eastern Towhee	3	
European Starling	6	
Field Sparrow	4	2
Gadwall	4	
Great Blue Heron	1	
Greater Yellowlegs	5	
Hooded Merganser	10	
Indigo Bunting		4
Killdeer	3	2
Mallard	2.	5
Mourning Dove	5),,,	
Northern Cardinal	8	21/
Northern Harrier	1/1/	
Northern Mockingbird		
Northern Pintail		$\frac{1}{2}$
Northern Shoveler	16	
Pied-billed Grebe	2	
Red-bellied Woodpecker		
Red-tailed Hawk		
Red-winged Blackbird		7,6
Snow Goose		
Cong Coord	2 1	/ De Ca

Song Sparrow

2019 Survey Dates Migration: April 2nd. Breeding Season: May 13th. Acreage: 80

	2019			
Species	Migration	Breeding Season		
Swamp Sparrow	2			
Tufted Titmouse	1			
Unknown Sandpiper	30	1		
Wilson's Snipe	4			
Wood Duck	1			
White-throated Sparrow	1			
Yellow-breasted Chat		2		
Yellow-rumped Warbler	1			
Grand Total	153	55		

Notes: This easement, new to our sample in 2019, was particuarly notable for containing 30 sandpipers who's ID stumped our survey crew! Other highlights included good numbers of waterfowl, such as Blue-winged Teal, Hooded Merganser, and Northern Shoveler, and a high diversity of species for the size of the easement. Belted Kingfisher (below) was present during both migration and the breeding season, as were Mallard and Canada Goose.



66642496009JJ

2019 Survey Dates

Migration: inaccessible due to high water.
Breeding Season: May 26th.

Acreage: 232

2019 Breeding

Notes: It was fortunate that surveyors were able to access this easement in late May, when many other sites in southeast Missouri were still under water. Highlights included numerous Great Egrets (background photo) and Black-necked Stilts, as well as other wetland-associated birds such as Prothonotary Warbler and Mississippi Kite. We anticipate adding to this site's species list in future survey years.

Species Season Acadian Flycatcher American Crow American Goldfinch Belted Kingfisher Blue-gray Gnatcatcher 5 Brown-headed Cowbird 2 Blue Jay 1 Black-necked Stilt 5 Carolina Chickadee 2 2 Carolina Wren Eastern Towhee 1 Eastern Wood-Pewee 1 **Great Crested Flycatcher** 1 **Great Egret** 16 10 Indigo Bunting Mississippi Kite Northern Cardinal 6 Northern Parula Prothonotary Warbler 3 Purple Martin 1 Red-bellied Woodpecker 1 Red-eyed Vireo Summer Tanager 3 Tufted Titmouse 1 White-eyed Vireo 1 2 Wood Duck Yellow-billed Cuckoo 3 **Grand Total 74**

66642407009TT

2018 Survey DatesMigration: March 29th. Breeding Season: May 25th. **Acreage:** 270

	Migr	Migration		Season
Species	2018	2019	2018	2019
American Coot		100		
American Crow		1		
American Goldfing	eh		1	
American Robin		3		
Bald Eagle		2		
Barn Swallow			2	
Bell's Vireo			2	2
Blue-gray Gnatcate	cher			1
Brown-headed Cov	wbird 1	2		1
Blue Grosbeak				2
Blue Jay		3		
Black-necked Stilt	15			1
Bonaparte's Gull	3			
Brown Thrasher	Land Land	3		
Blue-winged Teal	67	22	2	Princy.
Carolina Wren	1	2	2	
Chipping Sparrow	1			1
Common Grackle	Time on the 1 word	14	15	4
Common Yellowth	roat	Miles and Miles and Miles	9	2
Dickcissel	- AUGUSTA MAGNATA		84	78
Downy Woodpeck	er	1 1 1 1		
Eastern Kingbird			5	2
Eastern Meadowla	rk 10	24	7	8
Eastern Phoebe	1			
Eastern Towhee		3	1	3
Field Sparrow	8/1	26	16	10
Fox Sparrow	N IN A			
Gadwall	38	4		
Great Blue Heron			13	
Great Crested Flyc	atcher			1
Golden-crowned K				
Great Horned Owl	CANTOGALNO ESPOILINO AS LOCUSSO II		1	
Great Egret		4		
Green Heron				2
Grasshopper Sparr	ow		3	
Greater Yellowlegs	RESERVED IN TRACK TO SERVE THE PROPERTY OF THE PARTY OF T	13		
Green-winged Tea	M I N 1 A 1 2 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3	60	XX	4
Hairy Woodpecker	THE RESERVE OF THE PARTY OF THE	1	TOWN ASSE	
House Wren				
Indigo Bunting		XX EXTENS	5-14	8
	MARKET THE TANKS	TOWN NOT THE	Con No CHE	

Notes: This site was surveyed at an opportune time to get a snapshot of migratory bird use. Large numbers of waterfowl and shorebirds were present, such as American Coot, Pectoral Sandpiper and Least Sandpiper. The easement contained a diversity of both wetland species (such as Green Heron, lower photo) and grassland species (such as Yellow-breasted Chat), during the breeding season.





	Migration		Breeding Season	
Species	2018	2019	2018	2019
Killdeer	12	5	7	5
King Rail				1
Long-billed Dowitcher		42		
Least Bittern				1
Least Sandpiper		232	2	
Lesser Yellowlegs	64		1	
Lincoln's Sparrow	01		1	
Mallard	10	12	4	4
Mourning Dove	2	3	3	
Northern Bobwhite		7	16	17
Northern Cardinal	2	7	6	4
Northern Flicker	2	4	1	
Northern Harrier	4	2		
Northern Mockingbird			1	
Northern Shoveler	67	8		
Orchard Oriole			3	1
Pied-billed Grebe	2	1	E STATE OF THE PARTY OF THE PAR	
Peregrine Falcon	1	Carlot A		
Pectoral Sandpiper	17	315		
Pileated Woodpecker		1		
Purple Martin			1	3
Red-bellied Woodpecker	1	2	6	2
Red-winged Blackbird		122		
Ring-billed Gull	The same	1100		
Ring-necked Duck	4			
Red-tailed Hawk		120		
Rusty Blackbird				
Savannah Sparrow	6		1	
Semipalmated Plover	11-	Barra.		
Sora		4		
Song Sparrow		6		
Spotted Sandpiper	4		SECT.	
Swamp Sparrow	14	36		
Tree Swallow	3.4	12		
Unknown Blackbird	467	11		
White-breasted Nuthatch		1	1-34	
White-eyed Vireo		Comment of the	100	2
Wilson's Snip	194	18		10
Yellow-Breasted Chat	A A	1 100	8	5
Yellow-billed Cuckoo		30	1	5
Grand Total	749	1164	220	173

66642496009JZ

2019 Survey Dates

Migration: April 1st. Breeding Season: May 22nd *Acreage:* 132

2019

	2019		
Species	Migration	Breeding Season	
Alder Flycatcher	Migration	1	
American Coot	2		
American Crow	1		
American Robin	1		
Belted Kingfisher		1	
Bell's Vireo		4	
Blue-gray Gnatcatcher	1	5	
Brown-headed Cowbird	4	1	
Blue Jay	1		
Brown Thrasher	2	2	
Blue-winged Teal	37		
Carolina Chickadee	3		
Canada Goose	8		
Carolina Wren	2	The same	
Common Grackle		1	
Common Yellowthroat		3	
Dickcissel	1// 2/	8	
Downy Woodpecker	2.4		
Eastern Bluebird	2		
Eastern Kingbird		重直》	
Eastern Phoebe			
Eastern Towhee	$\sqrt{ 5 }$	MILL	
Eastern Wood-Pewee		A TITLE	
Field Sparrow	19	5	
Fox Sparrow	2		
Great Blue Heron		Y Design	
Great Crested Flycatcher		DA	
Greater Yellowlegs	2/11/		
Hairy Woodpecker	Wall H	1401	
/Indigo Bunting	TO MANY	13	
Killdeer		6	
Least Bittern	11/12/	7 1	
Mallard	/ 1/4//		
Mourning Dove	//4/	//>2	
Northern Cardinal	/ / T7 /	2	
Northern Flicker	1 1	The N	
Northern Harrier		524	

		Breeding
Species	Migration	Season
Northern Shoveler	12	
Pied-billed Grebe		1
Pileated Woodpecker		1
Red-bellied Woodpecker	2	
Red-shouldered Hawk	1	
Sora	1	
Song Sparrow	1	
Swamp Sparrow	13	
Tufted Titmouse	1	
White-crowned Sparrow	1	
Wilson's Snipe	1	
Wood Duck	4	
Wood Thrush		1
Yellow-breasted Chat		6
Yellow-throated Vireo		
Grand Total	154	71
	THE WEST	

Notes: This easement, new to our sample in 2019, contained a diversity of waterfowl and other wetland-dependent species during migration. Like many sites in southeast Missouri, a mixture of grassland, wetland and forest birds were present during breeding season. The site supported high numbers of Indigo Bunting (below, photo taken on site).



MDC SWIFT DITCH 66642496009J5

2019 Survey DatesMigration: April 4th. Breeding Season: May 26th. **Acreage:** 147

2019

_	n	4	^
2		ш	u
	v	1	,

	201			
Species	Migration	Breeding Season		
American Coot				
American Crown	3			
Bell's Vireo		2		
Blue Grosbeak		1		
Blue Jay	3	4		
Blue-gray Gnatcatcher	6	2		
Blue-winged Teal	49	ALL		
Brown-headed Cowbird	13	2/2		
Canada Goose	2	200		
Carolina Chickadee	6			
Carolina Wren	1/	1		
Common Grackle	5	1		
Common Yellowthroat		3		
Downy Woodpecker	1	1		
Eastern Bluebird	1			
Eastern Kingbird	And the latest	1		
Eastern Towhee	1			
Eastern Wood-Pewee		2		
Field Sparrow	11	5		
Golden-crowned Kinglet	1	15. 公司用		
Gray Catbird		1		
Great Blue Heron	3	1		
Great Egret	3			
Greater Yellowlegs	11	25-201		
Green Heron		2		
Indigo Bunting		6		
Kentucky Warbler		1 1		
Killdeer		1		
Lesser Yellowlegs	1			
Mallard	1			
Mourning Dove	2			
Northern Cardinal	9	4		
Northern Harrier	1			
Northern Shoveler	11			
Orchard Oriole		3		
Pectoral Sandpiper	3			
Pileated Woodpecker	1	1		
Prothonotary Warbler		1		
Red-bellied Woodpecker	2	1		

	Species	Migration	Breeding Season
	Ruby-crowned Kinglet	2	
	Solitary Sandpiper	2	
	Sora	1	
	Summer Tanager		Jul .
W.	Swamp Sparrow	7	- 100
	Tufted Titmouse	1	
	Wilson's Snipe	76	
	Wood Duck	3	
7	Wood Thrush		3
	Yellow-billed Cuckoo		4
	Yellow-breasted Chat		3
	Yellow-rumped Warbler	4	
	Grand Total	181	55

Notes: This publicly accessible wetland, owned and managed by the Missouri Department of Conservation, was close to inaccessible due to flooding. It is a long, narrow site with several habitat subtypes, such as open water, flooded forest and marsh. This is reflected in the bird species documented, particularly during migration. Field Sparrow (below; photo taken on site) were common along with several other grassland, wetland and forest species.



6664240800MYJ

2019

2019 Survey Dates

Migration: April 2nd. Breeding Season: May 21st. *Acreage:* 147

Species	Migration	Breeding Season
Alder Flycatcher		1
American Bittern	1	2
American Crow	2	
American Robin	1	
Barn Swallow		1
Bell's Vireo		1
Blue Jay		2
Blue-winged Teal	2	
Brown Thrasher	1	
Brown-headed Cowbird		2
Carolina Wren	2	3
Common Grackle	10	2
Common Yellowthroat		5
Dickcissel		66
Downy Woodpecker	1	
Eastern Kingbird	The same of the sa	2
Eastern Meadowlark	15	6
Eastern Towhee		1
Field Sparrow	15	3
Great Blue Heron	2	一人需求
Hooded Merganser	4	
Indigo Bunting	by cond	5
Killdeer	5	2
Mallard	7	2
Mourning Dove	4	2
Northern Bobwhite	3	- (\4_)
Northern Harrier	4	
Pectoral Sandpiper	1	
Red-tailed Hawk	1	

	20	19
Species	Migration	Breeding Season
Rusty Blackbird	1	
Savannah Sparrow	11	
Sedge Wren	2	
Solitary Sandpiper		1
Swamp Sparrow	32	
Wilson's Snipe	45	
Yellow-breasted Chat		1
Grand Total	174	114





Notes: This easement contained an impressive number of Wilson's Snipe (above; photo taken on site) during migration and of Dickeissel (left; photo taken on site) during the breeding season. Other highlights included Eastern Meadowlark, Northern Bobwhite, and Northern Harrier, a hawk of marshes and grasslands.

5464241801QFT

2019 Survey Dates

Migration: March 29th. Breeding Season: May 23rd. *Acreage:* 263

2019

Species	Migration	Breeding Season
American Golden-Plover	14	
Barn Swallow		5
Black-necked Stilt		6
Brown-headed Cowbird		14
Carolina Wren		1
Cliff Swallow		6
Common Grackle		2
Dickcissel		33
Eastern Kingbird		1
Eastern Wood-Pewee	也學	1_
Horned Lark	15	3
Indigo Bunting	X	2
Killdeer	22	12
Mallard	1	
Mourning Dove	c 5	8
Northern Harrier	1 44.7	
Northern Mockingbird		2
Pectoral Sandpiper	2	
Purple Martin		1
Red-winged Blackbird	80	
Swamp Sparrow		
Grand Total	141	97



Notes: This site is scheduled for wetland reconstruction and this year provided a good opportunity to get a "before" picture. Habitat generalist species and birds that prefer short vegetation or bare ground, such as Killdeer (left) were present. During the breeding season, surveyors only walked the perimeter of the property in order to avoid disturbing crops. Dickcissel were numerous in the hedgerows on the easement border.

2019 Survey Dates
Migration: March 31st. Breeding Season: May 23rd and 24th.
Acreage: 386

			N/!			Breeding Season				
Const.	2015		Migration		2010	2015				2010
Species	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Alder Flycatcher		2	1	4	7				4	1
American Bittern	0	3	1	4	7				1	
American Coot	9	1		7	1				2	
American Crow			-			2	0	27	2	4
American Goldfinch			7			2	8	27	6	4
American Kestrel					_		1	_		
American Robin	2	1	3	11	7	2		5	2	
American Tree Sparrow		3								
American Woodcock				1						
Bald Eagle		1		2	1			1	2	1
Baltimore Oriole				1				1	3	
Barn Swallow	1		3//		4			2	1	2
Barred Owl			A T				1996			
Bell's Vireo						7	6	7	2	3
Black-necked Stilt	10	3	21	I MALLESSE		2	WASHINGTON TO THE PARTY OF	8		in the part
Blue Grosbeak							1		May Yes	16
Blue Jay		1	5	2	1	144	~ 1	3	3	
Blue-gray Gnatcatcher				1						2
Blue-headed Vireo		2								
Blue-winged Teal	53	253	114	19	18				2	
Bobolink		y / h	HAVEN					2		2
Brown Thrasher	2	14	2	5	3			/ 1]	1	- 34
Brown-headed Cowbird			9	4	5		1	5		5 .
Canada Goose			有影点		- 42		The second	18	7 - HE	A. T.
Carolina Chickadee					2					1
Carolina Wren		$\langle \langle 1 \rangle \rangle$		4	1	PAR			4	
Cedar Waxwing			1 -						3	
Chipping Sparrow		1	7	1/(s						1,1
Cliff Swallow	20 M	$\mathcal{N}_{\mathcal{N}}$				2		2		
Common Grackle	w7	9	- 6	$11 \times$			8	44	8	3
Common Nighthawk		The Art				1/2/		1		
Common Yellowthroat	10					5 /	9	14	16	8
Dickcissel	Jan .					79	89	144	130	50
Double-crested			*	4	100					
Cormorant	8/1/2 3		WII	18	1.					12.
Downy Woodpecker		1		//1		No.		بار سار		2
Eastern Bluebird	1	A CONTRACTOR		/_1		Se Men	The second	V		
Eastern Kingbird		K K JA							No Marie	1
Eastern Meadowlark	1/7	9//	5	7	- 8	10	12	8	_5 =	3
Eastern Towhee		2	6	8	5	2	2	4	4	1
	TAX BUILDING TO SAN	TO VERFENDAMENTAL			The state of the s	And the second	ALC: NO STATE OF THE PARTY OF T			

666424005009GX

	Migration						Breeding Season				
Species	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	
Eastern Wood-Pewee							1	1	1		
European Starling		1			3		1	2			
Field Sparrow	7	33	34	37	51	7	3	24	18	10	
Fish Crow									2		
Grasshopper Sparrow			5			3			1	1	
Gray Catbird								1			
Great Blue Heron	1		1	1	1						
Great Crested Flycatcher									1		
Greater Yellowlegs	13	212	36	6	2						
Green Heron						1		5	1	1	
Green-winged Teal	6	78		7							
Hairy Woodpecker									1		
Henslow's Sparrow								2			
House Finch			5								
House Wren		A DE A	AND A STREET	1		en W.					
Indigo Bunting					to a little	4	4	13	14	4	
Killdeer	18	3	6	10	9	6	6	9	9	3	
King Rail		2	1	1		2	2	1	2		
LeConte's Sparrow			1								
Least Bittern	Sing is		1						2		
Lesser Yellowlegs	2	6	27	2				3			
Lincoln's Sparrow		3	6					2	1		
Little Blue Heron						P. Veren		-1	#		
Long-billed Dowitcher	/ Hose !							-7 T			
Louisiana Waterthrush	Z_{ex}		KN 10 P					SI		3	
Mallard	10	3	6	12	3	2	100	10	3	1	
Marsh Wren		N	N. K. C. C.		2		No.	No.			
Mississippi Kite								1			
Mourning Dove	3	2	5	3	9	4	7	14	9	3	
Northern Bobwhite				M_{\perp}	2		人全位	11/1/1/	[]4	6	
Northern Cardinal			4	7/2	6		/ 2	5	3	7	
Northern Flicker	1			4	9	$\mathbb{N}^{\mathbb{N}}$	从了其		3		
Northern Harrier		4	1	1 11	7		4				
Northern Mockingbird	NWX							2	V 1		
Northern Shoveler	4	22	$\frac{1}{2}\left(\frac{1}{2},\frac{1}{2}\right)$	20	8	为少少	V.				
Orchard Oriole							3	2	1		
Pectoral Sandpiper		501	35	5					$\langle \rangle$		
Pied-billed Grebe	**	1/		2				= 1011			
Pileated Woodpecker				125				V			
Purple Martin							111	1			
	STATE	1 19	15-05-		N. July	THE PARTY AND A	S N S S		A KAR SHE		

666424005009GX

			Migration				Bre	eding Sea	son	
Species	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Red-bellied Woodpecker		2	1	2	1				1	1
Red-headed Woodpecker									1	1
Red-tailed Hawk	N. mari				1	Victoria V				
Ruby-throated Hummingbird		W. F. All	att.	1	1/2	1				Philips.
Savannah Sparrow	6	2		18	5				1	
Scarlet Tanager		WITH TO				1		-		Marin Marin
Sedge Wren							1/6/19/5	Will state of		2
Solitary Sandpiper		2	30							
Song Sparrow	3.00		3	1	2					
Sora	1	1	3	1		1			1	
Spotted Sandpiper	STANKAS			大學家				1.		1
Summer Tanager							1			
Swamp Sparrow	35	31	49	110	9	$\langle \langle \lambda \rangle / \langle \rangle \rangle$				
Tree Swallow		/ 8-		· / / -						
Tufted Titmouse	1.		7.7	2		4			1 2	To the
Vesper Sparrow			-	3		2.				
Virginia Rail					3				16.00	
Warbling Vireo									1	· \
Western Sandpiper	3		20				4			
White-crowned Sparrow	di de				4		7			
White-eyed Vireo				The					$\langle 1 \rangle$	1
Wilson's Snipe	1>	99	134	57	57	阿里拉			413	
Wood Duck	2	11-	10	The state of	1	- 汽类型	2#	13	13	
Yellow-billed Cuckoo		FW.	TO THE REAL PROPERTY.	了大种文学		1	24/1	ATTE!	2	2
Yellow-breasted Chat	ALAL I	A AV	1	图等中		2		5 le	6	7
Yellow-throated Warbler	-	X- 1							V 12	1
Grand Total	208	1311	615	411	412	148	174	419	310	151



Notes: This easement once again contained high diversity and numbers of wetland and grassland species. Though the migration survey date was similar to previous years, due to the variable nature of migration, we did not document as many waterfowl as in the past. However, numbers of some other wetland species were up, such as American Bittern. This site consistently supports good numbers of grassland birds during the breeding season, such as Yellow-breasted Chat (left). Unfortunately, no King Rails were documented this year for the first time since we have been surveying this site.

WET REGION 4 OVERVIEW

Survey coverage in WET Region 4 in 2019.

Easement	County	Site Acreage	# Transects	Migration Visit	Breeding Visit
66642405009G7 (east)	Saline	94	3	not included in sample	6/30
66642400008YJ	Johnson	147	3	4/10	5/29
666424020096S	Henry	166	5	4/5	inaccessible
6664249900B3K	Johnson	186	4	4/13	5/31
6664240900X1B	Johnson	39.3	2	4/12	5/29
65642497009XR	Henry	124	4	4/5	5/28
6664241000Y51	Pettis	33	1	4/10	5/30
6664241000YHC	Saline	174	7	4/20	5/26
66642412018CM	Saline	82	3	4/15	5/27
6664240008YH	Johnson	240	4	4/13	5/30
66642404009B2	Vernon	205	4	4/8	6/13
66642496009PQ	Pettis	70	2	4/10	5/30
66642405009G7 (west)	Saline	157	3	4/15	6/30
75642400000LM	Vernon	787	11	4/9/2019 6 of 11 transects completed	6/20 & 6/21
66642411013WF	Vernon	40	2	4/8	6/13
66642497009R2	Vernon	456	9	4/6	6/14

66642405009G7 (EAST)

2019 Survey Dates

Migration: not included in sample.

Breeding Season: June 30th.

Acreage: 94

		Migration			Breeding	Season		
Species	2016	2017	2018	2016	2017	2018	2019	
American Coot			1					
American Crown		1						
American Goldfinch				1				
American Kestrel		1						
American Tree Sparrow		-	13	THE REAL PROPERTY.	Mary to California	STATE OF THE PARTY	BI CLOSE OF THE PARTY OF THE PA	950
Bald Eagle	Vice a solid to		1		tare in the			730
Bank Swallow			30.00	9	THE PERSON NAMED IN	THE RESERVE AND LINES.	100	1
Barn Swallow		2	-		2			
Black-capped Chickadee	District Control	2		DIST. SALES WILL	MANUAL ROLL	- ALE		W 129
Belted Kingfisher	a zeel week .		T	manual Assessment	Manager State	5,1	CAN HANDER	
Bell's Vireo				144		1		
Blue-gray Gnatcatcher	_ //.	1 = 4				-00-0		
Brown-headed Cowbird	-	2		-	12.4	AND THE RESERVE OF THE PARTY OF	4	S
Blue Jay		1***	THE RESERVE TO SERVE	-7-1	The state of the s			製い布
Brown Thrasher	1	1 7 1	- T- 500	-7755		2		
Blue-winged Teal	29	16	100					
Canada Goose	1	2	A A		40	A	A STATE OF THE STA	
Carolina Wren	September 1	1	4 =				to I am	
Cliff Swallow			1 4	97	-33	67	19	
Common Grackle					36		29	
Common Yellowthroat	Mail and	2		2	3	1	2	
Dickcissel	A TOTAL			1. 1		11	1	Y
Eastern Bluebird	2						1. The St.	1
Eastern Kingbird	4 4 / 2 8		W M	i i				
Eastern Meadowlark	1		2	N. A.	1		at the displacement	
Eastern Phoebe	W	1 / 1	2			275.6	4	大學
Eastern Wood-Pewee	医女子 第一	4						31 000
Field Sparrow	3 3		3					
Gadwall 🗽 💮 💮			1 . A . 34				** ***	1
Great Blue Heron	estate)	1 "	2	1	2	3	2	16
Gray Catbird	1	W.					1	
Great Egret			Ĩ)
Green Heron		1		1 /	1			
Greater Yellowlegs	11×	1 *	- 5					
Green-winged Teal			139				- 11	
Hooded Merganser						3		
Indigo Bunting				6	3	3100	4	1.
Killdeer	2	1	8 =	4	3	11		
Long-billed Dowitcher			4					
Least Sandpiper	2							
Lesser Yellowlegs	6	17	1 ,					
Mallard And Mallard	* 180 To		78				· *	1
7	734	All						-

66642405009G7 (EAST)

		Migration			Breedin	g Season	
Species	2016	2017	2018	2016	2017	2018	2019
Marsh Wren		1					
Mourning Dove				2			
Northern Cardinal		3	1			1	
Northern Harrier			1				
Northern Rough-winged							
Swallow	4	1			8		7
Northern Shoveler			3				
Orange-crowned Warbler		2					
Pectoral Sandpiper		1					
Pileated Woodpecker	- 51	Same State		1	mallin	nie o o	
Prothonotary Warbler	1	**	Sandheill .	Street Indian			No. of Lot, Line
Purple Martin				2			
Red-bellied Woodpecker	1					1	
Ring-necked Duck			30				A STATE OF
Red-shouldered Hawk			1	1			
Savannah Sparrow	29		9				
Sedge Wren		1					
Song Sparrow		2	10	W. c			
Spotted Sandpiper	NA TALLS	was borner	194 di-	1	Mar mar	A SERVICE	with kinds of the
Swamp Sparrow	11	6	42		林阳 川山		
Tree Swallow	3	120	2	Olim 1588	1.	Supply of	2
Turkey Vulture		1	THE TOTAL	75X 13	1		
Warbling Vireo	a a compa			1.10	Will-American		
White-eyed Vireo						1	
Wilson's Snipe	Service Study		5				
Wild Turkey	A STATE OF		Paralline.	THE REAL PROPERTY.	1 1	dia in the	
Wood Duck	NY TOU	wall drive			11	20	16
Western Palm Warbler	1					(8) 1 8 (8)	000
White-throated Sparrow	45 145		5	1 1 5/7	A Maria	The or west	
Yellow-billed Cuckoo							2
Yellow-crowned Night-Heron		1400	11/1/201/		N MENT		4
Grand Total	112	192	469	132	108	126	91
	A A A A A				100	A PROPERTY OF	A STATE OF

Notes: This site was not originally on the survey list this year but we had the opportunity to survey it during the breeding season. This resulted in the exciting find of four Yellow-crowned Night-Herons (right), a species that is not common in central Missouri. This easement and the adjacent easement to the west absorbed enormous amounts of flood water from the Blackwater River throughout the spring and summer. By the end of June, the site wasn't completely underwater but all pools remained full.



2019 Survey DatesMigration: April 10th. Breeding Season: May 29th. **Acreage:** 147

		Migr	ation		Breeding Season				
Species	2016	2017	2018	2019	2016	2017	2018	2019	
American Bittern	2								
American Coot	58	6	260	90					
American Crow		3				2			
American Goldfinch		2			2	1			
American White Pelican	14		15	15	1000	SECTION			
American Wigeon			1						
Bald Eagle	1	1		1	1			- T	
Baltimore Oriole								1	
Bank Swallow					2	15	2.54	of the	
Barn Swallow		2	120	1.		18	14		
Barred Owl					100		1		
Bell's Vireo					1	2		4	
Belted Kingfisher		1				The second	2		
Black Tern	000		KA S			联系统	j 1		
Black-capped Chickadee		A	1	## ·					
Blue Grosbeak		STATE OF		物化交				1	
Blue Jay	THE A		TO THE		1	1 1997	NA TOWN	L solar	
Blue-gray Gnatcatcher	3_		R. C.	本於於			2	1	
Blue-winged Teal	136	50	81	69	6	1		NEW YORK	
Brown Thrasher				2	1 Y	F X [2]	2/11/		
Brown-headed Cowbird	X 1 3	W(10)	i vin		SALTE		A LA	A X	
Canada Goose	12	14	10	18	28	28		30	
Carolina Wren			NA TO						
Cliff Swallow		1	THE STATE OF THE S	100 M		82	RR.	-	
Common Grackle	ASSET /	-1,	17	PLS IT	1		6	2	
Common Nighthawk			CHE !	The state of the s	A SI	5	-107	4	
Common Yellowthroat	4				4	8	5	7	
Cooper's Hawk		1							
Dickcissel							4		
Double-crested Cormorant	9	24	16	70					
Downy Woodpecker		1		1				1	
Eastern Bluebird							1		
Eastern Kingbird	1					3	1	2	
Eastern Meadowlark				1					
Field Sparrow	2 3 3	2	-						
Fish Crow	8		1 3				1	1 5	
Forster's Tern			1					1	
Franklin's Gull			12						
Gadwall			595	34					
Gray Catbird						1		1	

66642400008YJ

		Migr	ation			Breedin	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Great Blue Heron	9	2	2	1	2	1	28	1
Great Egret		14	17			5	7	
Greater White-fronted Goose						1		
Greater Yellowlegs	10	1	2	9				
Green Heron		2					1	
Green-winged Teal			43					
Henslow's Sparrow								1
Hooded Merganser				1				
Indigo Bunting					1	1		2
Killdeer		1		2	2			2
Lark Sparrow	1							
Least Bittern			1		9	13	2	
Least Sandpiper						5		
Lesser Scaup			5	2				
Lesser Yellowlegs	2	8	6	2				
Louisiana Waterthrush	ALC: N	N						1
Mallard		DISCOUL SE	2	Towns (St.)	SHILLS	MAN.	5	
Marsh Wren	1	1	2					
Mourning Dove		1		2		1	2	2
Northern Cardinal	2	3			1	3	1	3
Northern Shoveler	2	15	29	7				
Orchard Oriole					1	2		2
Palm Warbler	1				- 3-			
Pectoral Sandpiper			5	5				
Peregrine Falcon	-		1 ST. 1 ST.	2				
Pied-billed Grebe		5	4	To I have	ma	2		
Pileated Woodpecker		1		EXP.				
Prothonotary Warbler	1		1000					
Purple Martin		3 40	2		EXAM.			
Red-bellied Woodpecker		- 1	The Party	力製作品	2	1-		2
Red-eyed Vireo				20110	4845	3.5	211	1/2/2
Red-shouldered Hawk		1			WEST PARTY	To the second	1	STATE T
Red-tailed Hawk		1	世紀	E TA		1		
Redhead	1		9580 3			1224		
Ring-necked Duck	3		2 F 72	3	AT THE REAL PROPERTY.	7	1	1
Ruddy Duck	1			17	PAR DE	证	MANAGE	1 12
Sandhill Crane	2	2		2	1	2	2	715
Savannah Sparrow	2	STATE OF	1	1 13	San San		EBA	
Sedge Wren	Sure.	4	Kall al	DE A		1 78		
Slate-colored Junco				1	1			
Solitary Sandpiper	20	I I						
Sora	12	13	1			3		

66642400008YJ

	Migration					Breeding Season			
Species	2016	2017	2018	2019	2016	2017	2018	2019	
Swamp Sparrow	2	5	1	6					
Tree Swallow	26	8	13	18		69			
Tufted Titmouse		2	LAST		NVA		SIPM		
Turkey Vulture		1		6	HXII	1			
Virginia Rail	1				THE				
Warbling Vireo	4	C. Lat.		NO.	2		1		
Western Palm Warbler	LINK	101							
Willow Flycatcher	MAYON				124	2	STOY	2	
Wilson's Snipe	3	De 27	3						
Wood Duck	2	9		1	21	6	47	6	
Yellow Warbler						3			
Yellow-billed Cuckoo					1	39		1	
Yellow-breasted Chat						86		1	
Grand Total	336	211	1132	405	91	291	141	78	



Notes: The high species diversity on this site was similar to previous years. Highlights from 2019 included good numbers of American White Pelican, Ruddy Duck, Double-crested Cormorant and Tree Swallow (left; photo taken on site) during migration. It is always a pleasure to see the Sandhill Cranes (background) that are on or near this site every year.

2019 Survey Dates

Migration: April 5th. Breeding Season: inaccessible due to high water.

Acreage: 166

		3.51		D 11	C
G •	2015	Migration	2010		g Season
Species	2015	2016	2019	2015	2016
American Bittern			1		
American Coot			3		
American Crow	1	7			
American Goldfinch	1	2			2
American Kestrel			2	1	2
American Pipit			2		
American White Pelican			1		
Barred Owl	Will fill	11. 18	2		
Bald Eagle		2	4	2	
Barn Swallow	2	4			1
Bell's Vireo	Tibes a	CANCEL PER	100	-	3
Brown-headed Cowbird	3	2	4		1
Blue Jay	a passional a	3	2		
Bonaparte's Gull	100	A PARTY	1		
Brown Thrasher	2	** ** ** ** ** ** ** ** ** ** ** ** **	1		
Blue-winged Teal	87	46	273		
Carolina Chickadee	W x	TO STATE	1	ALC: AL	
Canada Goose	1	The same	- 8		17 9
Carolina Wren			1	100	
Common Grackle				HIM TODAY	2
Common Yellowthroat		Freeze		2	3
Double-crested Cormorant	- 5-1	7.1	127	19	1
Dickcissel					35
Eastern Kingbird					I I
Eastern Meadowlark	153	4	1		2
European Starling	_ 1	1	/ \5		3
Fish Crow	1		8	DAY F	
Field Sparrow	3	6	6	1/1/1/1/	3
Great Blue Heron	8	1	4	6	5
Great Horned Owl		85 1 /			
Gray Catbird	1-1				2
Great Egret	4		1	10	
Greater Yellowlegs	128	4	39		
Green-winged Teal		2	48		
Hudsonian Godwit	2	/\			
Indigo Bunting				1	4
Killdeer	1	2	1		
Lesser Yellowlegs	1/11/1	\33	17		
Mallard	1		11-		
Mourning Dove	4				3
4	WEST STATE				

666424020096S

			Mi	igratio	on		Bree	ling Se	eason
Spe	cies	2015		2016		2019	2015		2016
Nor	thern Cardinal	1		4		7			1
Nor	thern Harrier	1		1					
Nor	thern Parula			1					
Nor	thern Shoveler	6		3		91			
Orcl	nard <mark>O</mark> riole								2
Pect	oral Sandpiper			53			-		- 4
Purp	ole Martin			3			1		ø
Ring	g-billed Gull					3		1	<i>g</i> ,
Red	-bellied Woodpecker				_	1			1
Red	-eyed Vireo			1					
Red	-shouldered Hawk			2		1			
Sava	annah Sparrow	5		7					
Sed	ge Wren	1				-			
Sora				1			4		
Soli	tary Sandpiper			1					
Son	g Sparrow					3	1		
Swa	mp Sparrow	4				6			
Tree	Swallow			1		2			
Wils	son's Snipe	14	w	20	4				
Woo	od Duck			4	1	2	2		
Wes	tern Palm Warbler			1					
Whi	te-throated Sparrow					1			
Yell	ow-breasted Chat						1		2
Yell	ow-billed Cuckoo						2		
Yell	ow-rumped Warbler	1							
Gra	nd Total	281		227		689	52		77

Notes: It is unusual for an easement to be accessible during migration and not during the breeding season, but that was the case here due to extreme flooding in the area. The migration survey resulted in far higher numbers of many species than in 2015 or 2016. Highlights included good numbers of Greater and Lesser Yellowlegs (right), Blue- and Green-winged Teal, Double-crested Cormorants and Northern Shovelers. Four Bald Eagles were also present.



2019 Survey Dates Migration: April 13th. Breeding Season: May 31st. Acreage: 186

	Migration		Breeding Season	
Species	2015	2019	2015	2019
Alder Flycatcher				2
American Coot	7	2		
American Goldfinch		1		
American Robin		1		
Bald Eagle				1
Baltimore Oriole				1
Barn Swallow		1		1
Black-capped Chickadee		2		
Blue-gray Gnatcatcher		2		1
Brown-headed Cowbird		5		1
Blue Jay		1		
Brown Thrasher		5		
Blue-winged Teal	210	32		1
Carolina Chickadee	1			
Canada Goose	11	5	1	50
Carolina Wren	-	2	-	Index to 600
Common Grackle	-	31	-	
Common Yellowthroat				5
Double-crested Cormorant	2	AVIII OF		1000 124
Dickeissel				1
Downy Woodpecker				2
Eastern Meadowlark		2		
Eastern Wood-Pewee				1
European Starling		2		
Fish Crow	8	10		
Great Blue Heron	* 5	1	4	1
Great Crested Flycatcher				1
Gray Catbird				3
Great Egret			3	1
Green Heron			1	1
Greater Yellowlegs		5		
Hooded Merganser			1	
Indigo Bunting				8
Killdeer		2		
Least Sandpiper		1		
Lesser Yellowlegs		17		
Mallard				2

6664249900B3K

	Migr	ation	Breeding	Season	
Species	2015	2019	2015	2019	
Mourning Dove		1		2	
Northern Cardinal	1	5		4	
Northern Flicker		1	1		
Northern Shoveler	10	35			
Pied-billed Grebe	2				
Pectoral Sandpiper		12			
Pileated Woodpecker	2				
Prothonotary Warbler				2	
Red-bellied Woodpecker		2		1	
Ruby-crowned Kinglet		4			
Red-eyed Vireo				1	
Red-headed Woodpecker		Nation 1		make and	
Sandhill Crane	1	3	- VEVE		X TARREST MAN
Savannah Sparrow	Shiring AV	2	AKME	XXII V	
Solitary Sandpiper	SENTE IN THE			1	
Spotted Sandpiper		1		1	
Swamp Sparrow	1	6			
Tree Swallow	_ 28	3		3	
Tufted Titmouse		2			
Turkey Vulture		2			
White-crowned Sparrow		1			通用证明
Wilson's Snipe				1000	
Wood Duck	2		1	1	
White-throated Sparrow		1 -		1983	
Yellow-billed Cuckoo				2	
Yellow-rumped Warbler		5			> *- 6 %
Grand Total	296	190	12	107	



Notes: This easement had a far higher diversity of species during both migration and the breeding season this year than during a previous survey several years ago. One highlight was impressive numbers of Canada Geese which were nesting on site (photo, left). Wetland-dependent species such as Great Blue Heron, Great Egret and Green Heron were present during breeding season as they were during the 2015 survey, but were joined by individuals of other species to result in a more diverse and numerous group of birds.

2019 Survey Dates
Migration: April 12th. Breeding Season: May 29th.
Acreage: 39.3

		Migration			
Species	2015	2016	2019	2016	2019
American Bittern			1		
American Crow			2	1	2
American Goldfinch		4	1		3
American Robin		1	1		
Barred Owl	1		1		
Bald Eagle		2			
Barn Swallow		1			
Belted Kingfisher		1		1	
Bell's Vireo				2	1
Blue-gray Gnatcatcher					1
Brown-headed Cowbird	Self Self-shoot	13	2	2	2
Blue Grosbeak					1
Blue Jay		17			2
Brown Thrasher		1	2		
Blue-winged Teal	11				
Blue-winged Warbler		1			
Canada Goose	8	P. C. STORY	2		
Carolina Wren	The same	1	1 1	TANK .	The state of the s
Cliff Swallow			THE W	1	
Common Yellowthroat			THE REAL PROPERTY.	1	7
Dickcissel					9
Downy Woodpecker	STATE OF THE STATE	1	1		
Eastern Bluebird	No. 10	3		1	
Eastern Kingbird	Kenther .			1	a 1 /2
Eastern Meadowlark		7		West .	
Eastern Phoebe			1		
Eastern Towhee		1	1	- 1 X	
Fish Crow		4	3		3
Field Sparrow	VALUE OF THE STATE	3	5	2 =	3
Great Blue Heron		1		2	
Gray Catbird				4	
Green Heron		7/\	(C	2	2
Greater Yellowlegs		7/2/2			
Henslow's Sparrow		4		5	
Hooded Merganser					
Indigo Bunting					7
Killdeer	2				
Mourning Dove	With Milk				
	The state of the s	WASSING X			1

6664240900X1B

Migration					
Species	2015	2016	2019	2016	2019
Northern Bobwhite				1	
Northern Cardinal	1	1	5	2	5
Northern Parula	1	2			
Pileated Woodpecker		1			
Red-bellied Woodpecker		1		1	
Red-shouldered Hawk				1	
Red-tailed Hawk				1	
Sedge Wren	1				
Sora	2				
Swamp Sparrow	1	2	6		
Tree Swallow			8		
Tufted Titmouse			2	1	
Turkey Vulture		3			
White-eyed Vireo					1
Wilson's Snipe	4		4		
Wild Turkey			au enDisi	Marine Street	-
Wood Duck	3			1	5
Wood Thrush				7 AG.	1 -
White-throated Sparrow			1		
Yellow-breasted Chat				1	4
Yellow-billed Cuckoo				1	
Grand Total	35	81	53	37	61

Notes: Particularly for its size, this easement provided habitat for a good number of birds in both seasons. Similar to some other sites, this property was home to more wetland birds during migration and a mix of wetland and grassland birds during breeding season. The photos of American Goldfinch and Northern Cardinal, below, were taken on the site during the breeding season.





2019 Survey Dates Migration: April 5th.. Breeding Season: May 28th. Acreage: 124

	Migr	ation	Breeding	g Season	
Species	2018	2019	2018	2019	
Acadian Flycatcher			2	1	
American Crow	2	2	3	2	
American Goldfinch	1	1			
American Pipit	4				
American White Pelican	23				
Bald Eagle	1		2		
Barred Owl	1	3	4		
Bell's Vireo			1		
Black-capped Chickadee			2	1	
Blue Jay	2	4	1		
Blue-gray Gnatcatcher			2	7	
Blue-winged Teal	16	3			
Brown Thrasher		1	11	1	
Brown-headed Cowbird	2	10	1	3	
Canada Goose	14				
Carolina Chickadee	3				
Carolina Wren	6	4	3	44	
Cattle Egret				Tan I restau	
Common Grackle		2	Sun J. Sin 12		
Common Yellowthroat	7		6	11	1
Dark-eyed Junco	6	100 m	**		1
Double-crested Cormorant	127	17	- AR AR	data da	
Downy Woodpecker	2	3	11		
Eastern Bluebird		(1) (1) (1)		(人) 电影	X
Eastern Kingbird	THE WALL	18 1		(Vi +VII)	
Eastern Meadowlark	1	XA		1 1/2	3/
Eastern Phoebe	2	3		* 1 " " ")	K
Eastern Wood-Pewee	1		1	2	X
Fish Crow	6	3 1/	7	1	1
Great Blue Heron	3	2	1	160	MI
Great Crested Flycatcher	1			WAY!	W.
Great Egret	23	T BR	\ /	16	
Greater Yellowlegs	3	4 /	1		
Green-winged Teal	18	X华X		THE SERVICE STREET	17
Hooded Merganser	1	X777.	-3-/- C		
Indigo Bunting	1) 10	> 78.5	TO 200	13)	
Killdeer	8		CO TO	100 L	
Lesser Yellowlegs	A	KI Y	1112	HAD.	X
Louisiana Waterthrush	Z	MA AS		NEW YORK	No.
Mallard	8				12
		CONTRACTOR OF STREET		The state of the s	100

65642497009XR

Notes: Lower numbers of birds during migration this year in comparison to 2018 was based primarily on the timing of just a few species - Double-crested Cormorant, American White Pelican, Great Egret and a few species of waterfowl. This year, Great Egrets were present during breeding season instead (photo below). Other highlights included a sizable flock of Tree Swallows during migration and breeding Prothonotary Warbler, Common Yellowthroat and Indigo Bunting.



	Migration		Breeding	Breeding Season	
Species	2018	2019	2018	2019	
Mourning Dove	2	3			
Northern Cardinal	11	10	7	4	
Northern Flicker		1			
Northern Harrier	1	1			
Northern Parula			2	3	
Northern Shoveler	2				
Pectoral Sandpiper	3				
Pileated Woodpecker	2		2		
Prothonotary Warbler			2	4	
Purple Martin	200		1		
Red-bellied Woodpecker	2	4	4	1 1 3	
Red-eyed Virei			2	1	
Red-headed Woodpecker		1	1		
Red-shouldered Hawk	1				
Red-tailed Hawk	1				
Ruby-crowned Kinglet		1			
Ruby-throated					
Hummingbird		VI 1	$\frac{2}{2}$, l	
Savannah Sparrow	6				
Solitary Sandpiper		1			
Song Sparrow	9	3			
Swamp Sparrow	17	5			
Tree Swallow		28			
Tufted Titmouse	1	1	5		
Turkey Vulture	5	1	12	2	
White-breasted Nuthatch	1			1	
White-crowned Sparrow		1			
White-eyed Vireo				1	
White-throated Sparrow	2	3	2		
Wild Turkey	1		3		
Wilson's Snipe		2			
Winter Wren	2	1	10		
Wood Duck	3	3	10	5	
Yellow-bellied Sapsucker	1				
Yellow-billed Cuckoo			3	2	
Yellow-breasted Chat			1		
Yellow-rumped Warbler	2	4			
Yellow-throated Vireo				1	
Grand Total	363	143	108	94	

6664241000Y51

2019 Survey DatesMigration: April 10th. Breeding Season: May 30th. **Acreage:** 33

	Migr	ation	Breedin	g Season	
Species	2018	2019	2018	2019	
American Coot	45				
American Crow			1		
American Goldfinch			1	1	
Barn Swallow				2	
Black-capped Chickadee			1		
Bell's Vireo			1		
Brown-headed Cowbird		1	1		
Blue Jay		1	1		
Brown Thrasher	3	1			
Blue-winged Teal	9	26			
Canada Goose	15	4	1	1	
Carolina Wren		1	3		
Common Merganser	1				
Common Yellowthroat			4	2	
Dickcissel	3. Significan	dolah	4	3	eli. di
Eastern Meadowlark		2			
Eastern Phoebe			1		1
Eastern Wood-Pewee				1	
European Starling	The same of	5			
Field Sparrow	11	1		The State of the S	1
Gadwall	9	THE PARTY	SAN THE REAL PROPERTY.	1	114
Great Blue Heron	1		2	3	
Gray Catbird			1		
Greater Yellowlegs	4			N. S. W.	
Green-winged Teal	2	17		A 63-80 (A)	
Hooded Merganser	10 S2 . 0 1 S		1		
Indigo Bunting			3	2	
Killdeer			1/	1	
Lesser Scaup	6				
Mourning Dove	1 B	5	2/		
Northern Cardinal	Nisah	5	3	3	
Northern Shoveler		20			
Orchard Oriole			1		2
Pied-billed Grebe	3		JAN		1
Purple Martin			May 1		
Red-bellied Woodpecker	LONG!		The second	1	

	Migration		Breedin	g Season
Species	2018	2019	2018	2019
Ruby-throated Hummingbird			1	
Song Sparrow		1		
Swamp Sparrow	1	1		
Tree Swallow			3	
Tufted Titmouse			1	
Willow Flycatcher			1	
Wood Duck			4	
Yellow-breasted Chat			3	1
Yellow-billed Cuckoo			1	1
Grand Total	98	91	48	23

Notes: This site and an easement adjacent to it together provide an important habitat complex for wetland birds. This easement had good numbers of Blue- and Green-winged Teal and Northern Shoveler during migraiton. In the breeding season, Great Blue Herons were recorded along with a number of different songbirds such as Dickcissel, Yellow-billed Cuckoo and Common Yellowthroat (below).



6664241000YHC

2019 Survey Dates

Migration: April 20th. Breeding Season: May 26th. *Acreage:* 174

2019

	201	19
		Breeding
Species	Migration	Season
American Bittern	1	
American Redstart	1	
Barn Swallow	1	2
Black-capped Chickadee	2	
Bell's Vireo		7
Blue-gray Gnatcatcher	1	
Brown-headed Cowbird	3	
Blue Jay	1	1
Brown Thrasher	1	1
Blue-winged Teal	11	1
Carolina Chickadee	1	
Canada Goose	3	
Carolina Wren	6	1
Common Yellowthroat	Max I was	9
Downy Woodpecker	3	1
Fish Crow	2	4
Field Sparrow	17/17	5
Great Crested Flycatcher	17.7	5 //
Gray Catbird	Was AN	1 1
Indigo Bunting		8
Lincoln's Sparrow	2 (
Louisiana Waterthrush	1	
Marsh Wren	1 7	
Northern Cardinal	4	
Northern Parula	2	
Pileated Woodpecker	4	= 3
Prothonotary Warbler	884	1
Red-bellied Woodpecker	2 1 2 1	
Red-eyed Vireo		1 1 y
Red-shouldered Hawk	i	
Spotted Sandpiper		5
Swamp Sparrow	8	
Tree Swallow		2
Tufted Titmouse	1	1
Turkey Vulture	1	
White-breasted Nuthatch	1 3	
White-crowned Sparrow	3 3 3	

White-crowned Sparrow

Species	Migration	Breeding Season
Willow Flycatcher		1
Wood Duck	16	13
White-throated Sparrow	2	
Yellow-breasted Chat		2
Yellow-crowned Night-Heron		1
Yellow-rumped Warbler	6	
Yellow-throated Vireo	Maria I	
Grand Total	99	76

Notes: This easement contained high-quality emergent marsh habitat during migration. In late May, a large portion of the property was flooded by the Blackwater River; the River was literally flowing through the easement (photo below). On the newly formed river bank, Spotted Sandpipers were recorded, unsual for central Missouri. The site contained good numbers of Wood Ducks, Common Yellowthroat, and Bell's Vireo. One Yellow-crowned Night-Heron was also recorded, which occurred at only one other central Missouri property.



66642412018CM

Least Bittern Least Sandpiper Lincoln's Sparrow Louisiana Waterthrush

Marsh Wren Northern Cardinal Northern Mockingbird

Northern Parula Northern Shoveler Pied-billed Grebe Pileated Woodpecker Red-bellied Woodpecker Ruby-crowned Kinglet Red-tailed Hawk

2019 Survey Dates Migration: April 15th. Breeding Season: May 27th. Acreage: 82

		2019			2019
Species	Migration	Breeding Season	Species	Migration	Breeding Season
Acadian Flycatcher		1	Ruby-throated Hummingbird		2
American Bittern		1	Swamp Sparrow	23	
American Redstart		2	Tufted Titmouse		1
Barn Swallow	1	5	Turkey Vulture		1
Black-capped Chickadee		1	Warbling Vireo		1
Belted Kingfisher		1	White-breasted Nuthatch	1	
Bell's Vireo		2	White-eyed Vireo		1
Blue-gray Gnatcatcher	2	2	Wilson's Snipe	2	
Blue Jay	1		Wood Duck	2	5
Brown Thrasher	1		White-throated Sparrow	1	
Blue-winged Teal	3	3	Yellow-breasted Chat		1
Canada Goose	14	And Street, St.	Yellow-billed Cuckoo		5
Common Merganser	1		Yellow-rumped Warbler		A STATE OF THE PARTY OF THE PAR
Common Yellowthroat	Second Second	14	Yellow-throated Vireo		1
Downy Woodpecker	1200		Yellow-throated Warbler	1	THE RESERVE OF THE PARTY OF
Eastern Kingbird		1	Grand Total	99	79
Eastern Wood-Pewee				(ME and	1 1
Fish Crow	/ / 4	1	11//	CARROLL ST.	James III
Field Sparrow	11/1/2/1/1	HALL	3. I have believe	Maria Maria	at I day
Great Blue Heron	41.	Month 5 1 Lake	Notes: This easement is qu	ite unique in	its location and
Great Crested Flycatcher	My Sty		surrounding topography. D	ue to the qual	ity of its marsh
Greater Yellowlegs	////1		habitat, the site contained a birds. Highlights included a		
Hooded Merganser	1 1	W. J.	Sparrows (photo below) dur		
Indigo Bunting \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		5 数数	Bitterns (a high number on		

this size) during the breeding season.



2019 Survey DatesMigration: April 13th. Breeding Season: May 30th.

Acreage: 240	
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			Migra	ation			Breeding	Season		
	Species	2016	2017	2018	2019	2016	2017	2018	2019	
	Alder Flycatcher						1		2	
	American Bittern	1	1		1					
	American Coot	doth and		15	25					
	American Crow		1	5		2	4	4	e-1	
	American Goldfinch	3	11			2	5	2		
	American Robin	- New Contract	1					1	2 40	
	American White Pelican			7	10					
	Bald Eagle		1				1			
	Baltimore Oriole					is 1	1		2 2	
	Barn Swallow				is T		3	3	16 1 June	
	Barred owl	A TANK	l-v-	1	1			2		
5	Bell's Vireo		TO MY	444		4	2	2	1,	
X	Belted Kingfisher	11	1	1 🕏	· 林林 恒	ALL CANA		A Ayla	MAN MAN	<
	Black-capped Chickadee	-11-18	5	3	5	> 1 1	1	-1	V Mari	
	Blue Grosbeak)		1	N- Hode	
4	Blue Jay	74	3	3	3	1	2	4		
	Blue-gray Gnatcatcher	1	3, 4,		4		3		1	
	Blue-winged Teal	49	47	52	62				1	
	Brown Thrasher	1 /		1	4	M Z	1	2	1	
	Brown-headed Cowbird	30	14/	11/	15,	1 4	3	6	8	
	Canada Goose	8	[5]	10'/	22	1, 1,	11	12		
	Carolina Wren	2	11.40	3	1	1744	f ^o	3		
	Cedar Waxwing	1		10		٨	12		2	
	Chimney Swift	2		1					N , , (
	Cliff Swallow	Λ		4			10			
	Common Grackle	2 1	14		2	5	.2	1	\ /3\ /\ \\	
1	Common Yellowthroat	7		$' \wedge $	Ň	6	15	15 🕴	15	
	Cooper's Hawk		1 1		7					
	Dickcissel	1.			1	/1	6	5		
	Double-crested Cormorant	3 1	\ \'	24 /	/1 -					
	Downy Woodpecker	1	1/3	1 /	# 1 a	У	¥		1	
	Eastern Bluebird	1 1/	5/		14	7	V		1	
	Eastern Kingbird		1,1-	A port	19.0	2	\1		3/	
	Eastern Meadowlark	λ^2	6-	6	3	2	1	1		
	Eastern Phoebe	~ \ _{	/	1	7		1			_
	Eastern Towhee	1/		1	/ 1					
	Eastern Wood-Pewee	12					2			
	European Starling	1/		1 /1			5		1 6 1	
	Field Sparrow			1		///	4			
				•		7	X			
1		r	A			1	$\langle V \rangle$			
		V	- (V	104	3	1	/			
	V.		1		(26	X			- X	

6664240008YH

		Migration			Breeding Season			
Species	2016	2017	2018	2019	2016	2017	2018	2019
Fish Crow	12		71	2	3		2	
Gray Catbird	1	1				1	3	5
Great Blue Heron	18	4	13	2	9	4	8	2
Great Crested Flycatcher	1				2	4	4	3
Great Egret	4	13		3	3	4	28	4
Great Horned Owl				1				
Great-tailed Grackle	1							
Greater Yellowlegs	18	6	10	1				
Green Heron	2				1		3	1
Green-winged Teal			18					
Hairy Woodpecker								1
Henslow's Sparrow							3	
Hooded Merganser		1	4		1		1	
House Wren	2	-		-		Mil.	1	1
Indigo Bunting	1				12	4	13	15
Killdeer	6		3		1		1	
Least Bittern	1			-			1	
Least Flycatcher						1		
Least Sandpiper	1							
Lesser Scaup			2	1.		網絡開發		
Lesser Yellowlegs	4	36	130	1	建 州。20			#
Mallard			19	1				
Marsh Wren	11		1 1 9	小师是		Toll a		1.015
Mourning Dove	2	1,1	2	1121-	5		3	4
Northern Bobwhite	$\sim 2_{ m P}$			少为什。	5		2	
Northern Cardinal	大 7	16	2 6	3	6	7	8	10
Northern Flicker		11	1		3	1		
Northern Parula	人里		1			1		
Northern Pintail			7		11			
Northern Rough-winged								
Swallow	3			2				100
Northern Shoveler			26		A STATE OF THE STA			· / /
Orchard Oriole					17	1.0		1
Osprey	业。 不	1		Dan	一大震			
Pectoral Sandpiper			6					
Pied-billed Grebe	N A	WI BEE	2	3	Y			
Pileated Woodpecker	61 / A		Visit			3	Brown B	Walls A
Prothonotary Warbler	2	2	E ISTE		2		3	5
Red-bellied Woodpecker	3	3	3	2	4	2		2)(
Red-eyed Vireo	MAPPLE	1	NO TO					1

6664240008YH

		Migr	ation		7	Breeding	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Red-headed Woodpecker	2	1		1	3 -			
Red-shouldered Hawk		2			-	1		1
Ring-necked Duck			3					
Rose-breasted Grosbeak	1	BAR			1			
Ruby-crowned Kinglet		2		1				
Ruby-throated Hummingbird	117		M-1					
Sandhill Crane				1				1
Savannah Sparrow			10			78		Fig. 1
Sedge Wren	4	2	1				94	
Solitary Sandpiper	1/4		100	1			AN P	
Song Sparrow		1	2	5			1	
Sora	2	2			~ 17		TO	54
Spotted Sandpiper	3				3/1		23	Bearly.
Summer Tanager			Art TE		1		10 8 35	
Swainson's Thrush			200		EL CO	1-1		
Swamp Sparrow	2	7	16	18				1
Tree Swallow	10	13	1	36	6	13	17	1
Tufted Titmouse	2	3	1	o De	2	2	2	1
Turkey Vulture		1	2	1	4	27/19/18		
Warbling Vireo	1	3		A ST			1	6
Western Palm Warbler		3				1	8/_	11/
White-breasted Nuthatch					7100	1 33		300
White-eyed Vireo			-40	10 F	12/1	4	11	
White-throated Sparrow		188	1	2				TA
Wild Turkey	20 6		5 1 16	1000	2/			The state
Willow Flycatcher		No track	900		110	2		
Wilson's Snipe	100	9	8	6	W.			30.196
Wood Duck	1	7	2	9	6	12	26	1
Wood Thrush	1	MILES				2		TO BAY
Yellow Warbler			111/1		-	10	22	
Yellow-billed Cuckoo		110	Stall.	The same	3	The Vo	3	2001
Yellow-breasted Chat	1011	150	first.		1	2	No. of Lot	-
Yellow-rumped Warbler	District	7	1	5	il be dit	10	100	Service of the last
Yellow-throated Vireo	1	E E	P. A.		1	200	PA	COS S
Grand Total	344	256	496	274	121	176	200	112

Notes: This easement maintains relatively consistent numbers and diversity of birds. A highlight this year was observing one Sandhill Crane during both migration and the breeding season. Numbers of songbirds such as Common Yellowthroat, Warbling Vireo, and Indigo Bunting remained steady or increased. Waterfowl, shorebird and wading bird (such as Great Blue Heron) numbers were lower than in previous years, but this is likely a result of migration timing and/or flooding conditions.

2019 Survey Dates
Migration: April 8th. Breeding Season: June 16th.
Acreage: 205

	Migration		Breeding Season		
Species	2015	2019	2015	2019	
American Bittern	2		2		
American Coot	21	21			
American Crow	3	3			
American Goldfinch	1	3			
American Robin		1			
Bald Eagle	1	2			
Barn Swallow		2	1	3	
Barred Owl		1		1	
Bell's Vireo			2	12	
Belted Kingfisher				1	
Black-capped Chickadee		3			
Blue Jay	additions.	3		1	
Blue-gray Gnatcatcher		4	0-9-0	7.4	
Blue-winged Teal	130	32		PACIFIC AND ADDRESS OF THE PACIFIC AND ADDRESS O	
Brown Thrasher	2	3	-		
Brown-headed Cowbird	22	1	Jake Hele	1/2/1	
Bufflehead	THE PARTY NAMED IN	2			
Canada Goose	3	5			
Carolina Wren		2		2	
Common Grackle			1 124	1 1	
Common Yellowthroat	2	V Wit 3	4	7 🛪	
Dickeissel			1	2 "	
Downy Woodpecker	Mark The	2	Marie I	KI I	
Eastern Bluebird		1			
Eastern Kingbird	製作舞蹈			1	
Eastern Phoebe		1	100		
Eastern Wood-Pewee				2	
Fish Crow		2		1	
Gadwall	42	41			
Gray Catbird				2	
Great Blue Heron				15	
Great Egret		2	1	7	
Greater Yellowlegs	9	6		图 如	
Green Heron			2)	2	
Green-winged Teal		1313		4// 1/	
Hairy Woodpecker		1		K// 38/2	
Hooded Merganser		21			
Indigo Bunting			5	10 /	
	DYM RUSS	TO A STATE OF THE	ACCOUNT TO	10	

66642404009B2

	Migration		Breeding Season	
Species	2015	2019	2015	2019
Kentucky Warbler			1	
Killdeer	1			3
Lesser Yellowlegs		1		
Mallard		1		
Mississippi Kite			2	
Northern Cardinal		5	1	7
Northern Flicker				1
Northern Mockingbird	1			
Northern Parula	1	2		
Northern Pintail				2
Northern Shoveler	10	9		
Ovenbird				1
Pied-billed Grebe	1	1		
Pileated Woodpecker	2			
Red-bellied Woodpecker	SEM	2		1000
Red-eyed Vireo				1
Red-headed Woodpecker				1 1
Red-shouldered Hawk	1 ,	1	1	
Ring-necked Duck		2		LAN CLYNICA
Ruby-crowned Kinglet		3		
Rusty Blackbird		1/		
Sedge Wren	1, 1			
Song Sparrow		9.1		
Sora	4		$b_{D \setminus \{0\}}$	
Swamp Sparrow	4	16		
Tree Swallow	12	1	2.	
Tufted Titmouse		2		
Turkey Vulture		1		
White-throated Sparrow		111 ×	N.Y.	
Wild Turkey	/1	4人1个月		166
Willow Flycatcher	W_{i}/λ	建加入数		2
Wilson's Snipe	//11//	2 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
Wood Duck		1/4	/11	1 6
Yellow Warbler	MM			$A \cup A$
Yellow-billed Cuckoo				2 /
Yellow-breasted Chat		外一次	2	
Yellow-crowned Night-Heron		1 1		14/1//
Yellow-rumped Warbler		15		
Grand Total	287	207	39	101
			DESCRIPTION OF THE PARTY OF THE	SCATTLE DE LA COMP

Notes: While bird numbers during migration were slightly lower this year than in 2015, the number of breeding birds was significantly higher. This easement contained a large number of Great Blue Herons (photo below) during the breeding season, along with several Great Egrets, Wood Ducks and songbirds like Bell's Vireo. Migration highlights included large numbers of Swamp Sparrows and Hooded Mergansers.



Perry Conservation Area 66642496009PQ

2019 Survey Dates

Migration: April 10th. Breeding Season: May 30th. *Acreage:* 70

	Migr	aiton	Breedin	g Season
Species	2018	2019	2018	2019
American Bittern	10	3	2010	2019
American Coot	36	3		
American Crow	30	1	3	
American Goldfinch		1	3	
American Robin		2		
Barred Owl	1	2		
Baltimore Oriole	-			1
Barn Swallow	11			
Belted Kingfisher		111		
Bell's Vireo		OF THE PARTY		2
Blue-gray Gnatcatcher	141100	1		
Brown-headed Cowbird		1		
Blue Jay		7		
Brown Thrasher				
Blue-winged Teal	23	12		142
Canada Goose	3	7		1
Carolina Wren		MEL	ick of an	
Cliff Swallow	2		7	- 9
Common Grackle			216	A TO
Common Yellowthroat	6		9	6
Dickcissel			4	次。如
Eastern Phoebe	7		W/A	. //
Eastern Towhee	· Prod			- 1 -
Eastern Wood-Pewee	Me of			2964
Fish Crow		8	9	1
Great Blue Heron	6		1	4
Great Egret	41	365	24	-
Green Heron	-1		71	- 8
Greater Yellowlegs				
Great-tailed Grackle	1	the same	May an	
Green-winged Teal	10	12		
Hooded Merganser				
Indigo Bunting			3	2
Killder			3	1001/
King Rail	2			
Least Bittern				1
Lesser Yellowlegs	1	1		1
			A	

		Migraiton		Breeding	g Season
	Species	2018	2019	2018	2019
	Lincoln's Sparrow	1			
	Marsh Wren	13	1		
	Mississippi Kite			1	
	Mourning Dove		8	1	
	Northern Cardinal		3	2	2
	Northern Rough-winged				
	Swallow	3			
	Northern Shoveler	34			
	Orchard Oriole				1
	Pied-billed Grebe	3			
	Pileated Woodpecker	111/11	1/	D. W. ISM	1
	Red-bellied Woodpecker	ECHN PART	1//	1	EMPHILE VE
	Red-shouldered Hawk			1	1/
	Sora	10			
- Care	Song Sparrow	4	aliaka.		
1000	Swamp Sparrow	17	4		
	Tree Swallow	210			2
15000	Turkey Vulture		2		h h
0.0	Virginia Rail	1/5			
	Warbling Vireo			2	100 de
公司で	Wilson's Snipe	7			7 - Y
	Wood Duck		2	3	
	White-throated Sparrow	一种	2	C. S. A.	7.20
	Yellow-breasted Chat	A Act		T	1 3
	Yellow-billed Cuckoo	المنز	1	1.	1
	Grand Total	446	-94	290	28
	TO ANALYSIS TO THE PROPERTY OF			40.40	

Notes: The publicly accessible wetland at Perry Conservation Area had quite different water levels and vegetation growth this year as compared to 2018. This resulted in fewer wetland-dependent species documented; however, the site still contained American Bittern and Blue- and Green-winged Teal in migration. Several Great Blue Herons and one Least Bittern were highlights during the breeding season.

2019 Survey Dates Migration: April 15th. Breeding Season: June 30th. Acreage: 157

		Migr	ation			Breedin	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
American Bittern			1					1
American Coot			8	1				
American Crow	1		3		1		3	
American Goldfinch	5	1.70						
American Wigeon			1					
Bald Eagle		1	2	2	1	1		
Bank Swallow								1
Baltimore Oriole	DAIL SEA		skeet .	7916	1			
Barn Swallow	Miles Paris					1	2	Milede IVe
Black-capped Chickadee	110	6			4	3		1
Belted Kingfisher	11	м о			2		2	
Bell's Vireo							1	
Blue-gray Gnatcatcher	2			THE ELL	2	4	1	1
Brown-headed Cowbird			6	5	1			2
Blue Grosbeak	N.	No.			3		SPE	
Blue Jay	26		1	1	1			3
Brown Thrasher	1		7 1		T. Mars			
Blue-winged Teal	44	18	79	13				
Canada Goose	7	7	12	25			第一	E Cr
Carolina Wren		2	2	3	1			3
Cliff Swallow			SILVE TO		11		85	
Common Grackle			de de		1	1	20	
Common Yellowthroat		1			6	5	2	5
Dickcissel							3	1
Downy Woodpecker	1			2	1			1
Eastern Bluebird				1			5	1
Eastern Kingbird	XX	3					1	
Eastern Meadowlark	1				1	1		
Eastern Phoebe	T				1 July 1			
Eastern Towhee	\ /%1							
Eastern Wood-Pewee					/1	1	1	A COLOR
European Starling	5	1	11/		/ 2			
Fish Crow		^ 5	4	2			2	1
Field Sparrow	3			2	3		1	1
Gadwall			25					
Great Blue Heron	1		1		1	1	2	4
Great Crested Flycatcher			M		2	2	11	1
Green Heron					2		2	
Greater Yellowlegs	7		6	18				
Greater White-fronted Goose				2				
CONTRACTOR OF THE PARTY OF THE				CONTRACTOR OF THE PARTY OF THE	mility a life			

66642405009G7 (WEST)

"是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个		Migra	ation	1		Breeding	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
House Wren				- 4	2		1	
Indigo Bunting		44.41	10		- 6	6	4	111
Kentucky Warbler	1,7	17/		100				Williams
Killdeer	1/201	10/01/8	A CHILD	and Extended		811374	2	
Lesser Yellowlegs	2			8	复数队			King Line
Louisiana Waterthrush	1.1	2				門國關		
Mallard			14	IAL	All c	386.00		NAME OF
Marsh Wren		1	The state of		91			4
Merlin		1	et in in	1127	西州州			
Mourning Dove		The state of	THE STATE OF	X	1	1		
Northern Cardinal	3			1	2	412	1	1
Northern Flicker	111	11		1.	2	Philips .	7	
Northern Harrier	-	1	1			7	BOSK .	
Northern Parula	3	2	100/1	المائحة الم	I do	1	1	W
Northern Waterthrush			TINE.	- 1		CH HE	14%的	AL 3
Northern Rough-winged Swallow				1	4	2		
Northern Shoveler	沙 园皇	THE RESERVE	10			L.N.	THE PARTY	
Pied-billed Grebe	1	10000000000000000000000000000000000000	A TOP		-		Grant .	-
Pectoral Sandpiper	4	7	7 1					1.4
Pileated Woodpecker	3	2	1	and a	3		2	1 %
Prothonotary Warbler	2	4			4	1	2 -	
Rose-breasted Grosbeak		1					1	
Red-bellied Woodpecker	4.	3		2	4	2	11.	1
Ruby-crowned Kinglet	2	-1				*		
Red-eyed Vireo	(Δ)	1	-			1		
Red-headed Woodpecker	7	1		2	2	4	1	3
Ring-necked Duck			25					
Red-shouldered Hawk	1	2^{\perp}			1		2	
Red-tailed Hawk		1		li.				
Ruby-throated Hummingbird						1	- 3	
Savannah Sparrow		6		100				
Sora		4						
Song Sparrow	3		5					
Swamp Sparrow			3	5				
Tree Swallow	25	77		10			2	
Tufted Titmouse	3	1		3	1	3	1	1
Turkey Vulture	1	2	3		1		No.	
Vesper Sparrow	3			1				
Warbling Vireo		المر			2	1	- 3	
White-breasted Nuthatch		1			2		1	

66642405009G7 (WEST)

		Migr	ation			Breeding	g Season	
Species	2016	2017	2018	2019	2016	2017	2018	2019
Wilson's Snipe	2		1					
Wild Turkey		No.			1		AF	0
Wood Duck	6	2	3	2	63	16	6	23
White-throated Sparrow	1	1	Cha					
Yellow-billed Cuckoo					2		1	PART I
Yellow-crowned Night-Heron	1				A. Stewart		1	توالتو
Yellow Warbler	1	-						
Yellow-rumped Warbler	-		1		4	- P		
Yellow-throated Vireo		19	1		2			
Yellow-throated Warbler		1	4/					
Grand Total	186	164	232	113	151	62	164	64

Notes: This site and its neighbor easement were heavily flooded by the Blackwater River in 2019. Nonetheless, this property still contained high numbers of Wood Ducks (background photo) and of a few shorebird species. Great Blue Heron numbers during the breeding season were slightly higher than in previous years and songbird and woodpecker numbers remain steady.

2019 Survey Dates Migration: April 9th (6 of 11 transects). Breeding Season: June 20th and 21st. Acreage: 787

		Migr	ation			Breeding	g Season	
Species	2014	2015	2018	2019	2014	2015	2018	2019
Acadian Flycatcher							1	
Alder Flycatcher							1	
American Bittern	1	3		4	1	1		
American Coot	5	204	160	23				1
American Crow	4		7	5		2	7	5
American Goldfinch		1	1	1		1		5
American Kestrel			1					
American Pipit			4	2				
American White Pelican		83	233	1				54
Bald Eagle	1		4	4	1		1	1
Barn Swallow	35	17	3	2	3	2		7
Barred Owl		1	3	1			2	1
Bell's Vireo						2	8	11
Belted Kingfisher		1	1					
Black-and-white Warbler			300					1
Black-capped Chickadee				2		1	/ 1	
Black-crowned Night-Heron	1						21	
Blue Jay	1 200	1	4	5			1	1
Blue-gray Gnatcatcher	St. In	1	DEATE S	- 4	45%	2	4	22
Blue-winged Teal	37	837	146	219			2	
Brown Thrasher	W.Z.		3 1	2			3	1 1 1 1
Brown-headed Cowbird		1	68	4	界书	100%	4	10
Canada Goose	18	21	19	12		外形	64	7
Carolina Chickadee	W.	1	1	1 + 1	11 / 1	111	Mark and	/持續/
Carolina Wren	11-11	1	6	4	- 45	2	8	5
Cliff Swallow	TRANS.	Ī	量人力	-	- }	事章	21/ Se.	2
Common Gallinule	1)	1	1 4	1	*		K d	萝卜
Common Grackle	MY	1/1	4	2	6 14	1	1	31
Common Tern	XIII	1/ 7	-17	fa	VE		X	1
Common Yellowthroat	5	3	DAY	1	3	14	17	22
Cooper's Hawk		2	/1) /		ili		J. Se
Dickcissel	A	W S	YAS	1	17	23	59	27
Double-crested Cormorant	3	12	51	4				
Downy Woodpecker	1 12	1 500		4		711	2	1]
Eastern Bluebird		166	1 m	1		al A		
Eastern Kingbird	PAN	11/1	7.2				5	211
Eastern Meadowlark	13	2	2	2		1	1	
Eastern Phoebe	13		2					
Eastern Wood-Pewee						1	1	2
Field Sparrow			1	2			1	

75642400000LM

		Mig	ration			Breeding	g Season	
Species	2014	2015	2018	2019	2014	2015	2018	2019
Fish Crow			3	1			3	1
Gadwall	16		8	25				
Golden-crowned Kinglet			3					
Grasshopper Sparrow	1							
Gray Catbird	1						4	2
Great Blue Heron		5	7	2	6	10	7	22
Great Crested Flycatcher						1	4	5
Great Egret	33		2			3	49	32
Greater White-fronted Goose		1						
Greater Yellowlegs	11	42	59	6			1	
Green Heron						2		3
Green-winged Teal		9	61	33				
Hairy Woodpecker								1
Hooded Merganser			2				1	
Horned Lark			1				1	
House Wren			1					
Indigo Bunting						8	14	44
Kentucky Warbler	little do nitr	. dis.	Million.		al .	1		
Killdeer			13	1.1	2	10	3	7
King Rail	1						1	
Least Sandpiper	13		u. 150					
Lesser Scaup				6				
Lesser Yellowlegs	12	46	22	The self)+01/miles	
Magnolia Warbler							SAME OF	1
Mallard		10	3	6		S 2 16 11		
Mississippi Kite		Market Market					1	
Mourning Dove	# 1	121	2	B. III	A district	J. Kland		9
Northern Bobwhite	11 1		MI	WINE.	AH TANA		H WA IN	2
Northern Cardinal	11	3	19	12		10	16	27
Northern Flicker	11	9 1.1	8			XA I	11/	AVE
Northern Harrier	111	1	2	X)	11 ()///		1 11	
Northern Parula	1		120				~ 1	1
Northern Rough-winged	-		-	19 -11		· ·		XX
Swallow	5	54	1 226	150		1	X-	1
Northern Shoveler Orchard Oriole	6	34	236	150	V	4	5	
Pectoral Sandpiper		14	27	185		1	3	4 -
Pied-billed Grebe		4	4		W.	A.V.	144	
Pileated Woodpecker	W	10	1	4	4 - 1		1	
Prothonotary Warbler	3	7	1/1			6	VE	14/1
Red-bellied Woodpecker	3	1	V 5//	75	1 1	1	16/	Ž I
Rea-beffied woodpecker		X ¹	3	>,/	1		A/X	
	. \	10	\$ J		1	1	1//	

75642400000LM

		Migra	ation			Breeding	g Season	
Species	2014	2015	2018	2019	2014	2015	2018	2019
Red-eyed Vireo							2	1
Red-headed Woodpecker			3				1	
Red-shouldered Hawk			3				2	2
Red-tailed Hawk			1	1				
Ruby-crowned Kinglet			2					
Ruby-throated Hummingbird							1	
Rusty Blackbird			71					
Savannah Sparrow			24	8				
Scissor-tailed Flycatcher							1	
Sedge Wren		1						
Semipalmated Sandpiper			11					
Solitary Sandpiper	11		1	-	100	-		
Song Sparrow		1	5	A.				
Sora	3	2	-	463				
Spotted Sandpiper	1		-49			100	1	
Summer Tanager		- 4		1				3
Swamp Sparrow	1	4	24	7				
Tree Swallow		100	19	13	71	5	2	5
Tufted Titmouse	3	100	5	4		2	7	4
Turkey Vulture	2	6-	2	6	2		1	3
Virginia Rail	1							
Warbling Vireo						1		
White-breasted Nuthatch							1	1
White-eyed Vireo						1		4
White-rumped Sandpiper			3					
White-throated Sparrow	2		3	2				
Wild Turkey			3	1		1	4	
Wilson's Phalarope	31					100		
Wilson's Snipe		1	37	1				
Wood Duck			18	4		26	3	34
Yellow-billed Cuckoo							8	5
Yellow-breasted Chat				4		1	3	3
Yellow-crowned Night-Heron		1	1					4
Yellow-headed Blackbird	1							1
Yellow-rumped Warbler	1		4	1				
Yellow-throated Vireo			A	1		1		2
Grand Total	270	1491	1608	617	36	147	357	471

Notes: This easement is one of the few we have been surveying since 2014, and it represents an outstanding contribution to bird habitat in southwest Missouri. This year, we were only able to survey a little more than half of the transects due to water levels. Numbers of some wetland-dependent species were slightly lower than in previous years, but most remained consistent. Breeding bird numbers were higher than ever, and this increase was consistent across many species. The photo of the Magnolia Warbler (background) was taken on site during the breeding season, which is notable since this is a species that typically only migrates through Missouri.

2019 Survey Dates

Migration: April 8th. Breeding Season: June 13th. *Acreage:* 40

	Migr	ation	Bree Sea	ding son
Species	2018	2019	2018	2019
American Crow	1	5	4	4
American Pipit		1		
Bald Eagle	1	1	1	2
Barred Owl			2	
Black-capped Chickadee		1		
Blue-gray Gnatcatcher			1	1
Blue-winged Teal	96	47		
Brown-headed Cowbird		1	1	1
Canada Goose	7	13	1	
Carolina Wren		Malue.		
Common Merganser	2		and the	h
Common Nighthawk			1	
Common Yellowthroat			7	5
Dickcissel			7	
Double-crested		SIN A LI		
Cormorant	The street was	21		
Dunlin	3		w in the	
Eastern Bluebird				
Eastern Kingbird	野科	Mala		
Eastern Phoebe	11 10 1	1		1 1
Fish Crow Gadwall		2	1	
Matter DW Al	2	2		
Great Blue Heron	4	2	1	W
Great Egret Great Egret	(KI)	1 1	2	1 11
Great Horned Owl			11	1-17
	12	O VIX		-
Greater Yellowlegs Green-winged Teal	13 / 22			1/-
Indigo Bunting	221		11 1	18.
Killdeer	2	1+ ////	III. JX	11 1
Lesser Yellowlegs	$\begin{pmatrix} 2 \\ 2 \end{pmatrix}$	771		
Mallard	2	AMI		
Mississippi Kite	3	7 1 1		2
Mourning Dove				2
Northern Cardinal	2	1 1	3	1
Northern Pintail	1	2	3	
Northern Shoveler	43	42		
Pectoral Sandpiper	43	1		
Pied-billed Grebe		1		
rica-billed Grebe		1		

	Migr	ation		ding son
Species	2018	2019	2018	2019
Pileated Woodpecker			1	
Purple Martin				1
Red-bellied Woodpecker	1		1	
Red-shouldered Hawk	1		1	
Ruby-crowned Kinglet	1			
Rusty Blackbird	50			
Solitary Sandpiper		2		
Song Sparrow	2	3		
Swamp Sparrow	7	7		
Tufted Titmouse			2	
Turkey Vulture		Marin state	- Marine	2
Wild Turkey	3114		1	
Wilson's Snipe	27	13		
Wood Duck			1	
Yellow-billed Cuckoo			1	
Grand Total	341	174	52	22

Notes: Like many sites in Missouri in 2019, the water levels on this easement resulted in slightly lower bird numbers than last year. The property still had ample numbers of Wilson's Snipe, Blue-winged Teal and Northern Shoveler. Of note was the presence of two Mississippi Kites (photo below) during the breeding season.



		2019
Species	Migration	Breeding Season
Acadian Flycatcher		1
Alder Flycatcher		1
American Bittern	1	
American Coot	7	
American Crow	4	1
American Pipit	1	
American Goldfinch	1	3
American Robin	1	
Barred Owl	5	
Bald Eagle	2	13/13
Black-capped Chickadee	1	1
Bell's Vireo		3
Blue-gray Gnatcatcher	4	6
Brown-headed Cowbird	9	7
Blue Jay	6	
Brown Thrasher	6	
Blue-winged Teal	31	
Canada Goose	4	
Carolina Wren	4	5
Chipping Sparrow	2	1
Common Grackle		1
Cooper's Hawk	1	
Common Yellowthroat		25
Double-crested Cormorant	14	
Dickcissel		18
Downy Woodpecker	3	3
Eastern Bluebird	5	OI W
Eastern Kingbird		4
Eastern Meadowlark	6	
Eastern Phoebe	3	
Eastern Wood-Pewee		1 300
Fish Crow	3	3
Field Sparrow	9	4
Great Blue Heron	2	2
Great Crested Flycatcher		1
Great Horned Owl	1	
Gray Catbird		2
Great Egret		6
Greater Yellowlegs	1	
Henslow's Sparrow	4	
Hooded Merganser	2	
Indigo Bunting		21

Lesser Yellowlegs

2019 Survey DatesMigration: April 6th. Breeding Season: June 14th. **Acreage:** 456

		2019
Species	Migration	Breeding Season
Louisiana Waterthrush	1	
Marsh Wren	1	
Mourning Dove	3	
Northern Bobwhite	3	5
Northern Cardinal	26	15
Northern Flicker	3	
Northern Shoveler	17	
Pied-billed Grebe	4	
Pileated Woodpecker	1	1
Prothonotary Warbler		6
Red-bellied Woodpecker		1
Ruby-crowned Kinglet	2	
Red-headed Woodpecker	3	
Ring-necked Duck	3	
Red-shouldered Hawk	2	
Solitary Sandpiper	1	
Song Sparrow	9	
Swamp Sparrow	31	
Tufted Titmouse	6	
White-eyed Vireo		1
Wild Turkey	4	
Wood Duck	8	3
White-throated Sparrow	6	
Yellow-breasted Chat		7
Yellow-billed Cuckoo		4
Yellow-rumped Warbler	2	
Grand Total	289	165

Notes: This easement, new to our surveys in 2019, contained an impressive diversity of species along with good numbers. The site held grassland and forest birds as well as several marsh-dependent species. Five Barred Owls were recorded during migration; the background photo was taken on site.



BIRD SPECIES NAME CODES FOR USE WITH SITE MAPS

Code	Species Name	Code	Species Name	Code	Species Name
ACFL	Acadian Flycatcher	BRTH	Brown Thrasher	FOSP	Fox Sparrow
ALFL	Alder Flycatcher		Black-throated Green	FOTE	Forster's Tern
AMAV	American Avocet	BTNW	Warber	FRGU	Franklin's Gull
AMBI	American Bittern	BUFF	Bufflehead	GADW	Gadwall
AMCO	American Coot	BWHA	Broad-winged Hawk	GBHE	Great Blue Heron
AMCR	American Crow	BWTE	Blue-winged Teal	GCFL	Great Crested Flycatcher
AMGO	American Goldfinch	BWWA	Blue-winged Warbler	GCKI	Golden-crowned Kinglet
AMGP	American Golden-Plover	CACH	Carolina Chickadee	GHOW	Great Horned Owl
AMKE	American Kestrel	CAEG	Cattle Egret	GRCA	Gray Catbird
AMPI	American Pipit	CAGO	Cackling Goose	GREG	Great Egret
AMRE	American Redstart	CANG	Canada Goose	GRHE	Green Heron
AMRO	American Robin	CARW	Carolina Wren	GRSP	Grasshopper Sparrow
AMWI	American Wigeon	CATE	Caspian Tern	GRYE	Greater Yellowlegs
AMWO	American Woodcock	CAWA	Canada Warbler	GTGR	Great-tailed Grackle
ATSP	American Tree Sparrow	CCSP	Clay-colored Sparrow		Greater White-fronted
AWPE	American White Pelican	CEDW	Cedar Waxwing	GWFG	Goose
BADO	Barred Owl	CHSP	Chipping Sparrow	GWTE	Green-winged Teal
BAEA	Bald Eagle	CHSW	Chimney Swift	GWWA	Golden-winged Warbler
BANO	Barn Owl	CLSW	Cliff Swallow	HAWO	Hairy Woodpecker
BANS	Bank Swallow	COGA	Common Gallinule	HESP	Henslow's Sparrow
BAOR	Baltimore Oriole	COGR	Common Grackle	HETH	Hermit Thrush
BARS	Barn Swallow	COHA	Cooper's Hawk	HOFI	House Finch
BASA	Baird's Sandpiper	COME	Common Merganser	HOLA	Horned Lark
BAWW	Black-and-white Warbler	CONI	Common Nighthawk	HOME	Hooded Merganser
BBCU	Black-billed Cuckoo	COTE	Common Tern	HOWR	House Wren
BBPL	Black-bellied Plover	COYE	Common Yellowthroat	HUGO	Hudsonian Godwit
BBSA	Buff-breasted Sandpiper	CSWA	Chestnut-sided Warbler	INBU	Indigo Bunting
ВССН	Black-capped Chickadee	DCCO	Double-crested Cormorant	KEWA	Kentucky Warbler
BCNH	Black-crowned Night-Heron	DEJU	Dark-eyed Junco	KILL	Killdeer
BEKI	Belted Kingfisher	DICK	Dickcissel	KIRA	King Rail
BEVI	Bell's Vireo	DOWO	Downy Woodpecker	LASP	Lark Sparrow
BGGN	Blue-gray Gnatcatcher	DUNL	Dunlin	LBDO	Long-billed Dowitcher
BHCO	Brown-headed Cowbird	EABL	Eastern Bluebird	LBHE	Little Blue Heron
BHVI	Blue-headed Vireo	EAKI	Eastern Kingbird	LCSP	LeConte's Sparrow
BLGR	Blue Grosbeak	EAME	Eastern Meadowlark	LEBI	Least Bittern
BLJA	Blue Jay	EAPH	Eastern Phoebe	LEFL	Least Flycatcher
BLPW	Blackpoll Warbler	EASO	Eastern Screech-Owl	LESA	Least Sandpiper
BLRA	Black Rail	EATO	Eastern Towhee	LESC	Lesser Scaup
BLTE	Black Tern	EAWP	Eastern Wood-Pewee	LETE	Least Tern
BLVU	Black Vulture	EUCD	Eurasian Collared-Dove	LEYE	Lesser Yellowlegs
BNST	Black-necked Stilt	EUST	European Starling	LISP	Lincoln's Sparrow
BOBO	Bobolink	EWPW	Eastern Whip-poor-will	LOSH	Loggerhead Shrike
BOGU	Bonaparte's Gull	FICR	Fish Crow	LOWA	Louisiana Waterthrush
BRCR	Brown Creeper	FISP	Field Sparrow	MALL	Mallard

Code	Species Name	
MAWA	Magnolia Warbler	RWBL
MAWR	Marsh Wren	SACR
MERL	Merlin	SAVS
MIKI	Mississippi Kite	SBDO
MODO	Mourning Dove	SCJU
NAWA	Nashville Warbler	SCTA
NESP	Nelson's Sparrow	SCTA
NOBO	Northern Bobwhite	SEPL
NOCA	Northern Cardinal	SESA
NOFL	Northern Flicker	SEWR
NOHA	Northern Harrier	SNEG
NOMO	Northern Mockingbird	SNGO
NOPA	Northern Parula	SORA
NOPI	Northern Pintail	SOSA
NOWA	Northern Waterthrush	SOSP
NOWA		SPSA
NRWS	Northern Rough-winged Swallow	SSHA
NSHO	Northern Shoveler	STSA
OCWA	Orange-crowned Warbler	SUTA
OROR	Orchard Oriole	SWSP
OSPR	Osprey	SWTH
OVEN	Ovenbird	TEWA
PBGR	Pied-billed Grebe	
PEFA	Peregrine Falcon	TRES
PESA	•	TUTI
PIWO	Pectoral Sandpiper	TUVU
PRAW	Pileated Woodpecker Prairie Warbler	UNKBL
		UNKDUCK
PROW	Prothonotary Warbler	UNKFL
PUFI	Purple Finch	UNKSA
PUMA	Purple Martin	UNKSW
RBGR	Rose-breasted Grosbeak	UNKWO
RBGU	Ring-billed Gull	UPSA
RBME	Red-breasted Merganser	VEER
RBWO	Red-bellied Woodpecker	VESP
RCKI	Ruby-crowned Kinglet	VIRA
REDH	Redhead	WAVI
REVI	Red-eyed Vireo	WBNU
RHWO	Red-headed Woodpecker	WCSP
RNDU	Ring-necked Duck	WEME
RNPH	Ring-necked Pheasant	WESA
ROGO	Ross's Goose	WEVI
ROPI	Rock Pigeon	WIFL
RSHA	Red-shouldered Hawk	WILL
RTHA	Red-tailed Hawk	WIPH
RTHU	Ruby-throated Hummingbird	WISN
RUBL	Rusty Blackbird	WITU
RUDU	Ruddy Duck	WIWA
-	J -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Code	Species Name		
WODU	Wood Duck		
WOTH	Wood Thrush		
WPWA	Western Palm Warbler		
WRSA	White-rumped Sandpiper		
WTSP	White-throated Sparrow		
YBCH	Yellow-breasted Chat		
YBCU	Yellow-billed Cuckoo		
YBFL	Yellow-bellied Flycatcher		
YBSA	Yellow-bellied Sapsucker		
YCNH	Yellow-crowned Night- Heron		
YERA	Yellow Rail		
YEWA	Yellow Warbler		
YHBL	Yellow-headed Blackbird		
YRWA	Yellow-rumped Warbler		
YSFL	Yellow-shafted Flicker		
YTVI	Yellow-throated Vireo		
YTWA	Yellow-throated Warbler		



