

# 2011 Upper Mississippi River and Great Lakes Region Joint Venture Bird Habitat Conservation Accomplishments

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## Introduction

Upper Mississippi River and Great Lakes Region Joint Venture (JV) partners submit bird habitat accomplishments to the Joint Venture Office each year. Tracking partner conservation actions provides valuable information on the land area influenced by the partnership, as well as a measure of funding expended to accomplish established JV Implementation Plan objectives.

In 2009, the accomplishment reporting form was changed from the previous version. The 2007 - 2008 report form mirrored the level of cover type description in the 2007 JV Implementation Plan. Although this level of detail is ideal, several partner agencies struggled with reporting which resulted in incomplete/inconsistent responses. To overcome this issue, partners were surveyed by JV staff to identify reporting impediments. A new form was then developed prior to the 2009 reporting period and was considered a success; reports were completed more consistently. Reports from 2011 were completed using this same revised format. Estimates of JV partner influence on bird populations is a further JV monitoring goal and our understanding of bird-habitat relationships will improve with consistent tracking and monitoring of landscape changes.

## 2011 Accomplishments

The JV partnership reported accomplishments on 434,239 acres, expending approximately \$87 million. Bird habitat enhancement was the primary conservation action (58% of the reported area), followed by restoration (32%), and protection (10%).

### *Enhancement highlights*

- 40,870 acres of wetlands enhanced across the region
- Majority of emergent marsh enhancement occurred in BCR 23
- Mudflat and shallow water enhancement was focused in BCR 22
- 208,980 acres of uplands enhanced across the region
- 139,650 acres of grassland enhanced, with 119,510 acres reported for BCR 22
- 66,310 acres of woodland enhanced, with 44,950 acres in BCR 12

### *Restoration highlights*

- 26,140 acres of wetlands restored across the region
- Majority of acres were emergent marsh in BCR 22
- 119,500 acres of upland cover restored
- 95% of upland restoration was grasslands
- Greatest amount of grassland and woodland restored in BCR 22

### *Protection highlights*

- 5,330 acres of wetlands protected across the region
- 1,950 acres of emergent marsh were protected in BCR 23 and 1,290 acres in BCR 22
- 37,410 acres of uplands protected
- Majority of upland acres were forest cover in BCR 12

## **JV cumulative accomplishments since Implementation Plan completion (2007 – 2011)**

Cumulative accomplishments are compiled for two categories: protection and restoration / enhancement. Protection accomplishments typically represent existing bird habitats now under management of a conservation organization through acquisition or long-term agreements (easements). Restoration / enhancement accomplishments represent additional new area available for target bird species through manipulations in cover type or quality at a site. Since 2007, JV partners have restored or enhanced 1,007,700 acres in the region. Also during this time, 127,700 acres of bird habitat were protected. Comparing cumulative total accomplishments against 2007 JV Implementation Plan objectives, we can calculate the percent of JV Plan objectives achieved. These percentages were determined for restoration / enhancement objectives and are presented in Tables 1 (wetlands) and 2 (uplands). These percentages are not calculated for protection objectives because a complete assessment of the area of various cover types protected before 2007 has not been completed. In addition, bird habitat losses during the assessment period were not determined but should be considered in the bird habitat accounting process. Current data is insufficient to estimate the “net change” in cover types (habitat) most important to JV focal species.

### **Acknowledgements**

Joint Venture partners in the Upper Mississippi River and Great Lakes region are transitioning from largely opportunistic conservation to science-based and targeted actions following the 2007 JV Implementation Plan. Bird habitat objectives and decision-support maps were developed by the JV Science Team to increase JV efficiency and effectiveness. However, the engine for bird conservation in the JV region remains in habitat delivery, and partner accomplishments since 2007 have been impressive.

Table 1. Percent of wetland objectives accomplished (%) and cumulative acres (2007 - 2011) restored and enhanced by the Upper Mississippi River and Great Lakes Region Joint Venture compared to habitat objectives identified in the 2007 Joint Venture Implementation Plan. Cumulative totals for BCRs represent data from 2009 - 2011 partner accomplishment reports; data from 2007 - 2008 were reported by state and are included in the "unknown" category. Percent (%) = the cumulative total / objective \* 100.

State	BCR	Marsh <sup>a</sup>			Mudflat / Shallows <sup>b</sup>			Open water / Beach <sup>c</sup>		
		Objective	Cumulative total	%	Objective	Cumulative total	%	Objective	Cumulative total	%
Iowa	22	23,356	23,900	102.33	55,117	6,297	11.42	2,974	0	0.00
	23	2,471	1,180	47.75	3,184	399	12.53	796	0	0.00
	Unknown		5,279			410			0	
	Total	25,827	30,359	117.55	58,301	7,106	12.19	3,770	0	0.00
Illinois	22	22,542	1,138	5.05	63,163	1,444	2.29	3,584	655	18.28
	23	1,649	0	0.00	1,487	0	0.00	376	18	4.79
	24	1,995	2,011	100.80	2,484	0	0.00	230	0	0.00
	Unknown		174			212			22	
	Total	26,186	3,323	12.69	67,134	1,656	2.47	4,190	695	16.59
Indiana	22	14,781	1,664	11.26	22,852	1,441	6.31	1,242	126	10.14
	23	9,086	264	2.91	5,795	0	0.00	1,445	0	0.00
	24	4,337	420	9.68	4,612	65	1.41	388	0	0.00
	Unknown		1,371			80			40	
Total	28,204	3,719	13.19	33,259	1,586	4.77	3,075	166	5.40	
Kansas	22/Total	4,344	735	16.92	33,705	216	0.64	2,018	55	2.73
Michigan	12	66,795	3,510	5.25	4,945	1,477	29.87	8,882	0	0.00
	22	1,440	1,054	73.19	2,124	328	15.44	175	0	0.00
	23	56,881	8,694	15.28	25,869	626	2.42	7,289	36	0.49
	Unknown		4,817			0			0	
Total	125,116	18,075	14.45	32,938	2,431	7.38	16,346	36	0.22	
Minnesota	12	75,321	7,632	10.13	4,668	na	na	7,128	na	na
	22	5,412	na <sup>d</sup>	na	3,959	na	na	207	na	na
	23	86,643	97	0.11	11,473	na	na	2,835	na	na
	Unknown		822			0			0	
Total	167,376	8,551	5.11	20,100	0	0.00	10,170	0	0.00	
Missouri	22/Total	5,167	32,419	627.42	42,304	55,023	130.07	2,440	0	0.00
Nebraska	22/Total	5,985	149	2.49	11,323	220	1.94	649	0	0.00
Ohio <sup>e</sup>	13	8,784	362	4.12	7,057	21	0.30	7,457	0	0.00
	22 <sup>f</sup>	12,517	1,074	8.58	26,758	5	0.02	4,515	15	0.33
	24	170	0	0.00	4,895	0	0.00	524	0	0.00
	Unknown		479			274			0	
Total	21,471	1,915	8.92	38,710	300	0.77	12,496	15	0.12	
Wisconsin	12	31,652	1,337	4.22	2,617	0	0.00	12,503	94	0.75
	22	1,428	50	3.50	760	0	0.00	311	0	0.00
	23	159,326	7,272	4.56	42,882	659	1.54	28,543	82	0.29
	Unknown		5,032			20			99	
Total	192,406	13,691	7.12	46,259	679	1.47	41,357	275	0.66	
All states	12	173,768	12,479	7.18	12,230	1,477	12.08	28,513	94	0.33
	13	8,784	362	4.12	7,057	21	0.30	7,457	0	0.00
	22	96,972	62,183	64.12	262,065	64,974	24.79	18,115	851	4.70
	23 <sup>g</sup>	316,056	17,507	5.54	90,690	1,684	1.86	41,284	136	0.33
	24	6,502	2,431	37.39	11,991	65	0.54	1,142	0	0.00
	Unknown		17,974			996			161	
Total	602,082	112,936	18.76	384,033	69,217	18.02	96,511	1,242	1.29	

<sup>a</sup>Marsh category includes wet meadow with open water, shallow semi-permanent marsh, hemi-marsh, deep-water marsh, and marsh with associated shrub / forest. The larger value for shallow semi-permanent marsh, hemi-marsh between breeding and non-breeding season objectives at the state/BCR level was used. Deep water marsh values for the breeding season were used because objectives were greater than the non-breeding season.

<sup>b</sup>Mudflat / shallows category includes dry mudflat / agriculture, wet mudflat / moist soil plants, shallow water, and moderate water. Dry mudflat / agriculture values for the breeding season were used because objectives were greater than the non-breeding season.

<sup>c</sup>Open water / beach category includes extensive open water and beach. The larger value for beach between breeding and non-breeding season objectives at the state/BCR level was used.

<sup>d</sup>Not available.

<sup>e</sup>Ohio totals only from 2010 - 2011.

<sup>f</sup>Includes accomplishments reported in BCR 23, formerly designated BCR 22, for which no habitat objectives were established.

<sup>g</sup>BCR 23 totals correspond to the 2007 JV boundary.

Table 2. Percent of upland objectives accomplished (%) and cumulative acres restored and enhanced (2007 - 2011) by the Upper Mississippi River and Great Lakes Region Joint Venture compared to habitat objectives identified in the 2007 Joint Venture Implementation Plan. Percent (%) = the cumulative total / objective \* 100.

State	BCR	Grassland <sup>a</sup>			Woodland <sup>b</sup>			Total Upland <sup>c</sup>		
		Objective	Cumulative total <sup>d</sup>	%	Objective	Cumulative total	%	Objective	Cumulative total	%
Iowa	22	4,250,376	342,855	8.07	2,717	13,637	501.91	4,253,093	356,492	8.38
	23	216,619	27,787	12.83	0	2,103	100.00	216,619	29,890	13.80
	Unknown		0			0			45,506	
	Total	4,466,995	370,642	8.30	2,717	15,740	579.32	4,469,712	431,888	9.66
Illinois	22	3,777,124	38,958	1.03	26,676	5,061	18.97	3,803,800	44,019	1.16
	23	86,944	68	0.08	4,940	3,044	61.62	91,884	3,112	3.39
	24	829,426	110	0.01	59,527	14,017	23.55	888,953	14,127	1.59
	Unknown		0						5,685	
Total	4,693,494	39,136	0.83	91,143	22,122	24.27	4,784,637	66,943	1.40	
Indiana	22	952,185	8,810	0.93	270,218	686	0.25	1,222,403	9,496	0.78
	23	223,535	4,380	1.96	75,829	267	0.35	299,364	4,647	1.55
	24	1,080,625	6,271	0.58	656,032	8,067	1.23	1,736,657	14,338	0.83
	Unknown		0			0			1,538	
Total	2,256,345	19,461	0.86	1,002,079	9,020	0.90	3,258,424	30,019	0.92	
Kansas	22/Total	2,782,949	5,429	0.20	6,422	626	9.75	2,789,371	6,055	0.22
Michigan	12	206,986	5,959	2.88	395,200	46,587	11.79	602,186	52,546	8.73
	22	69,901	586		34,580	22	0.06	104,481	608	0.58
	23	334,685	8,264	2.47	700,986	7,059	1.01	1,035,671	15,323	1.48
	Unknown		506						4,897	
Total	611,572	15,315	2.50	1,130,766	53,668	4.75	1,742,338	73,374	4.21	
Minnesota	12	242,060	0	0.00	800,280	44,525	5.56	1,042,340	44,525	4.27
	22	222,300	0	0.00	0	0	100.00	222,300	0	0.00
	23	736,060	0	0.00	191,919	127	0.07	927,979	127	0.01
	Unknown		0			0			0	
Total	1,200,420	0	0.00	992,199	44,652	4.50	2,192,619	44,652	2.04	
Missouri	22/Total	5,536,999	64,461	1.16	79,040	6,269	7.93	5,616,039	129,218	2.30
Nebraska	22/Total	1,247,597	793	0.06	0	0	100.00	1,247,597	1,680	0.13
Ohio <sup>e</sup>	13	277,875	132	0.05	244,283	1	0.00	522,158	133	0.03
	22 <sup>f</sup>	762,736	0	0.00	406,068	0	0.00	1,168,804	0	0.00
	24	6,422	0	0.00	8,892	0	0.00	15,314	0	0.00
	Unknown		0			0			0	
Total	1,047,033	132	0.01	659,243	1	0.00	1,706,276	133	0.01	
Wisconsin	12	69,901	505	0.72	518,700	24,941	4.81	588,601	25,446	4.32
	22	14,079	111	0.79	988	0	0.00	15,067	111	0.74
	23	1,831,999	3,302	0.18	716,300	895	0.12	2,548,299	4,197	0.16
	Unknown		0			0			1,803	
Total	1,915,979	3,918	0.20	1,235,988	25,836	2.09	3,151,967	31,557	1.00	
All states	12	518,947	6,464	1.25	1,714,180	116,053	6.77	2,233,127	122,517	5.49
	13	277,875	132	0.05	244,283	1	0.00	522,158	133	0.03
	22	19,616,246	462,003	2.36	826,709	26,301	3.18	20,442,955	547,679	2.68
	23 <sup>g</sup>	3,429,842	43,801	1.28	1,689,974	13,495	0.80	5,119,816	57,296	1.12
	24	1,916,473	6,381	0.33	724,451	22,084	3.05	2,640,924	28,465	1.08
	Unknown		506			0			59,429	
Total	25,759,383	519,287	2.02	5,199,597	177,934	3.42	30,958,980	815,519	2.63	

<sup>a</sup>Grassland category includes grassland and mixed wooded openland.

<sup>b</sup>Woodland category includes deciduous forest, evergreen forest, forested wetland, shrubland, and other forest.

<sup>c</sup>Total upland includes both grassland and woodland totals; reports from 2007 - 2008 grouped woodland and grassland objectives. These data were identified by states and are included in the "unknown" category.

<sup>d</sup>Cumulative totals for BCRs are separated out by woodland and grassland categories only represent data from 2009 partner accomplishment reports.

<sup>e</sup>Ohio totals only from 2010 - 2011.

<sup>f</sup>Includes accomplishments reported in BCR 23, formerly designated BCR 22, for which no habitat objectives were established.

<sup>g</sup>BCR 23 totals correspond to the 2007 JV boundary for which habitat accomplishments were developed.