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ILLINOIS NATURAL HISTORY SURVEY

The 2006 Survey of Breeding Birds at Prairie Ridge State Natural Area

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ILLINOIS
NATURAL
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SURVEY

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Densities of individual species are estimated based on birds observed within 100 m of point counts, and presented as birds per 100 ha. Site population estimates for individual species at each of the two units of Prairie Ridge are simple extrapolations of these density estimates to the total area of each unit, and do not include confidence intervals. The total number of birds observed on point counts (at all distances) may include “double-counted” individuals of some species that may be seen or heard beyond 400 m and noted at multiple points (e.g., northern bobwhite).

Results & Discussion

Four observers sampled 51 points on 12 June 2006 and 25 points on 13 June 2006 at the Jasper and Marion county units of Prairie Ridge SNA, respectively. Weather conditions were excellent on both mornings (dawn temperatures near 60 degrees F, partly cloudy skies, and light winds), and surveys were complete by 0830 AM (12 June) and 0730 AM (13 June).

Jasper County Unit. Forty-seven (47) species were recorded during point counts (Appendix I). Species with an average of one or more individuals recorded per point (and total number recorded) included: red-winged blackbird (641), European starling (468; mostly fly-by observations), dickcissel (198), eastern meadowlark (198), northern bobwhite (115), and common grackle (104; mostly fly-by observations). Based on densities, population estimates were derived for the 13 most common grassland-nesting species recorded (excluding mourning doves, largely observed as fly-bys; Table 1).

Among the threatened and endangered species, 39 Henslow’s sparrows were tallied on point-counts. Upland sandpipers were recorded from 3 areas (on 5 point counts), and a single king rail was flushed at another. Greater prairie-chickens, loggerhead shrikes, and northern harriers were not recorded in 2006, but had been observed on point counts in one or more previous years. The absence of northern harriers from this survey, and not otherwise observed

throughout 2006, marks the apparent end of nesting that had been documented annually since at least 1991.

Table 1. Total number of birds observed, 2006 and 2005 density estimates, and 2006 site population estimates for the 13 most commonly-encountered grassland-nesting birds at Prairie Ridge SNA, Jasper County, Illinois.

Species	Total # Birds Observed	2006 Density (per 100 ha)	2005 Density (per 100 ha)	2006 Site Population Estimate
Red-winged blackbird	461	352.8	238	4163
Dickcissel	198	115.5	110	1363
Eastern meadowlark	198	97.4	97.7	1149
Northern bobwhite	115	35.6	25.5	420
Henslow's sparrow	39	24.4	16.3	287
Common yellowthroat	46	21.9	26.2	258
Grasshopper sparrow	27	16.9	7.1	199
Sedge wren	16	10	3.5	118
Field sparrow	15	8.7	7.6	103
Song sparrow	13	5	9.9	59
Killdeer	12	3.7	7.1	44
Indigo bunting	11	3.7	6.4	44
Horned lark	8	5	2.8	59

Marion County Unit. Thirty-seven (37) species were recorded during point counts (Appendix I). Species with an average of one or more individuals recorded per point (and total number recorded) included: red-winged blackbird (314), dickcissel (112), eastern meadowlark (98), European starling (78; mostly fly-by observations), northern bobwhite (52), and Henslow's sparrow (33). Based on densities, population estimates were derived for the 12 most common grassland-nesting species recorded (excluding mourning doves, largely observed as fly-bys; Table 2).

Among the threatened and endangered species, 33 Henslow's sparrows were tallied on point-counts. At least 4 upland sandpipers were observed on 13 June, though only 2 were noted on point counts. Greater prairie-chickens were heard booming in two areas, and noted on several points. Three northern harriers were observed in two locations (including a pair being aggressive towards an observer, indicating probable nesting nearby). Single king rails in two locations and an American bittern were located on area searches after point counts were completed.

Table 2. Total number of birds observed, 2006 and 2005 density estimates, and 2006 site population estimates for the 12 most commonly-encountered grassland-nesting birds at Prairie Ridge SNA, Marion County, Illinois.

Species	Total # Birds Observed	2006 Density (per 100 ha)	2005 Density (per 100 ha)	2006 Site Population Estimate
Red-winged blackbird	314	365.6	225	1919
Dickcissel	122	142.7	171	749
Eastern meadowlark	98	114.6	94.3	602
Henslow's sparrow	33	39.5	36.7	207
Common yellowthroat	17	20.4	20.4	107
Northern bobwhite	52	17.8	42	94
Killdeer	9	10.2	3.8	54
Sedge wren	7	6.4	0	33
Grasshopper sparrow	5	5.1	10.2	27
Field sparrow	4	3.8	7.6	20
Indigo bunting	6	3.8	5.1	20
Song sparrow	3	2.5	10.2	13

Appendix I. Species recorded on point counts at Prairie Ridge SNA, June 2006. (X's indicate units within which each species was observed.)

Species	Jasper	Marion
Mallard	X	X
Ring-necked Pheasant	X	X
Greater Prairie-Chicken		X
Northern Bobwhite	X	X
Great Blue Heron	X	X
American Kestrel	X	
Northern Harrier		X
Red-tailed Hawk	X	X
King Rail	X	
Killdeer	X	X
Upland Sandpiper	X	X
Mourning Dove	X	X
Yellow-billed Cuckoo	X	X
Red-bellied Woodpecker	X	
Eastern Phoebe	X	
Great Crested Flycatcher	X	
Eastern Kingbird	X	X
Blue Jay	X	X
American Crow	X	X
Horned Lark	X	X
Tree Swallow		X
Barn Swallow	X	X
Tufted Titmouse		X
Carolina Wren	X	X
House Wren	X	

Species	Jasper	Marion
Sedge Wren	X	X
American Robin	X	X
Gray Catbird	X	
Northern Mockingbird	X	X
Brown Thrasher	X	X
European Starling	X	X
Common Yellowthroat	X	X
Eastern towhee	X	
Field Sparrow	X	X
Grasshopper Sparrow	X	X
Henslow's Sparrow	X	X
Song Sparrow	X	X
Northern Cardinal	X	X
Rose-breasted Grosbeak	X	
Blue Grosbeak	X	X
Indigo Bunting	X	X
Dickcissel	X	X
Red-winged Blackbird	X	X
Eastern Meadowlark	X	X
Common Grackle	X	X
Brown-headed Cowbird	X	X
Orchard Oriole	X	
Baltimore Oriole	X	
American Goldfinch	X	X
House Sparrow	X	