



A Review of Bird Monitoring in Manitoba SARPAL Target Areas in 2017

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Introduction

The Manitoba Beef Producers (MBP) and the West Souris River Conservation District (WSRCD) received funding from Environment and Climate Change Canada (ECCC) through the Species at Risk Partnerships on Agricultural Lands (SARPAL) program. MBP and WSRCD established a partnership of agencies and formed a technical committee to provide expertise, coordination implementation of the SARPAL program; which includes Turtle Mountain Conservation District (TMCD), Birds Studies Canada (BSC), Manitoba Important Bird Areas Program (IBA), Manitoba Habitat Heritage Corporation (MHHC). The intent of the program, over a three-year period, is to deliver information and incentives to cattle producers that own and manage native mixed-grass prairie that support habitat for Species at Risk (SAR). Outcomes of this program seek to enhance pastureland, improve grass quality, and maintain healthy habitats for SAR. The program runs until March 2019. These SARPAL projects seek to support native mixed-grass prairie in southwestern Manitoba, including the Poverty Plains, Lyleton Grasslands, Blind Souris River Valley, Belleview and Maple Lake Region (see Figure 1).

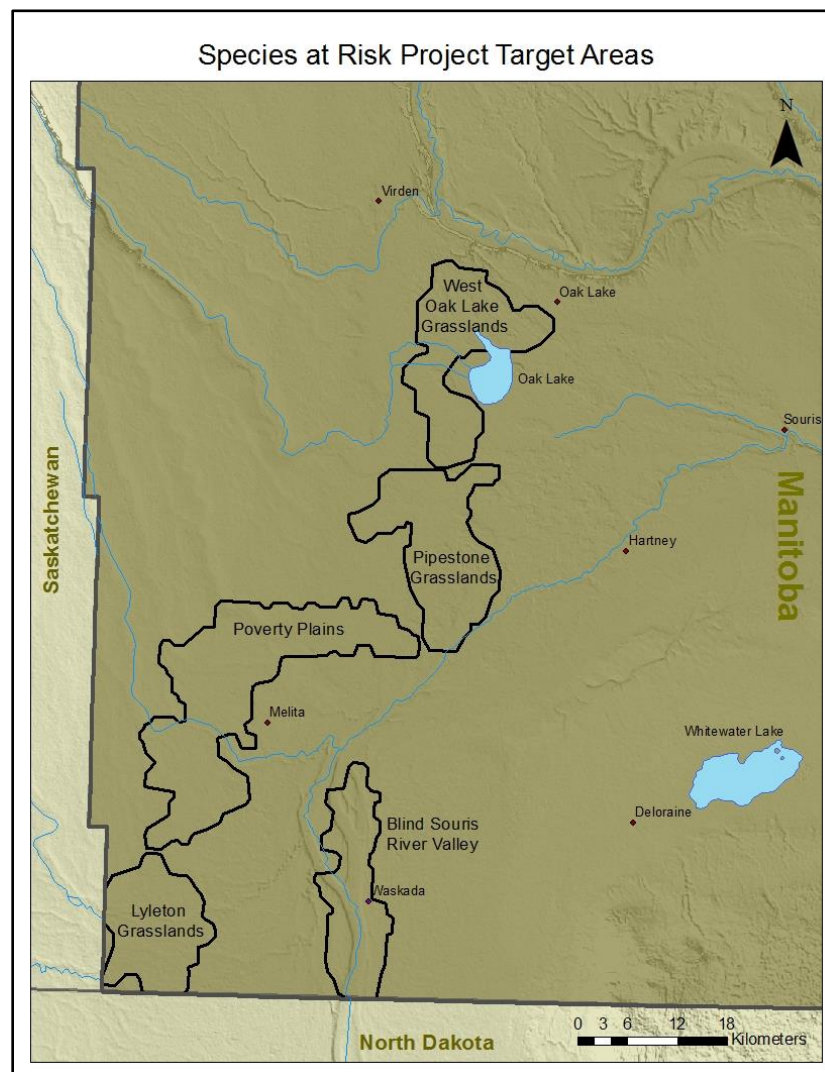


Figure 1: Map of target areas for Manitoba SARPAL 'Keep Grazing' project (courtesy of MHHC).

The primary objective of 'Keep Grazing' is for a collaborated effort, providing information and incentives to beef producers on native mixed-grass prairie in Manitoba. Native mixed-grass prairie is recognised for its intrinsic value to biodiversity, supporting many SAR. These dynamic ecosystems evolved as open grasslands, in part, due to seasonal grazing from herds of bison. In Manitoba, most of the remaining fragments of native prairie continue to be grazed by cattle. Cattle grazing replicates the natural grazing patterns on the prairies, creating ideal habitat for SAR and other grassland specialists. Without this, many of the remaining patches of grassland would likely be converted to cropland and associated with such conversion would be the loss of all dependent avian and non-avian grassland species.

The Manitoba IBA Program and BSC were contracted conducted bird surveys for these projects. These surveys are designed to both support and provide added value to the incentive packages being delivered by the MBP and WSRCD. Concurrently, MHHC have carried out Range Health Assessments on some of the same landholdings. The intention of these surveys is that they will:

1. provide landowners with a summary of all species on their land, highlighting SAR;
2. provide SAR data to project partners evaluating applications to the incentives program;
3. produce a baseline to analyse the efficacy of the incentive program;
4. encourage more participants to join the Manitoba's SARPAL Programs;
5. create pride in the role of Manitoba's beef producers as stewards and conservationists of our remaining native prairies and their associated SAR.

Methods

All bird surveys were organised and carried out by Dr. Christian Artuso of BSC. Monitoring took place during June and early July 2017; the period that territorial males are at their most vociferous in native grasslands. Landowners were contacted by Dean Brooker of WSRCD, Yasemin Keeler of TMCD and Carol Graham and Tom Moran of MHHC. The surveyor would walk a loop through the area of grassland selected by the landowner for monitoring, stopping at least every 400m (see Figure 2 for an example map of a route walked). This distance is double the minimum detection distance expected to hear most species of grassland bird. A minimum of 12-16 points were counted per section and a minimum of 6 points for a single quarter section was covered. All birds detected either by sight, sound or both were recorded during a two minute period and were given [breeding codes from the Manitoba Breeding Bird Atlas](#). SAR locations were also recorded on a handheld GPS.

Each landowner received a personal summary of the birds found on their land and personal follow-up from the SARPAL 'Keep Grazing' partnership.

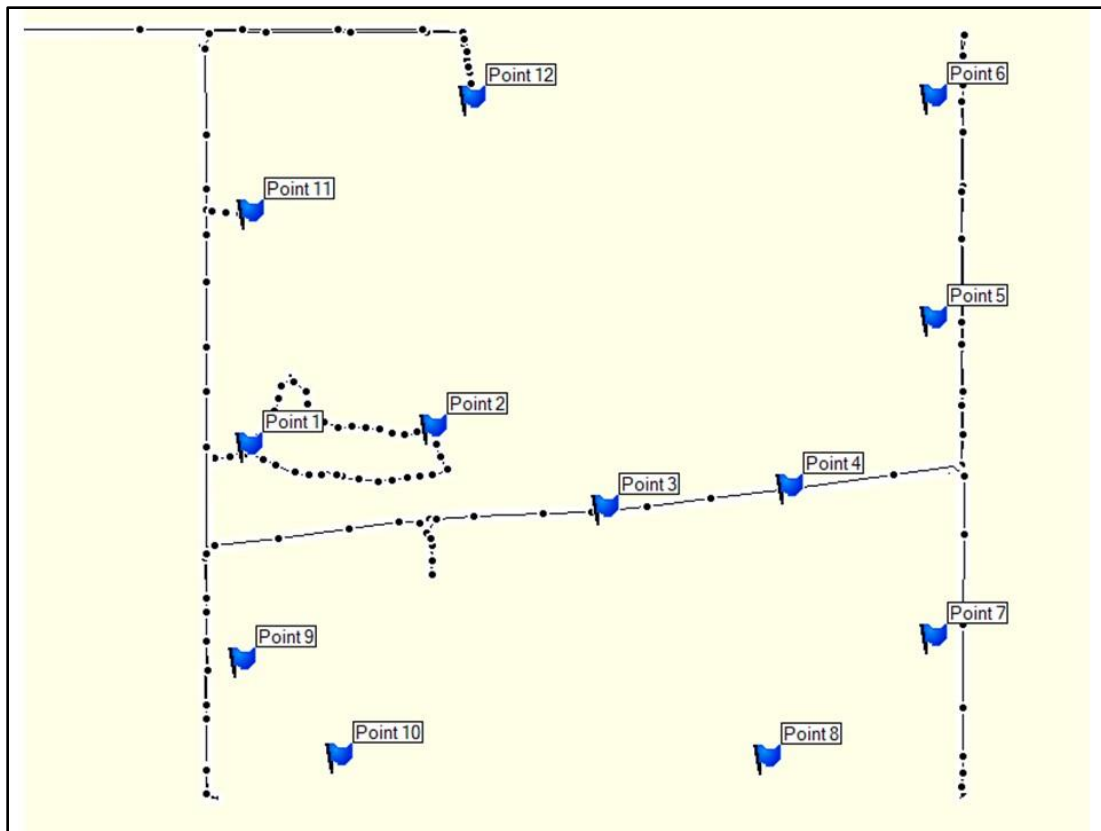


Figure 2: Example of points recorded on a single section during the summer of 2017.

Results

A total of 32 properties were surveyed. The size of each survey area depended on the wishes of the landowner and the availability of habitat. Typical surveys ranged from a quarter section to multiple sections. The largest number of properties were in the Oak Lake area and Lyleton Grasslands. Fewer properties were monitored in the Pipestone Grasslands and Blind Souris, see Table 1 for details.

Table 1: Summary of areas monitored

Target Area	Number of Properties Surveyed	Number of Sections Surveyed	Number of Point Counts Completed
Blind Souris	3	3	22
Lyleton Grasslands	9	6.75	88
Oak Lake	10	11.25	75
Pipestone Grasslands	4	3	37
Poverty Plains	6	3.25	48
Total surveyed	32	27.25	270

In total, 115 species of bird were detected across the five grassland target areas (Table 2). Although many of the birds detected were associated with grassland habitats, a number of other

species associated with broadleaf woodlands and wetlands were also recorded. This is indicative of the diversity of these open grassland areas in Manitoba which often include a combination of lakes, potholes, ephemeral wetlands, farmland shelterbelts, and small woodland bluffs. Savannah Sparrow was the most widespread species, being detected on over 75% of point counts. Western Meadowlark, Red-winged Blackbird, Bobolink, and Mourning Dove were also notably widespread. Red-winged Blackbird was the most abundant species, with over 500 individuals counted. See Table 2 for details.

Table 2: Summary of all species counted during point counts

Species	Total Count	Number of Points Observed	% Total All Point Counts
Canada Goose	272	21	7.8
Wood Duck	2	1	0.4
Gadwall	49	26	9.6
American Wigeon	5	3	1.1
Mallard	153	61	22.6
Blue-winged Teal	63	31	11.5
Northern Shoveler	42	24	8.9
Northern Pintail	28	12	4.4
Green-winged Teal	11	8	3.0
Canvasback	1	1	0.4
Redhead	17	4	1.5
Ring-necked Duck	2	2	0.7
Lesser Scaup	8	3	1.1
Ruddy Duck	6	3	1.1
Ring-necked Pheasant	9	9	3.3
Ruffed Grouse	1	1	0.4
Sharp-tailed Grouse	13	11	4.1
Pied-billed Grebe	21	20	7.4
Eared Grebe	11	1	0.4
American Bittern	42	41	15.2
Great Blue Heron	5	5	1.9
Black-crowned Night Heron	1	1	0.4
White-faced Ibis	49	14	5.2
Bald Eagle	3	2	0.7
Northern Harrier	6	6	2.2
Swainson's Hawk	7	6	2.2
Red-tailed Hawk	19	16	5.9
Ferruginous Hawk	3	2	0.7
Merlin	2	2	0.7
Yellow Rail	1	1	0.4
Virginia Rail	2	2	0.7

Species	Total Count	Number of Points Observed	% Total All Point Counts
Sora	36	35	13.0
American Coot	53	14	5.2
Sandhill Crane	4	1	0.4
Killdeer	40	37	13.7
Spotted Sandpiper	1	1	0.4
Willet	49	42	15.6
Upland Sandpiper	69	54	20.0
Marbled Godwit	46	39	14.4
Wilson's Snipe	91	80	29.6
Wilson's Phalarope	61	36	13.3
Franklin's Gull	313	35	13.0
Ring-billed Gull	1	1	0.4
Black Tern	159	51	18.9
Forster's Tern	2	1	0.4
Rock Pigeon	8	1	0.4
Mourning Dove	122	97	35.9
Black-billed Cuckoo	5	5	1.9
Great Horned Owl	5	5	1.9
Common Nighthawk	1	1	0.4
Red-headed Woodpecker	3	3	1.1
Downy Woodpecker	3	3	1.1
Northern Flicker	8	8	3.0
Pileated Woodpecker	1	1	0.4
Eastern Wood-Pewee	1	1	0.4
Alder Flycatcher	2	2	0.7
Willow Flycatcher	4	4	1.5
Least Flycatcher	40	36	13.3
Eastern Phoebe	3	3	1.1
Say's Phoebe	1	1	0.4
Great-crested Flycatcher	3	3	1.1
Western Kingbird	17	14	5.2
Eastern Kingbird	69	54	20.0
Loggerhead Shrike	1	1	0.4
Warbling Vireo	33	32	11.9
Red-eyed Vireo	2	2	0.7
Blue Jay	1	1	0.4
Black-billed Magpie	15	11	4.1
American Crow	40	24	8.9
Common Raven	18	14	5.2

Species	Total Count	Number of Points Observed	% Total All Point Counts
Horned Lark	26	23	8.5
Tree Swallow	31	16	5.9
Northern Rough-winged Swallow	1	1	0.4
Cliff Swallow	10	2	0.7
Barn Swallow	49	24	8.9
White-breasted Nuthatch	2	1	0.4
House Wren	14	11	4.1
Sedge Wren	90	60	22.2
Marsh Wren	31	20	7.4
Eastern Bluebird	1	1	0.4
Veery	1	1	0.4
American Robin	32	29	10.7
Gray Catbird	11	10	3.7
Brown Thrasher	16	15	5.6
European Starling	2	1	0.4
Sprague's Pipit	33	28	10.4
Yellow Warbler	28	27	10.0
American Redstart	1	1	0.4
Black-and-white Warbler	2	2	0.7
Ovenbird	1	1	0.4
Common Yellowthroat	12	12	4.4
Eastern Towhee	2	1	0.4
Chipping Sparrow	1	1	0.4
Clay-colored Sparrow	112	86	31.9
Vesper Sparrow	54	48	17.8
Lark Sparrow	2	2	0.7
Savannah Sparrow	370	223	82.6
Grasshopper Sparrow	98	83	30.7
Baird's Sparrow	7	6	2.2
Le Conte's Sparrow	45	40	14.8
Nelson's Sparrow	29	28	10.4
Song Sparrow	16	13	4.8
Chestnut-collared Longspur	86	29	10.7
Rose-breasted Grosbeak	2	2	0.7
Indigo Bunting	1	1	0.4
Bobolink	199	111	41.1
Red-winged Blackbird	541	129	47.8
Western Meadowlark	360	203	75.2
Yellow-headed Blackbird	278	64	23.7

Species	Total Count	Number of Points Observed	% Total All Point Counts
Brewers Blackbird	97	40	14.8
Common Grackle	27	14	5.2
Brown-headed Cowbird	163	89	33.0
Orchard Oriole	14	11	4.1
Baltimore Oriole	25	21	7.8
American Goldfinch	73	51	18.9

Species at Risk

In total, 11 different SAR were detected during the point counts. All regularly detected Manitoba grassland SAR, except the Burrowing Owl, were recorded. Several non-grassland species were detected in non-grassland habitats such as shelterbelts, wetlands, and old farm buildings. A summary of the SAR detected during point counts is available in Table 3.

Table 3: Summary of SAR detected during point counts by region.

Species	Blind Souris	Lyleton Grasslands	Oak Lake	Pipestone	Poverty Plains	Grand Total
Ferruginous Hawk		2				2
Yellow Rail			1			1
Common Nighthawk		1				1
Red-headed Woodpecker			1	2		3
Loggerhead Shrike		1				1
Eastern Wood-Pewee				1		1
Barn Swallow	1	25	11	6	6	49
Sprague's Pipit	11	11		4	7	33
Chestnut-collared Longspur	31	31		8	16	86
Grasshopper Sparrow	16	48	6	7	21	98
Baird's Sparrow	3	1			3	7
Bobolink	19	87	38	13	33	190

In addition, SAR were noted *en route* to properties and during other events organised by the IBA Program. These records are summarised in Table 4.

Table 4: SAR detected opportunistically (not during point counts).

	Blind Souris	Lyleton Grasslands	Oak Lake	Pipestone	Poverty Plains	Grand Total
Ferruginous Hawk		4				4
Red-headed Woodpecker			1	5		6
Loggerhead Shrike		3		1	2	6

Sprague's Pipit	2	5	7	2	1	17
Chestnut-collared Longspur		2		2	8	12
Grasshopper Sparrow		7	1		2	10
Baird's Sparrow	1	2	6			9
Bobolink		11			3	14

Discussion

The totals of all SAR within the SARPAL 'Keep Grazing' target area are summarised in the paragraphs below (all photos copyright of Christian Artuso).

Ferruginous Hawk – 6 in total



The Ferruginous Hawk nests in unbroken, unfragmented native grasslands with large populations of their favoured prey, ground squirrels. These hawks often nest on artificial nesting platforms on large cottonwoods in open prairie. Total breeding pairs has declined since the 1990's, potentially due to loss of ground squirrels. The Lyleton and Pierson grasslands and Poverty Plain appear to be the best place for this species currently.

Yellow Rail – 1 in total

The Yellow Rail is associated with short wetland vegetation, notably sedge meadows and wet grasslands. The one noted occurrence was in a wet cattle pasture. It is likely that due to the wet cycle, there are relatively high numbers of Yellow Rail but as it is nocturnal, the point-count method employed (commencing 30 minutes before local sunrise) gave minimal chance of detecting this wetland species.

Common Nighthawk – 1 in total

Another nocturnal species, the Common Nighthawk nests in both broadleaf woodland and open habitats including sandhills and native prairie, building their nests on bare ground.





Red-headed Woodpecker – 9 in total

This species is most prevalent in the Oak Lake area and Pipestone grasslands. Although not a grassland species, it is associated with cattle grazing, breeding in dead trees in heavily grazed woodlots.

Loggerhead Shrike – 7 in total

The prairie ‘butcher bird’, this species breeds in shelterbelts, old farm sites and low shrubby trees on the edge of native and tame grasslands. Like the Ferruginous Hawk, the Loggerhead Shrike has been declining steadily during the current wet cycle. It was most prevalent in grassland areas with more trees, large shrubs and shelterbelts, namely the Poverty Plains, Lyleton Grasslands and Pipestone Grasslands.



Eastern Wood-Pewee – 1 in total



A species of broadleaf woodlands, the Eastern Wood-Pewee is known to breed in the Oak Lake area

Barn Swallow – 49 in total

Widespread across the target area, the Barn Swallow forages over grasslands and wetlands and primarily breeds in agricultural buildings.





Sprague's Pipit – 50 in total

Most often detected due to its tumbling song delivered in flight well above the ground, the Sprague's Pipit is most commonly associated with native prairie but will sometimes breed in tame grasslands under certain conditions. Threatened due to its dependence on open, unbroken grassland, this species was most prevalent in the southwest corner, around the Blind Souris, Poverty Plains and Lyleton Grasslands. Four pipits were recorded on July 15th in the Oak Lake area by Manitoba

IBA volunteers.

Chestnut-collared Longspur – 98

Most frequently in the Blind Souris, with over 40% encounter rate during point counts. Being a species of shorter grasses, it is no surprise that it was not encountered in the wetter grasslands around Oak Lake. Was though present on one property in the Pipestone Grasslands.



Grasshopper Sparrow – 108 in total



Although not a SAR, this is a scarce and declining grassland species in Manitoba (provincial status rank of S2B or "rare"). Grasshopper Sparrow was detected in all areas, being the most abundant grassland bird bar Bobolink and Western Meadowlark. Most commonly encountered in the Poverty Plains, Lyleton Grasslands and Blind Souris.

Baird's Sparrow – 16 in total

The Baird's Sparrow arrives in Manitoba later than other species and may not be detected early in the season. An unexpected group of Baird's Sparrows were recorded on July 15th in the north Oak Lake area, although the southwest corner was generally the most likely place to encounter this species.



Bobolink – 204 in total

A species which has a strong affinity for tame grasslands, including alfalfa. Bobolink was relatively widespread, detected in at least 40% of points in all target areas bar the Pipestone Grasslands.

Conclusions

SAR were present in all target areas for SARPAL in 2017. Unfortunately, grassland species were less abundant in the Oak Lake grasslands, presumably due to high water levels in the current wet cycle that has seen extensive flooding in this region. The wet cycle may be suppressing populations of grassland species across the target area, most notably the Ferruginous Hawk and Loggerhead Shrike, but these pastures will still be capable of supporting grassland SAR in the long-term. Currently grassland SAR are most abundant in the southwest corner (Blind Souris, Lyleton Grasslands and Poverty Plains). These counts have produced an important baseline and should be continued in future years, especially as the SARPAL management evolves.

Acknowledgements

This monitoring was funded by Environment and Climate Change Canada's SARPAL program. All monitoring only happened thanks to the kind access permission and logistical assistance from 32 beef producers in southwestern Manitoba. Dean Brooker and Scott Hainsworth of West Souris River Conservation District, Yasemin Keeler of Turtle Mountain Conservation District and Carol Graham and Tom Moran of Manitoba Habitat Heritage Corporation contacted landowners and provided assistance throughout summer monitoring. Lynnea Parker provided editing assistance on the report.

Appendix 1 – Summary of all species encountered per geographic area

Blind Souris

Species	Total Count	Number of Points Observed	% Total all Point Counts
Gadwall	5	2	9.1
American Wigeon	3	1	4.6
Mallard	12	7	31.8
Northern Shoveler	1	1	4.6
Northern Pintail	4	2	9.1
Green-winged Teal	1	1	4.6
Lesser Scaup	4	1	4.6
Ring-necked Pheasant	1	1	4.6
Sharp-tailed Grouse	2	2	9.1
Bald Eagle	1	1	4.6
Northern Harrier	2	2	9.1
Sandhill Crane	4	1	4.6
Killdeer	4	4	18.2
Willet	13	10	45.5
Upland Sandpiper	9	5	22.7
Marbled Godwit	7	7	31.8
Wilson's Phalarope	8	5	22.7
Franklin's Gull	5	2	9.1
Black Tern	3	3	13.6
Rock Pigeon	8	1	4.6
Mourning Dove	15	12	54.6
Great Horned Owl	1	1	4.6
Eastern Kingbird	3	2	9.1
Black-billed Magpie	2	1	4.6
American Crow	2	2	9.1
Common Raven	2	1	4.6
Horned Lark	7	6	27.3
Tree Swallow	3	2	9.1
Cliff Swallow	3	1	4.6
Barn Swallow	1	1	4.6
Sedge Wren	3	1	4.6
American Robin	2	2	9.1
Sprague's Pipit	11	8	36.4
Clay-colored Sparrow	4	3	13.6
Vesper Sparrow	3	3	13.6

Species	Total Count	Number of Points Observed	% Total all Point Counts
Savannah Sparrow	48	22	100.0
Grasshopper Sparrow	16	12	54.6
Baird's Sparrow	3	2	9.1
Le Conte's Sparrow	1	1	4.6
Nelson's Sparrow	1	1	4.6
Chestnut-collared Longspur	31	12	54.6
Bobolink	19	9	40.9
Red-winged Blackbird	16	6	27.3
Western Meadowlark	52	20	90.9
Brewers Blackbird	7	3	13.6
Common Grackle	2	1	4.6
Brown-headed Cowbird	10	7	31.8
Orchard Oriole	1	1	4.6
American Goldfinch	4	3	13.6

Lyleton Grasslands

Species	Total Count	Number of Points Observed	% Total All Point Counts
Canada Goose	93	8	9.1
Gadwall	17	9	10.2
Mallard	25	13	14.8
Blue-winged Teal	4	2	2.3
Northern Shoveler	10	6	6.8
Northern Pintail	9	4	4.6
Green-winged Teal	3	2	2.3
Ring-necked Pheasant	7	7	8.0
Sharp-tailed Grouse	8	6	6.8
Pied-billed Grebe	2	2	2.3
American Bittern	13	12	13.6
Great Blue Heron	2	2	2.3
Northern Harrier	1	1	1.1
Swainson's Hawk	4	3	3.4
Red-tailed Hawk	8	7	8.0
Ferruginous Hawk	2	1	1.1
Sora	3	3	3.4
Killdeer	15	14	15.9

Species	Total Count	Number of Points Observed	% Total All Point Counts
Willet	15	13	14.8
Upland Sandpiper	42	32	36.4
Marbled Godwit	15	11	12.5
Wilson's Snipe	20	19	21.6
Wilson's Phalarope	15	9	10.2
Franklin's Gull	1	1	1.1
Black Tern	6	4	4.6
Mourning Dove	44	35	39.8
Black-billed Cuckoo	1	1	1.1
Common Nighthawk	1	1	1.1
Downy Woodpecker	1	1	1.1
Northern Flicker	2	2	2.3
Alder Flycatcher	1	1	1.1
Willow Flycatcher	2	2	2.3
Least Flycatcher	7	7	8.0
Western Kingbird	4	4	4.6
Eastern Kingbird	32	24	27.3
Loggerhead Shrike	1	1	1.1
Warbling Vireo	2	2	2.3
Black-billed Magpie	8	5	5.7
American Crow	6	4	4.6
Common Raven	7	5	5.7
Horned Lark	4	4	4.6
Tree Swallow	8	5	5.7
Northern Rough-winged Swallow	1	1	1.1
Cliff Swallow	7	1	1.1
Barn Swallow	25	11	12.5
House Wren	2	2	2.3
Sedge Wren	23	19	21.6
Marsh Wren	1	1	1.1
American Robin	4	3	3.4
Brown Thrasher	7	7	8.0
Sprague's Pipit	11	10	11.4
Yellow Warbler	7	7	8.0
Common Yellowthroat	1	1	1.1
Clay-colored Sparrow	55	40	45.5
Vesper Sparrow	6	6	6.8
Lark Sparrow	1	1	1.1

Species	Total Count	Number of Points Observed	% Total All Point Counts
Savannah Sparrow	113	70	79.6
Grasshopper Sparrow	48	40	45.5
Baird's Sparrow	1	1	1.1
Le Conte's Sparrow	15	14	15.9
Nelson's Sparrow	9	9	10.2
Song Sparrow	2	2	2.3
Chestnut-collared Longspur	31	9	10.2
Rose-breasted Grosbeak	1	1	1.1
Bobolink	87	48	54.6
Red-winged Blackbird	76	26	29.6
Western Meadowlark	119	71	80.7
Yellow-headed Blackbird	14	9	10.2
Brewers Blackbird	35	16	18.2
Common Grackle	2	2	2.3
Brown-headed Cowbird	99	49	55.7
Orchard Oriole	6	6	6.8
Baltimore Oriole	6	5	5.7
American Goldfinch	33	21	23.9

Oak Lake

Species	Total Count	Number of Points Observed	% Total All Point Counts
Canada Goose	128	8	10.7
Wood Duck	2	1	1.3
Gadwall	21	11	14.7
American Wigeon	2	2	2.7
Mallard	67	22	29.3
Blue-winged Teal	40	17	22.7
Northern Shoveler	14	6	8.0
Northern Pintail	6	2	2.7
Green-winged Teal	6	4	5.3
Canvasback	1	1	1.3
Redhead	13	2	2.7
Ring-necked Duck	1	1	1.3
Lesser Scaup	4	2	2.7
Ruddy Duck	5	2	2.7
Ruffed Grouse	1	1	1.3

Species	Total Count	Number of Points Observed	% Total All Point Counts
Sharp-tailed Grouse	1	1	1.3
Pied-billed Grebe	13	12	16.0
Eared Grebe	11	1	1.3
American Bittern	16	16	21.3
Great Blue Heron	1	1	1.3
White-faced Ibis	49	14	18.7
Bald Eagle	2	1	1.3
Northern Harrier	2	2	2.7
Swainson's Hawk	2	2	2.7
Red-tailed Hawk	3	3	4.0
Merlin	1	1	1.3
Yellow Rail	1	1	1.3
Virginia Rail	1	1	1.3
Sora	18	18	24.0
American Coot	44	10	13.3
Killdeer	8	7	9.3
Willet	12	10	13.3
Upland Sandpiper	5	4	5.3
Marbled Godwit	8	7	9.3
Wilson's Snipe	30	25	33.3
Wilson's Phalarope	20	13	17.3
Franklin's Gull	207	17	22.7
Black Tern	83	24	32.0
Mourning Dove	34	26	34.7
Black-billed Cuckoo	2	2	2.7
Great Horned Owl	2	2	2.7
Red-headed Woodpecker	1	1	1.3
Northern Flicker	2	2	2.7
Pileated Woodpecker	1	1	1.3
Least Flycatcher	15	12	16.0
Great-crested Flycatcher	3	3	4.0
Western Kingbird	6	5	6.7
Eastern Kingbird	8	7	9.3
Warbling Vireo	16	15	20.0
Red-eyed Vireo	2	2	2.7
Black-billed Magpie	3	3	4.0
American Crow	27	14	18.7
Common Raven	4	4	5.3

Species	Total Count	Number of Points Observed	% Total All Point Counts
Horned Lark	2	2	2.7
Tree Swallow	4	2	2.7
Barn Swallow	11	6	8.0
House Wren	8	5	6.7
Sedge Wren	35	20	26.7
Marsh Wren	27	16	21.3
Eastern Bluebird	1	1	1.3
Veery	1	1	1.3
American Robin	15	14	18.7
Gray Catbird	7	6	8.0
Brown Thrasher	1	1	1.3
European Starling	2	1	1.3
Yellow Warbler	11	10	13.3
American Redstart	1	1	1.3
Black-and-white Warbler	2	2	2.7
Ovenbird	1	1	1.3
Common Yellowthroat	5	5	6.7
Eastern Towhee	2	1	1.3
Clay-colored Sparrow	21	15	20.0
Vesper Sparrow	18	15	20.0
Savannah Sparrow	92	54	72.0
Grasshopper Sparrow	6	6	8.0
Le Conte's Sparrow	17	13	17.3
Nelson's Sparrow	15	15	20.0
Song Sparrow	8	5	6.7
Rose-breasted Grosbeak	1	1	1.3
Indigo Bunting	1	1	1.3
Bobolink	47	30	40.0
Red-winged Blackbird	222	50	66.7
Western Meadowlark	91	50	66.7
Yellow-headed Blackbird	190	37	49.3
Brewers Blackbird	16	7	9.3
Common Grackle	7	2	2.7
Brown-headed Cowbird	24	12	16.0
Baltimore Oriole	9	7	9.3
American Goldfinch	20	14	18.7

Pipestone Grasslands

Species	Total Count	Number of Points Observed	% Total All Point Counts
Canada Goose	7	4	10.8
Mallard	18	9	24.3
Blue-winged Teal	8	4	10.8
Northern Shoveler	7	4	10.8
Northern Pintail	2	1	2.7
Redhead	1	1	2.7
Pied-billed Grebe	1	1	2.7
American Bittern	3	3	8.1
Black-crowned Night Heron	1	1	2.7
Swainson's Hawk	1	1	2.7
Red-tailed Hawk	1	1	2.7
Virginia Rail	1	1	2.7
Sora	9	8	21.6
Killdeer	5	5	13.5
Willet	3	3	8.1
Upland Sandpiper	1	1	2.7
Marbled Godwit	6	5	13.5
Wilson's Snipe	19	15	40.5
Wilson's Phalarope	2	1	2.7
Franklin's Gull	32	7	18.9
Ring-billed Gull	1	1	2.7
Black Tern	44	9	24.3
Forster's Tern	2	1	2.7
Mourning Dove	19	16	43.2
Black-billed Cuckoo	1	1	2.7
Great Horned Owl	1	1	2.7
Red-headed Woodpecker	2	2	5.4
Downy Woodpecker	1	1	2.7
Northern Flicker	3	3	8.1
Eastern Wood-Pewee	1	1	2.7
Least Flycatcher	11	10	27.0
Eastern Phoebe	3	3	8.1
Eastern Kingbird	9	7	18.9
Warbling Vireo	8	8	21.6
Blue Jay	1	1	2.7
Black-billed Magpie	1	1	2.7

Species	Total Count	Number of Points Observed	% Total All Point Counts
American Crow	5	4	10.8
Common Raven	5	4	10.8
Horned Lark	5	4	10.8
Tree Swallow	4	2	5.4
Barn Swallow	6	3	8.1
White-breasted Nuthatch	2	1	2.7
House Wren	1	1	2.7
Sedge Wren	10	8	21.6
Marsh Wren	1	1	2.7
American Robin	7	6	16.2
Gray Catbird	1	1	2.7
Brown Thrasher	6	5	13.5
Sprague's Pipit	4	3	8.1
Yellow Warbler	5	5	13.5
Common Yellowthroat	4	4	10.8
Chipping Sparrow	1	1	2.7
Clay-colored Sparrow	7	7	18.9
Vesper Sparrow	12	11	29.7
Lark Sparrow	1	1	2.7
Savannah Sparrow	44	32	86.5
Grasshopper Sparrow	7	7	18.9
Le Conte's Sparrow	5	5	13.5
Song Sparrow	3	3	8.1
Chestnut-collared Longspur	8	2	5.4
Bobolink	13	7	18.9
Red-winged Blackbird	111	20	54.1
Western Meadowlark	37	25	67.6
Yellow-headed Blackbird	44	8	21.6
Brewers Blackbird	15	5	13.5
Common Grackle	10	6	16.2
Brown-headed Cowbird	15	10	27.0
Baltimore Oriole	7	6	16.2
American Goldfinch	9	7	18.9

Poverty Plains

Species	Total Count	Number of Points Observed	% Total All Point Counts
Canada Goose	44	1	2.1
Gadwall	6	4	8.3
Mallard	31	10	20.8
Blue-winged Teal	11	8	16.7
Northern Shoveler	10	7	14.6
Northern Pintail	7	3	6.3
Green-winged Teal	1	1	2.1
Redhead	3	1	2.1
Ring-necked Duck	1	1	2.1
Ruddy Duck	1	1	2.1
Ring-necked Pheasant	1	1	2.1
Sharp-tailed Grouse	2	2	4.2
Pied-billed Grebe	5	5	10.4
American Bittern	10	10	20.8
Great Blue Heron	2	2	4.2
Northern Harrier	1	1	2.1
Red-tailed Hawk	7	5	10.4
Ferruginous Hawk	1	1	2.1
Merlin	1	1	2.1
Sora	6	6	12.5
American Coot	9	4	8.3
Killdeer	8	7	14.6
Spotted Sandpiper	1	1	2.1
Willet	6	6	12.5
Upland Sandpiper	12	12	25.0
Marbled Godwit	10	9	18.8
Wilson's Snipe	22	21	43.8
Wilson's Phalarope	16	8	16.7
Franklin's Gull	68	8	16.7
Black Tern	23	11	22.9
Mourning Dove	10	8	16.7
Black-billed Cuckoo	1	1	2.1
Great Horned Owl	1	1	2.1
Downy Woodpecker	1	1	2.1
Northern Flicker	1	1	2.1
Alder Flycatcher	1	1	2.1

Species	Total Count	Number of Points Observed	% Total All Point Counts
Willow Flycatcher	2	2	4.2
Least Flycatcher	7	7	14.6
Say's Phoebe	1	1	2.1
Western Kingbird	7	5	10.4
Eastern Kingbird	17	14	29.2
Warbling Vireo	7	7	14.6
Black-billed Magpie	1	1	2.1
Horned Lark	8	7	14.6
Tree Swallow	12	5	10.4
Barn Swallow	6	3	6.3
House Wren	3	3	6.3
Sedge Wren	19	12	25.0
Marsh Wren	2	2	4.2
American Robin	4	4	8.3
Gray Catbird	3	3	6.3
Brown Thrasher	2	2	4.2
Sprague's Pipit	7	7	14.6
Yellow Warbler	5	5	10.4
Common Yellowthroat	2	2	4.2
Clay-colored Sparrow	25	21	43.8
Vesper Sparrow	15	13	27.1
Savannah Sparrow	73	45	93.8
Grasshopper Sparrow	21	18	37.5
Baird's Sparrow	3	3	6.3
Le Conte's Sparrow	7	7	14.6
Nelson's Sparrow	4	3	6.3
Song Sparrow	3	3	6.3
Chestnut-collared Longspur	16	6	12.5
Bobolink	33	17	35.4
Red-winged Blackbird	116	27	56.3
Western Meadowlark	61	37	77.1
Yellow-headed Blackbird	30	10	20.8
Brewers Blackbird	24	9	18.8
Common Grackle	6	3	6.3
Brown-headed Cowbird	15	11	22.9
Orchard Oriole	7	4	8.3
Baltimore Oriole	3	3	6.3

Species	Total Count	Number of Points Observed	% Total All Point Counts
American Goldfinch	7	6	12.5