

# 2013 Upper Mississippi River and Great Lakes Region Joint Venture Bird Habitat Conservation Accomplishments

Benjamin M. Kahler, U.S. Fish and Wildlife Service 2014

## Introduction

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

In 2009, the accomplishment reporting form was simplified 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 inconsistent responses. To overcome this issue, partners were surveyed by JV staff to identify reporting impediments, and the new form was developed. Since then, reports have been completed more consistently and we continue to use the simplified format. Estimates of JV partner influence on bird populations is a JV monitoring goal. Our understanding of bird-habitat relationships will improve with consistent tracking of partner accomplishments and monitoring of landscape changes.

## 2013 Accomplishments

JV partners reported 260,312 acres of bird habitat conservation, expending approximately \$71.6 million. Similar to previous years, bird habitat enhancement was the primary conservation action (76% of the reported area), followed by restoration (14%), and protection (11%).

### *Enhancement highlights*

- 83,980 acres of wetlands enhanced across the region
- Majority of emergent marsh enhancement occurred in Bird Conservation Region (BCR) 22
- Mudflat and shallow water enhancement was focused in BCR 22
- 112,990 acres of uplands enhanced across the JV region
- 84,860 acres of grassland enhanced, with 61,900 acres reported for BCR 22
- 28,130 acres of woodland enhanced, with 11,270 acres in BCR 22

### *Restoration highlights*

- 5,250 acres of wetlands restored across the JV region
- 30,340 acres of upland cover restored
- 69% of upland restoration was grasslands
- Greatest amounts of grassland restored in BCR 23 and woodland in BCR 22

### *Protection highlights*

- 6,650 acres of wetlands protected across the JV region
- 2,080 acres of emergent marsh were protected in BCR 12 and 1,810 acres in BCR 23
- 19,550 acres of uplands protected
- Majority of upland acres were forest cover in BCR 12

## **JV cumulative accomplishments since Implementation Plan completion (2007–2013)**

Cumulative accomplishments are compiled for two categories: protection and restoration / enhancement. Protection accomplishments represent existing bird habitats now under management by a conservation organization through acquisition or long-term agreements (easements). Restoration / enhancement accomplishments represent additional new area available for target bird species by increasing habitat quality through cover type manipulation. Since 2007, JV partners have restored or enhanced 1,378,500 acres across the region. Also during this time, 167,800 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 protected area of various cover types 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. JV science staff are attempting to estimate the “net change” in cover types (habitat) most important to JV focal species in new planning documents called “State x BCR Assessments.”

## **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. We thank the following partners who in coordination with countless private and public partner agencies, land conservancies, and foundations, contributed information from which this report was created:

[Ducks Unlimited, Inc.](#)  
[Indiana Department of Natural Resources](#)  
[Illinois Department of Natural Resources](#)  
[Kansas Department of Wildlife, Parks and Tourism](#)  
[Michigan Department of Natural Resources](#)  
[Minnesota Department of Natural Resources](#)  
[Missouri Department of Conservation](#)  
[Nebraska Game and Parks Commission](#)  
[Ohio Department of Natural Resources](#)  
[Wisconsin Department of Natural Resources](#)  
[U.S. Fish and Wildlife Service - Partners for Fish and Wildlife Program](#)  
[U.S. Fish and Wildlife Service - Division of Realty](#)

Table 1. Percent of wetland objectives accomplished (%) and cumulative acres restored and enhanced (2007–2013) 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 2009–2013 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	102.3	55,117	6,297	11.4	2,974	0	0.0
	23	2,471	1,180	47.8	3,184	399	12.5	796	0	0.0
	Unknown		5,334			410			0	
	Total	25,827	30,414	117.8	58,301	7,106	12.2	3,770	0	0.0
Illinois	22	22,542	21,934	97.3	63,163	2,151	3.4	3,584	655	18.3
	23	1,649	0	0.0	1,487	0	0.0	376	18	4.8
	24	1,995	2,011	100.8	2,484	0	0.0	230	0	0.0
	Unknown		174			212			22	
Total	26,186	24,119	92.1	67,134	2,363	3.5	4,190	695	16.6	
Indiana	22	14,781	1,709	11.6	22,852	1,823	8.0	1,242	126	10.1
	23	9,086	264	2.9	5,795	0	0.0	1,445	0	0.0
	24	4,337	516	11.9	4,612	139	3.0	388	0	0.0
	Unknown		1,381			387			40	
Total	28,204	3,870	13.7	33,259	2,349	7.1	3,075	166	5.4	
Kansas	22/Total	4,344	2,093	48.2	33,705	270	0.8	2,018	64	3.2
Michigan	12	66,795	4,377	6.6	4,945	3,153	63.8	8,882	589	6.6
	22	1,440	1,054	73.2	2,124	328	15.4	175	0	0.0
	23	56,881	19,143	33.7	25,869	1,306	5.0	7,289	36	0.5
	Unknown		4,817			0			0	
Total	125,116	29,391	23.5	32,938	4,787	14.5	16,346	625	3.8	
Minnesota	12	75,321	7,633	10.1	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	2,721	3.1	11,473	na	na	2,835	na	na
	Unknown		1,155			0			0	
Total	167,376	11,509	6.9	20,100	0	0.0	10,170	0	0.0	
Missouri	22/Total	5,167	32,666	632.2	42,304	83,668	197.8	2,440	0	0.0
Nebraska	22/Total	5,985	149	2.5	11,323	484	4.3	649	0	0.0
Ohio <sup>e</sup>	13	8,784	1,381	15.7	7,057	271	3.8	7,457	121	1.6
	22 <sup>f</sup>	12,517	1,823	14.6	26,758	5	0.0	4,515	23	0.5
	24	170	0	0.0	4,895	0	0.0	524	0	0.0
	Unknown		943			274			0	
Total	21,471	4,147	19.3	38,710	550	1.4	12,496	144	1.2	
Wisconsin	12	31,652	14,452	45.7	2,617	0	0.0	12,503	94	0.8
	22	1,428	50	3.5	760	0	0.0	311	0	0.0
	23	159,326	10,482	6.6	42,882	659	1.5	28,543	125	0.4
	Unknown		5,466			20			99	
Total	192,406	30,451	15.8	46,259	679	1.5	41,357	318	0.8	
All states	12	173,768	26,462	15.2	12,230	3,153	25.8	28,513	683	2.4
	13	8,784	1,381	15.7	7,057	271	3.8	7,457	121	1.6
	22	96,972	85,377	88.0	262,065	95,026	36.3	18,115	868	4.8
	23 <sup>g</sup>	316,056	33,791	10.7	90,690	2,364	2.6	41,284	179	0.4
	24	6,502	2,527	38.9	11,991	139	1.2	1,142	0	0.0
	Unknown		19,271			1,303			161	
	Total	602,082	168,809	28.0	384,033	102,256	26.6	96,511	2,013	2.1

<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-

<sup>d</sup>Not available.

<sup>e</sup>Ohio totals only from 2010–2013.

<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—2013) 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—2013 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	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	408,851	9.6	2,717	17,461	642.7	4,253,093	426,312	10.0
	23	216,619	33,261	15.4	0	4,224	na	216,619	37,485	17.3
	Unknown		0			0			47,358	
	Total	4,466,995	442,112	9.9	2,717	21,685	798.1	4,469,712	511,155	11.4
Illinois	22	3,777,124	41,975	1.1	26,676	8,061	30.2	3,803,800	50,036	1.3
	23	86,944	128	0.1	4,940	3,104	62.8	91,884	3,232	3.5
	24	829,426	110	0.0	59,527	14,017	23.5	888,953	14,127	1.6
	Unknown		0			0			5,685	
	Total	4,693,494	42,213	0.9	91,143	25,182	27.6	4,784,637	73,080	1.5
Indiana	22	952,185	13,519	1.4	270,218	1,110	0.4	1,222,403	14,629	1.2
	23	223,535	5,467	2.4	75,829	450	0.6	299,364	5,917	2.0
	24	1,080,625	11,087	1.0	656,032	9,727	1.5	1,736,657	20,814	1.2
	Unknown		0			0			1,538	
	Total	2,256,345	30,073	1.3	1,002,079	11,287	1.1	3,258,424	42,898	1.3
Kansas	22/Total	2,782,949	17,769	0.6	6,422	1,332	20.7	2,789,371	45,901	1.6
Michigan	12	206,986	23,042	11.1	395,200	59,153	15.0	602,186	82,195	13.6
	22	69,901	586	0.8	34,580	22	0.1	104,481	608	0.6
	23	334,685	28,794	8.6	700,986	8,830	1.3	1,035,671	37,624	3.6
	Unknown		506			0			4,897	
	Total	611,572	52,928	8.7	1,130,766	68,005	6.0	1,742,338	125,324	7.2
Minnesota	12	242,060	9,830	4.1	800,280	54,274	6.8	1,042,340	64,104	6.2
	22	222,300	0	0.0	0	0	na	222,300	0	0.0
	23	736,060	1,194	0.2	191,919	127	0.1	927,979	1,321	0.1
	Unknown		0			0			0	
	Total	1,200,420	11,024	0.9	992,199	54,401	5.5	2,192,619	66,119	3.0
Missouri	22/Total	5,536,999	121,548	2.2	79,040	9,898	12.5	5,616,039	190,987	3.4
Nebraska	22/Total	1,247,597	3,277	0.3	0	0	na	1,247,597	4,467	0.4
Ohio <sup>e</sup>	13	277,875	613	0.2	244,283	24	0.0	522,158	637	0.1
	22 <sup>f</sup>	762,736	46	0.0	406,068	22	0.0	1,168,804	68	0.0
	24	6,422	0	0.0	8,892	0	0.0	15,314	0	0.0
	Unknown		20			0			683	
	Total	1,047,033	679	0.1	659,243	46	0.0	1,706,276	1,388	0.1
Wisconsin	12	69,901	505	0.7	518,700	32,466	6.3	588,601	32,971	5.6
	22	14,079	242	1.7	988	17	1.7	15,067	259	1.7
	23	1,831,999	5,607	0.3	716,300	1,536	0.2	2,548,299	7,143	0.3
	Unknown		0			0			4,376	
	Total	1,915,979	6,354	0.3	1,235,988	34,019	2.8	3,151,967	44,749	1.4
All states	12	518,947	33,377	6.4	1,714,180	145,893	8.5	2,233,127	179,270	8.0
	13	277,875	613	0.2	244,283	24	0.0	522,158	637	0.1
	22	19,616,246	607,813	3.1	826,709	37,923	4.6	20,442,955	733,266	3.6
	23 <sup>g</sup>	3,429,842	74,451	2.2	1,689,974	18,271	1.1	5,119,816	92,722	1.8
	24	1,916,473	11,197	0.6	724,451	23,744	3.3	2,640,924	34,941	1.3
	Unknown		526			0			64,536	
	Total	25,759,383	727,977	2.8	5,199,597	232,397	4.5	30,958,980	1,105,373	3.6

<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—2013.

<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.