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# CENTRAL FLYWAY

## HARVEST AND POPULATION SURVEY DATA BOOK - 2023



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# CENTRAL FLYWAY

## 1948-2023

75 YEARS OF MIGRATORY BIRD CONSERVATION



## **Important Note to Users:**

From 1961-2001, estimates of waterfowl harvest, waterfowl hunter participation, and waterfowl hunter success in the United States were derived from a combination of several sources: 1) sales of migratory bird conservation stamps (Duck Stamps), 2) a Mail Questionnaire Survey of individuals who purchased ducks stamps for hunting purposes, and 3) the Waterfowl Parts Collection Survey (PCS). This survey, which was based on duck stamp sales was discontinued after the 2001 hunting season.

Beginning in 1999, new survey methods were implemented that obtained estimates of waterfowl harvest, hunter participation, and hunter success from: 1) States' lists of migratory bird hunters identified through the Harvest Information Program (HIP), 2) a questionnaire (HIP Survey) sent to a sample of those hunters, and 3) the Waterfowl PCS. The basic difference is that during 1961 - 2001 waterfowl hunter activity and harvest estimates were derived from a Mail Questionnaire Survey (MQS) of duck stamp purchasers, whereas from 1999 to the present those estimates were derived from HIP surveys of people identified as migratory bird hunters by the States. Both survey systems relied on the Waterfowl PCS for species composition data.

During 1989-2002, migratory game bird harvest and population survey information in the Central Flyway was presented in annually updated Data Books. Because of the recently implemented changes in survey design, historical harvest estimates will not be directly comparable to current estimates. Therefore, previous harvest survey information derived from the MQS are considered as final and compiled in the Central Flyway Waterfowl Hunting and Harvest Survey Information, 1961-2001.

For 1999 and subsequent years, waterfowl hunting and harvest estimates that are derived from HIP, along with the usual population survey information, will be compiled in annual updates of the Central Flyway Harvest and Population Survey Data Book. In the future, the annual Data Book will be expanded to also present annual hunter activity and harvest estimates for other migratory game bird species that are now derived from HIP surveys.

### ***508 Compliance***

*Flyway Data Books contain annual estimates of migratory bird abundance, harvest, and hunter participation and activity. Due to the large volume of data and the number of years, species, and geographic areas involved, data tables may be large and complex. Readers that may need help reading and interpreting the data, or that may need data presented in an alternative format to facilitate reading and interpretation, should contact the U.S. Fish and Wildlife Service's Central Flyway Representatives office (571-531-8785).*

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## Links to Related Reports

ATLANTIC, MISSISSIPPI, AND PACIFIC FLYWAY DATABOOKS: <https://www.fws.gov/partner/migratory-bird-program-administrative-flyways>

UNITED STATES HUNTING ACTIVITY AND HARVEST: <https://www.fws.gov/library/collections/migratory-bird-hunting-activity-and-harvest-reports>

CANADA NATIONAL WATERFOWL HARVEST SURVEY: <https://www.canada.ca/en/environment-climate-change/services/bird-surveys/waterfowl/national-harvest.html>

NORTH AMERICAN WATERFOWL AND WEBLESS STATUS REPORTS:  
<https://www.fws.gov/library/collections/population-status>

# **Canadian Migratory Bird Permit Sales**

## **Mid-Continent Sandhill Crane Hunting Permits**

## **Tundra Swan Hunting Permits**





FEDERAL MID-CONTINENT POPULATION SANDHILL CRANE PERMITS ISSUED IN THE CENTRAL FLYWAY AND MINNESOTA

YR	CO	KS	MT	NM	ND	OK	SD	TX	WY	CF TOTAL	MN
1975	401		158	1,225	4,172	171	198	5,482	56	11,863	
1976	341		117	1,195	4,137	265	200	5,060	37	11,352	
1977	374		82	1,452	6,294	519	134	4,897	48	13,800	
1978	343		209	956	5,798	620	98	5,198	52	13,274	
1979	528		159	1,288	4,949	470	63	5,098	43	12,598	
1980	437		118	1,082	5,754	510	240	5,239	33	13,413	
1981	397		53	1,022	5,796	466	197	5,297	30	13,258	
1982	528		147	962	4,714	750	579	4,650	40	12,370	
1983	575		175	706	8,033	909	528	7,317	63	18,306	
1984	538		113	721	7,436	1,187	544	6,838	43	17,420	
1985	555		143	710	6,802	1,102	656	7,417	59	17,444	
1986	617		99	595	8,926	1,073	705	7,258	25	19,298	
1987	610		128	502	8,778	1,213	517	6,289	30	18,067	
1988	512		162	480	6,214	1,472	437	7,053	38	16,368	
1989	434		172	430	6,128	1,717	524	8,066	25	17,496	
1990	389		143	533	7,268	1,725	646	11,994	22	22,720	
1991	501		238	602	3,353	1,618	668	11,142	25	18,147	
1992	498		303	582	3,760	1,397	721	9,848	18	17,127	
1993	411	575	336	541	4,572	1,277	708	10,407	37	18,864	
1994	427	567	320	547	4,790	1,561	636	10,515	49	19,412	
1995	571	711	351	564	5,242	1,323	650	10,755	42	20,209	
1996	612	837	369	499	5,570	1,391	677	11,334	41	21,330	
1997	572	997	325	454	4,934	1,393	757	37,365 <sup>2</sup>	46	46,845	
1998	4,937 <sup>2</sup>	1,088	270	449	6,082	1,385	951	32,523 <sup>2</sup>	49	47,734	
1999	4,847 <sup>2</sup>	1,235	279	516	6,050	1,438	810	33,380 <sup>2</sup>	52	48,607	
2000	5,169 <sup>2</sup>	1,084	283	493	7,451	1,333	721	44,719 <sup>2</sup>	58	61,311	
2001	5,869 <sup>2</sup>	1,374	253	509	8,078	1,315	680	49,410 <sup>2</sup>	72	67,560	
2002	5,644 <sup>2</sup>	1,279	303	496	8,245 <sup>3</sup>	1,186	619	37,558 <sup>2</sup>	54	55,384	
2003 <sup>1</sup>	5,854 <sup>2</sup>	1,206	273	471	6,030 <sup>3</sup>	1,000	563	43,199 <sup>2</sup>	50	58,646	
2004 <sup>1</sup>	5,784 <sup>2</sup>	1,180 <sup>3</sup>	308	548	5,788 <sup>3</sup>	780 <sup>3</sup>	307	52,161 <sup>2</sup>	61	66,917	
2005 <sup>1</sup>	5,766 <sup>2</sup>	805 <sup>3</sup>	281	494	7,441 <sup>3</sup>	698 <sup>3</sup>	490	51,511 <sup>2</sup>	68	67,554	
2006 <sup>1</sup>	4,792 <sup>2</sup>	826 <sup>3</sup>	265	512 <sup>4</sup>	7,410 <sup>3</sup>	615 <sup>3</sup>	445 <sup>5</sup>	70,968 <sup>2</sup>	78	85,911	
2007 <sup>1</sup>	4,931 <sup>2</sup>	598 <sup>3</sup>	238	480 <sup>4</sup>	7,442 <sup>3</sup>	731 <sup>3</sup>	390 <sup>5</sup>	101,382 <sup>2</sup>	58	116,250	
2008 <sup>1</sup>	5,772 <sup>2</sup>	655 <sup>3</sup>	272	677 <sup>4</sup>	6,501 <sup>3</sup>	736 <sup>3</sup>	398 <sup>5</sup>	122,553 <sup>2</sup>	73	137,637	
2009 <sup>1</sup>	4,038 <sup>2</sup>	540 <sup>3</sup>	139	862 <sup>4</sup>	7,774 <sup>3</sup>	1,029 <sup>3</sup>	693 <sup>5</sup>	11,332 <sup>5</sup>	62	26,469	
2010 <sup>1</sup>	4,280 <sup>2</sup>	508 <sup>3</sup>	283	701 <sup>4</sup>	8,375 <sup>3</sup>	1,055 <sup>3</sup>	410 <sup>5</sup>	12,560 <sup>5</sup>	86	28,258	1,954
2011 <sup>1</sup>	783 <sup>2</sup>	801 <sup>3</sup>	311	575 <sup>4</sup>	8,024 <sup>3</sup>	1,104 <sup>3</sup>	356 <sup>5</sup>	13,905 <sup>5</sup>	86	25,945	1,342
2012 <sup>1</sup>	801 <sup>2</sup>	571 <sup>3</sup>	186	859 <sup>4</sup>	8,519 <sup>3</sup>	451 <sup>3</sup>	343 <sup>5</sup>	14,083 <sup>5</sup>	102	25,915	1,032
2013 <sup>1</sup>	856 <sup>2</sup>	735 <sup>3</sup>	288	404 <sup>4</sup>	9,085 <sup>3</sup>	2,278 <sup>3</sup>	421 <sup>5</sup>	18,369 <sup>5</sup>	106	32,542	1,086
2014 <sup>1</sup>	848 <sup>2</sup>	787 <sup>3</sup>	356	368 <sup>4</sup>	4,692 <sup>3</sup>	660 <sup>3</sup>	390 <sup>5</sup>	20,105 <sup>5</sup>	433	28,639	1,216
2015 <sup>1</sup>	787 <sup>2</sup>	1,040 <sup>3</sup>	404	365 <sup>4</sup>	4,543 <sup>3</sup>	510 <sup>3</sup>	---	22,033 <sup>5</sup>	454	30,136	1,199
2016 <sup>1</sup>	841 <sup>2</sup>	1,055 <sup>3</sup>	376	416 <sup>4</sup>	3,956 <sup>3</sup>	559 <sup>3</sup>	171 <sup>5</sup>	23,962 <sup>5</sup>	569	31,905	1,139
2017 <sup>1</sup>	913 <sup>2</sup>	1,075 <sup>3</sup>	604	534 <sup>4</sup>	4,006 <sup>3</sup>	714 <sup>3</sup>	224 <sup>5</sup>	26,312 <sup>5</sup>	646	35,028	1,125
2018 <sup>1</sup>	954 <sup>2</sup>	2,678 <sup>3</sup>	676	2,413 <sup>4</sup>	4,102 <sup>3</sup>	642 <sup>3</sup>	237 <sup>5</sup>	29,668 <sup>5</sup>	392	41,762	1,091
2019 <sup>1</sup>	1,019 <sup>2</sup>	1,456 <sup>3</sup>	1,013	2,818 <sup>4</sup>	3,839 <sup>3</sup>	-- <sup>3</sup>	242 <sup>5</sup>	32,841 <sup>5</sup>	714	43,942	1,073
2020 <sup>1</sup>	1,107 <sup>2</sup>	1,970 <sup>3</sup>	1,005	2,763 <sup>4</sup>	5,168 <sup>3</sup>	11,513 <sup>3</sup>	210 <sup>5</sup>	38,832 <sup>5</sup>	619	63,187	1,288
2021 <sup>1</sup>	1,170 <sup>2</sup>	2,343 <sup>3</sup>	1,385	2,362 <sup>4</sup>	4,440 <sup>3</sup>	11,904 <sup>3</sup>	289 <sup>5</sup>	45,013 <sup>5</sup>	621	69,527	1,479
2022 <sup>1</sup>	9,194 <sup>2</sup>	2,270 <sup>3</sup>	562	3,471 <sup>4</sup>	5,544 <sup>3</sup>	12,536 <sup>3</sup>	250 <sup>5</sup>	52,568 <sup>5</sup>	1,182	87,577	1,424
<b>AVERAGES:</b>											
1975-79	397		145	1,223	5,070	409	139	5,147	47	12,577	
1980-89	520		131	721	6,858	1,040	493	6,542	39	16,344	
1990-99	1,377	859	293	529	5,162	1,451	722	17,926	38	28,100	
2000-09	5,362	955	262	554	7,216	942	531	58,479	63	74,364	
2010-19	1,208	1,071	450	945	5,914	886	310	21,384	359	32,407	1,226
1975-2022	2,044	1,095	313	879	6,083	1,709	462	25,114	159	37,403	1,265

<sup>1</sup> Preliminary

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<sup>2</sup> Harvest Information Program (HIP) or a point-of-sale electronic record (without cost) used to identify crane hunters in lieu of a special sandhill crane hunting permit

<sup>3</sup> States began charging a fee for crane hunting permits which reduces the number of permits issued to hunters that only occasionally come into contact with sandhill cranes.

<sup>4</sup> NM uses a combination of electronic and paper permits.

<sup>5</sup> SD uses a special question in their HIP questionnaire to identify sandhill crane hunters; TX hunters can only obtain crane permits in selected locations.

TUNDRA SWAN HUNTING PERMITS ISSUED FOR THE EASTERN AND WESTERN POPULATIONS

YR	EASTERN POPULATION							WESTERN POPULATION						TOTAL
	MT	ND	SD	NC	VA	DE	TOTAL	UT	ID	NV	MT	AK	TOTAL	
1962								1,000					1,000	1,000
1963								1,000					1,000	1,000
1964								1,000					1,000	1,000
1965								995					995	995
1966								1,000					1,000	1,000
1967								1,000					1,000	1,000
1968								1,000					1,000	1,000
1969								2,500		500			3,000	3,000
1970								2,500		500	500		3,500	3,500
1971								2,495		500	500		3,495	3,495
1972								2,500		500	500		3,500	3,500
1973								2,500		500	500		3,500	3,500
1974								2,500		500	500		3,500	3,500
1975								2,500		500	500		3,500	3,500
1976								2,500		500	500		3,500	3,500
1977								2,488		500	500		3,488	3,488
1978								2,500		500	500		3,500	3,500
1979								2,500		500	500		3,500	3,500
1980								2,500		500	500		3,500	3,500
1981								2,500		500	500		3,500	3,500
1982								2,500		500	500		3,500	3,500
1983	109						109	2,500		650	500		3,650	3,759
1984	108			1,000			1,108	2,500		650	500		3,650	4,758
1985	120			6,000			6,120	2,488		650	500		3,638	9,758
1986	170			6,000			6,170	2,500		608	500		3,608	9,778
1987	171			5,968			6,139	2,499		594	500		3,593	9,732
1988	99	400		5,995	600		7,094	2,500		260	500	112	3,372	10,466
1989	167	1,000		5,444	600		7,211	2,500		324	500	130	3,454	10,665
1990	173	1,000	500	5,989	600		8,262	2,500		297	500	81	3,378	11,640
1991	204	2,000	1,000	6,000	600		9,804	2,500		258	500	84	3,342	13,146
1992	217	2,000	1,502	5,961	600		10,280	2,500		100	500	89	3,189	13,469
1993	212	2,000	1,500	6,000	400		10,112	2,500		205	500	170	3,375	13,487
1994	232	2,000	1,500	6,000	600		10,332	2,500		206	500	216	3,422	13,754
1995	291	2,000	1,500	6,000	600		10,391	2,750		383	500	210	3,843	14,234
1996	372	2,000	1,235	5,000	600		9,207	2,750		376	500	193	3,819	13,026
1997	364	2,000	1,077	5,000	600		9,041	2,750		381	500	201	3,832	12,873
1998	429	2,000	1,216	5,000	600		9,245	2,750		492	500	192	3,934	13,179
1999	432	2,000	863	5,000	600		8,895	2,750		518	500	227	3,995	12,890
2000	434	2,000	850	5,000	600		8,884	2,000		493	500	164	3,157	12,041
2001	398	2,000	983	5,000	600		8,981	2,000		308	500	255	3,063	12,044
2002	393	2,000	1,060	5,000	600		9,053	1,998		264	500	252	3,014	12,067
2003	423	2,200	1,002	5,000	600		9,225	2,000		298	500	215	3,013	12,238
2004	320	2,200	820	5,000	600		8,940	2,000		330	500	175	3,005	11,945
2005	348	2,200	811	5,000	600		8,959	1,997		370	500	176	3,043	12,002
2006	340	2,200	811	5,000	600		8,951	1,994		605	500	168	3,267	12,218
2007	323	2,200	1,064	5,000	600		9,187	2,000		650	500	162	3,312	12,499
2008	307	2,200	958	5,000	600		9,065	2,000		535	500	182	3,217	12,282
2009	327	2,200	1,242	5,000	600		9,369	2,000		472	500	174	3,146	12,515
2010	369	2,200	1,234	5,000	600		9,403	2,000		469	500	212	3,181	12,584
2011	320	2,200	1,156	5,000	600		9,276	2,000		527	500	228	3,255	12,531
2012	338	2,200	1,266	5,000	600		9,404	2,000		650	500	165	3,315	12,719
2013	354	2,200	1,259	5,000	600		9,413	2,000		488	500	189	3,177	12,590
2014	401	2,200	1,216	5,000	600		9,417	2,000		234	500	159	2,893	12,310
2015	432	2,200	1,299	5,000	600		9,531	2,000		105	500	127	2,732	12,263
2016	410	2,200	1,083	5,000	600		9,293	2,000		404	500	114	3,018	12,311
2017	338	2,700	1,068	6,250	750		11,106	2,000		579	500	111	3,190	14,296
2018	354	2,700	1,189	6,250	750		11,243	2,000		650	500	109	3,259	14,502
2019	500	2,700	1,185	6,115	801	84	11,385	2,750		650	500	137	4,037	15,422
2020	500	2,200	1,166	4,895	638	67	9,466	2,750	50	650	500	84	4,034	13,500
2021	500	2,200	1,197	4,895	638	67	9,497	2,750	50	650	500	93	4,043	13,540
2022	500	2,200	1,265	4,721	532	347	9,565	2,750	43	650	500	87	4,030	13,595

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# **Waterfowl Hunter Activity and Success**



**AVERAGE SEASONAL DUCK HUNTER DAYS AFIELD BY STATE OF HARVEST (Harvest Information Program)<sup>1</sup>**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY
1999	5.68	7.50	5.73	7.53	6.41	5.71	7.79	6.30	5.90	6.54
2000	5.79	7.21	6.42	6.74	7.94	5.16	6.80	5.73	6.10	5.56
2001	6.51	6.18	6.60	7.93	5.91	5.16	6.28	6.70	5.16	6.25
2002	5.32	6.66	5.41	8.02	5.53	5.21	7.32	6.45	5.22	5.88
2003 <sup>2</sup>	6.42	7.13	4.97	7.30	7.92	5.33	7.50	6.56	6.21	5.35
2004 <sup>2</sup>	6.27	6.46	4.97	7.68	7.76	5.26	8.52	5.86	5.85	9.21
2005 <sup>2</sup>	5.42	7.56	5.31	7.11	5.76	5.14	6.69	5.56	5.34	5.47
2006 <sup>2</sup>	5.23	6.75	4.64	6.97	6.44	5.05	7.78	6.01	5.04	5.68
2007 <sup>2</sup>	5.56	6.31	5.15	8.24	6.62	4.90	7.95	5.83	5.22	5.20
2008 <sup>2</sup>	5.30	6.42	4.51	7.16	5.81	4.58	6.91	5.63	4.56	5.17
2009 <sup>2</sup>	5.99	6.46	4.38	7.29	9.54	5.42	7.47	5.09	6.09	5.37
2010 <sup>2</sup>	5.63	6.06	4.90	7.36	6.06	4.67	6.62	4.33	5.30	5.62
2011 <sup>2</sup>	5.31	7.10	5.20	8.51	5.66	5.08	7.87	5.34	6.43	4.88
2012 <sup>2</sup>	5.18	7.13	5.15	6.83	5.10	5.10	8.07	5.77	6.88	6.10
2013 <sup>2</sup>	6.48	6.25	5.98	7.80	6.34	5.03	6.81	6.03	7.77	5.64
2014 <sup>2</sup>	5.20	5.76	4.55	6.81	5.36	4.76	7.15	4.40	5.40	5.30
2015 <sup>2</sup>	6.16	5.02	5.15	7.28	4.67	5.17	6.39	5.81	5.06	4.97
2016 <sup>2</sup>	5.87	6.24	5.55	6.59	2.64	4.76	6.37	4.53	4.83	4.21
2017 <sup>2</sup>	5.17	3.70	4.62	7.95	5.87	4.88	5.23	4.16	4.54	5.31
2018 <sup>2</sup>	4.98	4.14	4.95	6.74	7.36	4.75	4.90	3.97	4.82	4.21
2019 <sup>2</sup>	4.93	4.77	3.75	7.24	4.55	4.43	5.08	5.36	4.82	4.10
2020 <sup>2</sup>	5.49	5.15	6.26	7.12	4.61	4.93	6.50	5.29	5.09	4.87
2021 <sup>2</sup>	4.05	5.06	4.47	6.77	4.49	4.75	5.52	4.50	4.57	5.21
2022 <sup>2</sup>	3.59	2.90	3.00	3.93	3.37	3.42	3.45	4.04	4.42	2.67

<sup>1</sup> Estimates for NM, CO, WY, and MT are statewide.

<sup>2</sup> Preliminary

**AVERAGE SEASONAL DUCK BAG PER HUNTER BY STATE OF HARVEST (Harvest Information Program)<sup>1</sup>**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY
1999	6.5	13.9	10.0	9.4	11.8	13.7	20.0	12.6	15.9	10.4
2000	8.4	15.2	12.4	11.4	19.6	13.3	17.2	11.9	15.3	10.1
2001	7.8	11.1	11.2	11.8	12.2	13.5	15.3	13.1	12.1	10.1
2002	7.8	13.9	8.6	13.1	11.4	15.0	15.8	13.1	9.5	9.9
2003 <sup>2</sup>	10.3	15.5	9.4	12.5	15.6	13.4	16.3	14.0	13.4	9.2
2004 <sup>2</sup>	9.0	14.2	8.4	9.9	10.6	14.7	22.8	11.4	10.7	12.6
2005 <sup>2</sup>	8.1	13.7	9.6	10.6	11.4	14.3	17.8	11.6	13.7	9.9
2006 <sup>2</sup>	8.7	12.8	8.7	10.6	19.3	12.8	21.2	12.6	12.4	11.4
2007 <sup>2</sup>	9.5	12.7	10.6	14.1	14.7	11.6	23.6	12.7	13.4	10.9
2008 <sup>2</sup>	8.1	13.9	9.5	14.3	13.3	11.0	17.7	11.9	10.5	9.2
2009 <sup>2</sup>	9.1	13.6	9.1	12.2	18.9	15.5	22.5	13.5	14.5	10.7
2010 <sup>2</sup>	8.6	14.3	10.6	11.5	13.4	13.0	18.0	11.3	14.7	10.8
2011 <sup>2</sup>	8.7	15.0	8.7	15.2	10.7	14.4	22.2	14.1	18.6	9.1
2012 <sup>2</sup>	7.9	13.7	8.9	11.4	9.0	14.6	24.6	14.9	20.0	12.2
2013 <sup>2</sup>	10.5	15.8	12.6	14.7	19.0	14.6	19.8	14.5	22.6	11.2
2014 <sup>2</sup>	8.1	12.9	10.2	12.6	8.7	14.6	18.3	11.2	14.1	10.9
2015 <sup>2</sup>	10.2	12.1	10.9	13.8	11.7	14.7	16.1	13.5	12.0	9.7
2016 <sup>2</sup>	8.4	12.8	12.1	11.3	3.9	13.1	13.3	11.7	14.6	8.5
2017 <sup>2</sup>	8.0	8.7	8.6	12.9	14.1	14.5	12.5	10.2	14.0	10.1
2018 <sup>2</sup>	7.4	9.7	11.6	10.6	11.5	14.0	10.9	9.8	12.9	9.0
2019 <sup>2</sup>	6.8	11.3	8.1	12.4	12.1	13.3	13.2	13.5	11.4	9.1
2020 <sup>2</sup>	6.7	13.1	12.3	13.9	8.5	14.3	16.4	16.4	14.9	9.3
2021 <sup>2</sup>	7.7	12.5	7.4	9.4	3.4	9.7	13.2	10.3	10.7	6.2
2022 <sup>2</sup>	5.8	6.6	5.9	8.4	5.8	12.5	7.7	13.3	14.5	5.8

<sup>1</sup> Estimates for NM, CO, WY, and MT are statewide.

<sup>2</sup> Preliminary

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**AVERAGE SEASONAL GOOSE HUNTER DAYS AFIELD BY STATE OF HARVEST (Harvest Information Program)<sup>1</sup>**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY
1999	6.12	6.48	5.64	7.43	3.82	5.25	4.52	6.71	3.42	5.03
2000	6.08	6.49	6.57	7.79	6.07	4.75	5.07	5.85	4.26	5.74
2001	6.21	5.71	5.61	8.21	4.31	4.97	3.90	6.58	2.84	5.99
2002	5.64	5.23	4.80	8.44	5.82	5.01	5.00	6.64	2.90	5.50
2003 <sup>2</sup>	7.01	7.22	4.66	7.51	5.32	4.67	5.19	7.30	3.19	5.72
2004 <sup>2</sup>	6.27	6.32	4.84	7.78	4.96	4.98	4.45	6.39	2.97	6.89
2005 <sup>2</sup>	5.77	7.07	4.38	8.39	4.15	5.02	4.33	6.06	3.12	5.23
2006 <sup>2</sup>	5.91	5.07	4.35	7.26	3.18	4.59	5.48	6.08	3.43	5.15
2007 <sup>2</sup>	5.75	5.58	4.29	8.57	3.87	4.29	4.56	5.92	3.10	5.18
2008 <sup>2</sup>	6.59	5.69	3.88	7.92	3.77	4.43	5.68	5.50	3.46	5.51
2009 <sup>2</sup>	5.58	6.46	4.02	8.08	4.89	4.74	4.36	5.69	2.97	4.69
2010 <sup>2</sup>	5.66	5.32	3.94	8.48	3.27	4.18	4.46	4.88	3.31	5.21
2011 <sup>2</sup>	5.66	5.88	4.49	9.31	6.07	4.46	3.97	5.58	4.56	4.86
2012 <sup>2</sup>	6.10	6.52	5.02	7.27	4.80	4.50	4.84	5.63	2.69	5.10
2013 <sup>2</sup>	6.28	5.69	4.68	7.17	4.16	4.73	5.00	6.49	2.98	5.96
2014 <sup>2</sup>	5.07	5.85	4.47	8.19	3.20	4.61	5.34	4.61	3.28	4.68
2015 <sup>2</sup>	4.74	4.13	5.06	8.38	3.43	4.60	5.09	6.18	3.19	4.96
2016 <sup>2</sup>	5.63	6.30	4.47	7.39	3.37	5.02	6.56	4.49	3.14	4.34
2017 <sup>2</sup>	5.31	4.69	5.20	8.36	3.97	4.43	3.43	5.10	2.93	5.51
2018 <sup>2</sup>	5.59	3.55	4.23	8.84	3.00	4.48	2.89	4.83	3.82	3.95
2019 <sup>2</sup>	5.38	4.12	5.52	7.62	4.25	3.99	3.64	4.10	2.85	4.79
2020 <sup>2</sup>	6.04	5.02	5.74	6.87	4.04	4.59	5.48	5.42	2.91	5.34
2021 <sup>2</sup>	4.23	5.19	4.34	8.37	4.06	4.17	4.27	4.88	3.02	4.51
2022 <sup>2</sup>	3.94	3.03	3.21	5.10	6.69	2.54	3.52	2.97	2.64	2.32

<sup>1</sup> Estimates for NM, CO, WY, and MT are statewide.

<sup>2</sup> Preliminary

**AVERAGE SEASONAL GOOSE BAG PER HUNTER BY STATE OF HARVEST (Harvest Information Program)<sup>1</sup>**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY
1999	4.7	5.9	3.2	5.3	4.9	5.7	3.6	6.8	8.1	3.7
2000	5.7	6.9	6.9	6.4	4.6	5.4	8.4	6.1	9.5	6.3
2001	4.2	5.6	4.5	5.6	6.2	6.1	3.1	7.2	6.4	4.0
2002	4.9	7.6	3.7	4.6	3.3	5.5	4.9	7.0	5.9	4.0
2003 <sup>2</sup>	7.6	9.9	4.8	6.3	4.0	5.4	4.9	9.2	6.4	5.8
2004 <sup>2</sup>	5.2	6.7	3.6	4.8	3.9	5.6	5.0	6.8	5.2	6.3
2005 <sup>2</sup>	6.0	9.1	4.0	7.4	3.8	5.8	4.3	6.7	7.8	5.0
2006 <sup>2</sup>	6.8	7.5	4.6	5.1	2.6	6.4	6.1	9.1	5.3	5.9
2007 <sup>2</sup>	5.4	5.9	4.8	5.7	6.3	6.0	5.7	7.1	5.7	3.3
2008 <sup>2</sup>	6.1	8.2	4.0	6.4	3.2	6.3	5.5	7.7	5.5	7.5
2009 <sup>2</sup>	6.2	9.4	3.8	7.0	6.0	6.6	4.3	8.1	5.4	5.8
2010 <sup>2</sup>	6.6	7.1	3.8	7.8	3.2	6.0	4.9	6.8	5.5	6.4
2011 <sup>2</sup>	4.6	7.1	4.9	6.4	5.8	6.0	4.3	8.9	5.6	4.3
2012 <sup>2</sup>	7.1	8.3	5.7	7.9	3.9	7.3	6.5	9.6	6.7	7.8
2013 <sup>2</sup>	7.4	9.8	6.6	10.0	3.1	8.0	10.1	10.8	4.9	6.1
2014 <sup>2</sup>	7.7	15.9	5.5	8.7	3.9	7.1	6.5	7.5	7.2	5.5
2015 <sup>2</sup>	6.6	7.7	6.0	8.4	1.7	5.8	5.3	7.4	3.2	5.7
2016 <sup>2</sup>	7.6	8.5	5.2	9.8	1.2	7.2	6.4	6.8	4.3	6.5
2017 <sup>2</sup>	9.1	9.3	5.6	11.0	1.3	8.2	7.7	8.2	4.8	8.5
2018 <sup>2</sup>	6.2	4.8	5.6	9.0	3.2	6.0	4.4	5.2	3.4	5.4
2019 <sup>2</sup>	5.2	7.3	6.1	9.0	1.6	7.2	5.4	6.7	4.4	7.0
2020 <sup>2</sup>	5.9	7.1	6.7	6.0	1.9	5.8	6.8	11.5	4.4	5.0
2021 <sup>2</sup>	7.9	7.5	6.3	8.1	1.2	6.1	6.5	7.0	2.9	7.3
2022 <sup>2</sup>	7.7	6.1	4.9	7.8	5.3	5.4	10.8	7.7	4.3	6.0

<sup>1</sup> Estimates for NM, CO, WY, and MT are statewide.

<sup>2</sup> Preliminary

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## ESTIMATES OF ACTIVE MID-CONTINENT SANDHILL CRANE HUNTERS

Year	CO	KS	MT	NM	ND	OK	SD	TX	WY	CF Total	MN
1975	226		69	806	2,896	80	117	2,733	22	6,949	
1976	203		68	752	1,328	148	80	2,497	16	5,092	
1977	189		40	921	4,126	339	77	2,329	27	8,048	
1978	190		86	836	3,776	334	50	2,390	21	7,683	
1979	275		61	745	3,225	307	29	2,356	13	7,011	
1980	216		50	625	3,387	275	160	2,439	12	7,164	
1981	216		23	598	3,315	269	103	2,543	14	7,081	
1982	138		56	386	2,429	342	260	1,553	8	5,172	
1983	211		64	253	3,551	384	225	2,435	20	7,143	
1984	206		51	301	3,189	467	208	2,380	19	6,821	
1985	187		37	216	2,383	372	168	2,613	12	5,988	
1986	106		17	178	3,095	299	149	1,991	5	5,840	
1987	113		29	133	2,529	358	120	1,942	5	5,229	
1988	117		48	171	1,779	531	78	2,497	11	5,232	
1989	74		52	152	2,018	492	153	2,805	6	5,752	
1990	101		33	180	2,614	395	172	4,130	6	7,631	
1991	153		69	220	1,674	370	139	3,231	3	5,859	
1992	96		95	182	1,776	330	153	2,655	7	5,294	
1993	87	294	97	218	2,223	357	140	3,602	5	7,023	
1994	93	293	79	211	2,497	456	151	3,350	11	7,141	
1995	154	393	118	211	2,408	331	143	3,707	6	7,471	
1996	91	382	82	166	2,744	355	169	3,356	9	7,354	
1997	67	452	68	124	2,386	264	178	4,515	10	8,064	
1998	96	480	43	155	2,785	345	237	4,022	10	8,173	
1999	133	533	60	204	2,444	375	173	2,699	8	6,629	
2000	192	430	64	160	2,481	223	209	3,180	11	6,950	
2001	202	555	72	173	2,934	391	145	3,554	13	8,039	
2002	175	517	85	166	2,407	237	144	4,037	15	7,783	
2003 <sup>a</sup>	236	495	60	244	2,271	64	114	4,821	10	8,315	
2004 <sup>a</sup>	315	539	93	252	2,491	265	79	5,121	16	9,171	
2005 <sup>a</sup>	280	274	90	233	3,370	259	165	5,383	24	10,078	
2006 <sup>a</sup>	144	445	71	245	3,272	243	144	5,531	25	10,120	
2007 <sup>a</sup>	158	255	82	241	3,145	166	57	5,685	19	9,808	
2008 <sup>a</sup>	191	283	84	239	2,815	255	64	6,338	24	10,293	
2009 <sup>a</sup>	159	213	50	286	3,546	371	63	3,179	67	7,934	
2010 <sup>a</sup>	302	182	93	192	3,474	332	52	4,187	29	8,843	964
2011 <sup>a</sup>	138	449	95	206	3,733	418	44	2,712	41	7,836	643
2012 <sup>a</sup>	139	214	59	270	3,332	160	54	2,972	39	7,239	410
2013 <sup>a</sup>	118	235	94	276	3,326	638	91	5,473	35	10,286	485
2014 <sup>a</sup>	89	151	88	252	1,743	231	56	5,145	70	7,825	401
2015 <sup>a</sup>	126	334	115	263	1,430	158	--- <sup>b</sup>	3,241	78	5,745	424
2016 <sup>a</sup>	144	332	113	310	1,504	219	39	6,746	96	9,503	471
2017 <sup>a</sup>	221	710	98	360	1,562	246	71	7,066	305	10,639	397
2018 <sup>a</sup>	178	457	175	416	1,626	258	73	8,807	94	12,084	383
2019 <sup>a</sup>	174	554	152	549	1,124	--- <sup>c</sup>	41	10,072	138	12,804	333
2020 <sup>a</sup>	216	735	229	505	1,752	3,722	52	19,999	177	27,387	480
2021 <sup>a</sup>	251	818	358	498	1,633	3,116	71	14,240	116	21,101	632
2022 <sup>a</sup>	768	504	240	579	2,272	1,947	50	16,822	347	23,529	898

<sup>a</sup> Preliminary

<sup>b</sup> All hunters put in stratum "did not hunt" or "no" in state HIP sample frame, so no estimate is available.

<sup>c</sup> Hunter name and address data not supplied, so no estimate is available.



**NUMBER OF ACTIVE TUNDRA SWAN HUNTERS FOR THE EASTERN AND WESTERN POPULATIONS**

Year	EASTERN POPULATION							WESTERN POPULATION					TOTAL		
	MT	ND	SD	DE	NC	VA	TOTAL	UT	ID	NV	MT	AK		TOTAL	
1964								940					940	940	
1965								915					915	915	
1966								950					950	950	
1967								910					910	910	
1968								930					930	930	
1969								2,225					2,225	2,225	
1970								2,200			275		2,475	2,475	
1971								2,146		415	245		2,806	2,806	
1972								2,100		400	265		2,765	2,765	
1973								2,175		375	230		2,780	2,780	
1974								2,200		385	350		2,935	2,935	
1975								2,175		390	350		2,915	2,915	
1976								2,150		410	380		2,940	2,940	
1977								2,264		380			2,644	2,644	
1978								2,150		370	350		2,870	2,870	
1979								2,150		390	390		2,930	2,930	
1980								2,100		395	400		2,895	2,895	
1981								2,225		445	330		3,000	3,000	
1982								2,200		400	340		2,940	2,940	
1983	70						70	2,125		507	375		3,007	3,077	
1984	58				867		925	2,150		494	305		2,949	3,874	
1985	60				5,080		5,140	2,021		436	275		2,732	7,872	
1986	51				4,888		4,939	2,075		480	270		2,825	7,764	
1987	106				5,014		5,120	1,924		404	395		2,723	7,843	
1988	60	301			4,729	519	5,609	1,875		195	355	71	2,496	8,105	
1989	117	865			4,446	517	5,945	1,925		262	400	81	2,668	8,613	
1990	121	816	485		4,859	499	6,780	2,050		232	370	46	2,698	9,478	
1991	131	1,565	850		4,849	488	7,883	1,950		181	185	53	2,369	10,251	
1992	139	1,648	1,352		4,675	516	8,330	1,875		71	365	58	2,369	10,699	
1993	119	1,603	1,350		4,802	334	8,208	2,025		135	380	83	2,623	10,831	
1994	145	1,616	1,260		4,790	489	8,300	2,100		161	405	119	2,785	11,085	
1995	175	1,638	900		4,776	495	7,984	2,172		287	340	118	2,917	10,901	
1996	219	1,549	840		3,773	476	6,857	2,392		331	415	81	3,219	10,076	
1997	262	1,671	872		3,892	503	7,200	2,392		328	395	125	3,240	10,440	
1998	308	1,559	851		3,762	481	6,961	2,420		418	415	108	3,361	10,322	
1999	282	1,675	690		3,836	445	6,928	2,338		435	390	148	3,311	10,239	
2000	260	1,566	606		4,047	513	6,992	1,680		360	301	59	2,400	9,392	
2001	233	1,553	827		3,997	510	7,120	1,560		240	340	151	2,291	9,411	
2002	200	1,550	693		3,951	485	6,879	1,658		182	305	151	2,296	9,175	
2003	199	1,436	587		4,257	520	6,999	1,740		221	250	131	2,342	9,341	
2004	230	1,564	579		3,958	526	6,857	1,600		221	400	91	2,312	9,169	
2005	240	1,715	539		4,180	527	7,201	1,618		270	380	83	2,351	9,552	
2006	211	1,650	543		4,074	520	6,998	1,775		442	325	82	2,624	9,621	
2007	213	1,672	700		4,126	509	7,220	1,800		501	400	70	2,770	9,990	
2008	193	1,738	653		4,244	523	7,351	1,760		369	385	109	2,623	9,975	
2009	193	1,804	752		4,322	492	7,563	1,780		283	405	92	2,560	10,123	
2010	207	1,694	665		4,246	500	7,312	1,720		356	360	129	2,566	9,877	
2011	192	1,760	740		4,200	454	7,346	1,740		401	390	128	2,658	10,004	
2012	213	1,650	680		4,179	452	7,174	1,820		501	370	114	2,804	9,978	
2013	202	1,671	722		4,308	442	7,345	1,540		268	375	110	2,293	9,638	
2014	265	1,692	739		4,069	417	7,182	1,740		280	345	80	2,445	9,626	
2015	346	1,672	1,129		4,309	545	8,001	1,740		60	407	101	2,308	10,309	
2016	339	1,561	954		3,744	444	7,042	1,620		294	436	41	2,391	9,433	
2017	128	1,755	625		5,309	522	8,339	1,640		405	200	37	2,282	10,621	
2018	223	1,863	710		5,265	532	8,593	1,618		625	305	51	2,599	11,192	
2019	201	1,755	1,038	70	5,124	565	8,753	2,226		411	247	48	2,932	11,685	
2020	201	1,430	1,019	38	4,174	454	7,316	2,236		421	245	61	2,995	10,311	
2021	221	1,386	1,023	55	4,044	482	7,211	2,077		30	292	73	2,764	9,975	
2022	210	1,622	1,276	283	4,062	396	7,849	1,832		26	361	300	2,555	10,404	
AVERAGES:															
1962-69								1,145					1,145	1,145	
1970-79								2,171		391	315		2,806	2,806	
1980-89	75	583			4,171	518	3,964	2,062		402	345	76	2,823	5,598	
1990-99	190	1,534	945		4,401	473	7,543	2,171		258	366	94	2,889	10,432	
2000-09	217	1,625	648		4,116	513	7,118	1,697		309	349	102	2,457	9,575	
2010-19	232	1,707	800	70	4,475	487	7,709	1,740		360	344	84	2,528	10,236	
2020-29	211	1,479	1,106	125	4,093	444	7,459	2,048		29	358	279	57	2,771	10,230
Start-2022	189	1,550	826	112	4,288	488	6,846	1,908		29	328	345	89	2,661	9,507

**AVERAGE SEASONAL TUNDRA SWAN BAG (RETRIEVED & UNRETRIEVED) PER ACTIVE HUNTER**

Year	EASTERN POPULATION							WESTERN POPULATION					TOTAL	
	MT	ND	SD	DE	NC	VA	TOTAL	UT	ID	NV	MT	AK		TOTAL
1962														
1963														
1964								0.45					0.45	0.45
1965								0.43					0.43	0.43
1966								0.60					0.60	0.60
1967								0.37					0.37	0.37
1968								0.67					0.67	0.67
1969								0.74					0.79	0.79
1970								0.57			0.65		0.67	0.67
1971								0.60		0.29	0.37		0.53	0.53
1972								0.55		0.35	0.57		0.52	0.52
1973								0.66		0.32	0.49		0.60	0.60
1974								0.72		0.56	0.90		0.72	0.72
1975								0.71		0.57	0.87		0.71	0.71
1976								0.58		0.55	0.40		0.55	0.55
1977								0.83		0.25			0.84	0.84
1978								0.70		0.25	0.47		0.61	0.61
1979								0.71		0.66	0.86		0.73	0.73
1980								0.64		0.30	0.68		0.60	0.60
1981								0.87		0.79	0.59		0.82	0.82
1982								0.69		0.46	0.44		0.63	0.63
1983	0.49						0.49	0.66		0.38	0.63		0.61	0.61
1984	0.39				0.39		0.39	0.60		0.51	0.74		0.60	0.55
1985	0.32				0.55		0.55	0.37		0.36	0.72		0.40	0.50
1986	0.80				0.53		0.53	0.51		0.53	0.80		0.54	0.53
1987	0.26				0.60		0.62	0.33		0.26	0.77		0.38	0.53
1988	0.45	0.72			0.58	0.24	0.55	0.51		0.42	0.79	0.23	0.53	0.55
1989	0.39	0.68			0.53	0.29	0.53	0.44		0.32	0.85	0.27	0.48	0.52
1990	0.51	0.70	0.84		0.64	0.29	0.63	0.50		0.31	0.80	0.35	0.52	0.60
1991	0.41	0.52	0.61		0.65	0.45	0.61	0.48		0.35	0.46	0.15	0.46	0.57
1992	0.27	0.59	0.71		0.62	0.40	0.61	0.26		0.44	0.62	0.29	0.32	0.54
1993	0.18	0.49	0.51		0.62	0.41	0.56	0.19		0.43	0.84	0.36	0.30	0.50
1994	0.44	0.48	0.47		0.82	0.41	0.67	0.42		0.60	0.86	0.35	0.49	0.63
1995	0.34	0.55	0.22		0.67	0.45	0.57	0.38		0.32	0.57	0.49	0.38	0.52
1996	0.30	0.48	0.30		0.61	0.42	0.52	0.84		0.41	0.78	0.65	0.72	0.58
1997	0.44	0.56	0.51		0.64	0.45	0.59	0.73		0.45	0.90	0.52	0.66	0.61
1998	0.29	0.43	0.29		0.65	0.52	0.53	1.05		0.50	0.78	0.48	0.86	0.64
1999	0.34	0.57	0.36		0.61	0.30	0.55	0.83		0.53	0.61	0.65	0.71	0.60
2000	0.50	0.44	0.30		0.67	0.36	0.56	0.47		0.24	0.82	1.95	0.51	0.54
2001	0.42	0.40	0.46		0.63	0.30	0.53	0.21		0.27	0.94	0.77	0.36	0.46
2002	0.28	0.48	0.32		0.63	0.38	0.54	0.39		0.28	0.59	0.36	0.40	0.50
2003	0.29	0.18	0.07		0.58	0.35	0.43	0.52		0.37	0.53	0.63	0.51	0.45
2004	0.48	0.50	0.25		0.46	0.32	0.44	0.48		0.41	0.67	0.60	0.51	0.46
2005	0.42	0.49	0.29		0.62	0.40	0.54	0.62		0.39	0.83	0.55	0.62	0.56
2006	0.30	0.40	0.33		0.59	0.33	0.50	0.58		0.36	0.53	0.88	0.54	0.51
2007	0.30	0.44	0.23		0.57	0.39	0.49	0.56		0.45	0.82	0.93	0.59	0.52
2008	0.29	0.56	0.42		0.61	0.49	0.56	0.47		0.37	0.55	0.62	0.48	0.54
2009	0.36	0.56	0.45		0.54	0.36	0.52	0.52		0.21	0.80	0.88	0.54	0.52
2010	0.22	0.47	0.33		0.62	0.49	0.54	0.47		0.35	0.63	0.54	0.48	0.52
2011	0.34	0.44	0.39		0.61	0.33	0.52	0.45		0.39	0.69	0.77	0.49	0.51
2012	0.38	0.40	0.26		0.62	0.39	0.52	0.56		0.44	0.83	0.48	0.57	0.53
2013	0.34	0.49	0.44		0.60	0.39	0.54	0.27		0.11	0.68	0.58	0.33	0.49
2014	1.52	0.50	0.38		0.63	0.41	0.59	0.51		0.09	0.51	0.60	0.46	0.56
2015	0.32	0.39	0.20		0.62	0.32	0.48	0.57		0.18	0.71	0.72	0.59	0.50
2016	0.27	0.40	0.10		0.56	0.30	0.43	0.55		0.46	0.54	0.93	0.54	0.46
2017	0.38	0.49	0.38		0.62	0.49	0.56	0.55		0.34	0.59	0.76	0.52	0.55
2018	0.27	0.50	0.27		0.54	0.39	0.50	0.64		0.39	0.40	0.78	0.55	0.51
2019	0.26	0.42	0.22	0.69	0.59	0.37	0.49	0.58		0.59	0.63	1.40	0.60	0.52
2020	0.38	0.40	0.19	0.68	0.60	0.29	0.48	0.65	0.56	0.68	0.67	0.62	0.65	0.53
2021	0.39	0.25	0.09	0.76	0.60	0.28	0.43	0.55	0.63	0.47	0.84	1.23	0.59	0.48
2022	0.48	0.48	0.12	0.76	0.64	0.39	0.50	0.51	0.42	0.43	0.77	0.67	0.53	0.51
AVERAGES:														
1962-69								0.54					0.55	0.55
1970-79								0.66		0.42	0.62		0.65	0.65
1980-89	0.44	0.70			0.53	0.27	0.52	0.56		0.43	0.70	0.25	0.56	0.58
1990-99	0.35	0.54	0.48		0.65	0.41	0.58	0.57		0.43	0.72	0.43	0.54	0.58
2000-09	0.36	0.45	0.31		0.59	0.37	0.51	0.48		0.34	0.71	0.82	0.51	0.51
2010-19	0.43	0.45	0.30	0.69	0.60	0.39	0.52	0.51		0.33	0.62	0.76	0.51	0.52
2020-29	0.42	0.38	0.14	0.74	0.61	0.32	0.47	0.57	0.54	0.52	0.76	0.84	0.59	0.51
Start-2022	0.39	0.48	0.34	0.72	0.60	0.38	0.53	0.52	0.54	0.38	0.70	0.66	0.52	0.53

# **Duck Harvests in the United States**

ESTIMATED REGULAR SEASON MALLARD HARVESTS (Harvest Information Program)

Table with columns for Year (YR), States (CO, KS, MT, NE, NM, ND, OK, SD, TX, WY), and Flyway categories (CEN FLYWAY, ATL FLYWAY, MISS FLYWAY, PAC FLYWAY, U.S.). Rows include years 1999-2022 and summary statistics like AVERAGE and % CHANGE FROM.

1 Preliminary
2 Pacific Flyway total includes Alaska

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ESTIMATED REGULAR SEASON GADWALL HARVESTS (Harvest Information Program)

Table with columns for Year (YR), States (CO, KS, MT, NE, NM, ND, OK, SD, TX, WY), and Flyway categories (CEN FLYWAY, ATL FLYWAY, MISS FLYWAY, PAC FLYWAY, U.S.). Rows include years 1999-2022 and summary statistics like AVERAGE and % CHANGE FROM.

1 Preliminary
2 Pacific Flyway total includes Alaska

FILE: S:\CF\_D\projects\DATABOOK\MONTORING\HARVEST DATA\HP\DOAB\HARVHP.XLS 01/24/24

ESTIMATED REGULAR SEASON AMERICAN WIGEON HARVESTS (Harvest Information Program)

Table with columns for Year (YR), States (CO, KS, MT, NE, NM, ND, OK, SD, TX, WY), and Flyway categories (CEN FLYWAY, ATL FLYWAY, MISS FLYWAY, PAC FLYWAY, U.S.). Rows include years 1999-2022 and summary statistics like AVERAGE and % CHANGE FROM.

1 Preliminary
2 Pacific Flyway total includes Alaska

FILE: S:\CF\_D\projects\DATABOOK\MONTORING\HARVEST DATA\HP\DOAB\HARVHP.XLS 01/24/24





**ESTIMATED REGULAR SEASON BLACK-BELLIED WHISTLING DUCK HARVESTS (Harvest Information Program)**

YR											CEN	ATL	MISS	PAC <sup>2</sup>	U.S.
	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	FLYWAY	FLYWAY	FLYWAY	FLYWAY	
1999	0	0	0	0	0	0	0	0	1,170	0	1,170	0	0	0	1,170
2000	0	0	0	0	0	0	0	0	2,881	0	2,881	252	0	370	3,503
2001	0	0	0	0	0	0	0	0	4,793	0	4,793	267	568	0	5,628
2002	0	0	0	0	0	0	0	0	5,442	0	5,442	1,871	0	0	7,313
2003 <sup>1</sup>	0	0	0	0	0	0	0	0	7,284	0	7,284	714	636	0	8,634
2004 <sup>1</sup>	0	0	0	0	0	0	0	0	11,872	0	11,872	1,916	1,185	0	14,973
2005 <sup>1</sup>	0	0	0	0	0	0	0	0	3,057	0	3,057	1,056	4,285	0	8,398
2006 <sup>1</sup>	0	0	0	0	0	0	0	0	2,492	0	2,492	1,394	6,225	0	10,111
2007 <sup>1</sup>	0	0	0	0	0	0	0	0	8,142	0	8,142	3,740	3,531	0	15,413
2008 <sup>1</sup>	0	0	0	0	0	0	0	0	1,373	0	1,373	1,477	5,879	0	8,729
2009 <sup>1</sup>	0	0	0	0	0	0	0	0	1,759	0	1,759	8,112	15,231	0	25,102
2010 <sup>1</sup>	0	0	0	0	0	0	0	0	6,975	0	6,975	6,495	4,015	58	17,543
2011 <sup>1</sup>	0	0	0	0	0	0	0	0	1,066	0	1,066	5,626	3,625	0	10,317
2012 <sup>1</sup>	0	0	0	0	0	0	0	0	1,415	0	1,415	5,223	937	0	7,575
2013 <sup>1</sup>	0	0	0	0	0	0	0	0	2,529	0	2,529	7,369	2,324	0	12,222
2014 <sup>1</sup>	0	0	0	0	0	0	0	0	968	0	968	3,247	552	0	4,767
2015 <sup>1</sup>	0	0	0	0	0	0	0	0	2,872	0	2,872	8,479	2,771	0	14,122
2016 <sup>1</sup>	0	0	0	0	0	0	0	0	2,429	0	2,429	5,496	1,380	0	9,305
2017 <sup>1</sup>	0	0	0	0	0	0	0	0	3,422	0	3,422	2,879	5,043	0	11,344
2018 <sup>1</sup>	0	0	0	0	0	0	0	0	524	0	524	6,443	1,309	0	8,276
2019 <sup>1</sup>	0	0	0	0	0	0	0	0	1,546	0	1,546	7,158	5,817	0	14,521
2020 <sup>1</sup>	0	0	0	0	0	0	0	0	1,731	0	1,731	4,203	8,993	0	14,927
2021 <sup>1</sup>	0	0	0	0	0	0	0	0	1,459	0	1,459	4,112	4,500	0	10,071
2022 <sup>1</sup>	0	0	0	0	0	0	0	0	1,626	0	1,626	5,559	3,906	0	11,091
<b>AVERAGE:</b> 1999-2022	0	0	0	0	0	0	0	0	3,284	0	3,284	3,879	3,446	18	10,627
<b>% CHANGE FROM:</b> Prev. Year									11%		11%	35%	-13%		10%
Average									-50%		-50%	43%	13%		4%

<sup>1</sup> Preliminary

<sup>2</sup> Pacific Flyway total includes Alaska

**ESTIMATED REGULAR SEASON FULVOUS TREE DUCK HARVESTS (Harvest Information Program)**

YR											CEN	ATL	MISS	PAC <sup>2</sup>	U.S.
	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	FLYWAY	FLYWAY	FLYWAY	FLYWAY	
1999	0	0	0	0	0	0	0	0	0	0	0	194	327	0	521
2000	0	0	0	0	0	0	0	0	0	0	0	252	0	0	252
2001	0	0	0	0	0	0	0	0	0	0	0	267	946	0	1,213
2002	0	0	0	0	0	0	0	0	0	0	0	125	140	0	265
2003 <sup>1</sup>	0	0	0	0	0	0	0	0	520	0	520	0	0	0	520
2004 <sup>1</sup>	0	0	0	0	0	0	0	0	283	0	283	776	1,461	0	2,520
2005 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	411	0	0	411
2006 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	797	732	0	1,529
2007 <sup>1</sup>	0	0	0	0	0	0	0	0	718	0	718	612	1,926	0	3,256
2008 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	316	735	0	1,051
2009 <sup>1</sup>	0	0	0	0	0	0	0	0	660	0	660	1,642	2,948	0	5,250
2010 <sup>1</sup>	0	0	0	0	0	0	0	0	465	0	465	1,274	0	0	1,739
2011 <sup>1</sup>	0	0	0	0	0	0	0	0	267	0	267	1,468	0	0	1,735
2012 <sup>1</sup>	0	0	0	0	0	0	0	0	566	0	566	1,567	2,344	0	4,477
2013 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	2,069	4,649	0	6,718
2014 <sup>1</sup>	0	0	0	0	0	0	0	0	581	0	581	812	276	0	1,669
2015 <sup>1</sup>	0	0	0	0	0	0	0	0	663	0	663	1,780	0	0	2,443
2016 <sup>1</sup>	0	0	0	0	0	0	0	0	324	0	324	1,649	0	0	1,973
2017 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	691	530	0	1,221
2018 <sup>1</sup>	0	0	0	0	0	0	0	0	524	0	524	1,879	349	0	2,752
2019 <sup>1</sup>	0	0	0	0	0	0	0	0	141	0	141	904	1,756	0	2,801
2020 <sup>1</sup>	0	0	0	0	0	0	0	0	192	0	192	465	0	0	657
2021 <sup>1</sup>	0	0	0	0	0	0	0	0	398	0	398	1,121	1,252	0	2,771
2022 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	776	558	0	1,334
<b>AVERAGE:</b> 1999-2022	0	0	0	0	0	0	0	0	263	0	263	910	872	0	2,045
<b>% CHANGE FROM:</b> Prev. Year									-100%		-100%	-31%	-55%		-52%
Average									-100%		-100%	-15%	-36%		-35%

<sup>1</sup> Preliminary

<sup>2</sup> Pacific Flyway total includes Alaska













**ESTIMATED REGULAR SEASON ALL-DUCK HARVESTS (Harvest Information Program) - does not include early teal season harvest for CF states**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN	ATL	MISS	PAC <sup>2</sup>	U.S.
											FLYWAY	FLYWAY	FLYWAY	FLYWAY	
1999	68,129	203,226	44,891	189,301	21,580	538,499	266,047	302,900	1,232,475	28,471	2,895,519	1,828,974	7,599,866	3,127,306	15,451,665
2000	91,070	195,555	40,520	207,716	52,782	427,300	219,410	218,399	1,550,722	32,412	3,035,886	1,791,877	7,610,590	2,711,332	15,149,685
2001	118,597	168,267	37,723	206,289	51,983	491,201	153,503	294,307	1,449,058	36,390	3,007,318	1,694,218	6,410,705	2,392,193	13,504,434
2002	82,306	202,093	34,532	215,972	40,100	514,598	228,625	251,699	907,241	41,288	2,518,454	1,760,084	5,681,073	2,210,500	12,170,111
2003 <sup>1</sup>	115,360	203,184	46,496	214,457	52,359	496,800	207,506	254,400	703,244	35,705	2,329,511	1,608,124	6,171,916	2,504,383	12,613,934
2004 <sup>1</sup>	93,159	249,126	42,821	158,780	32,329	541,901	346,013	215,299	841,481	39,654	2,560,563	1,407,669	5,353,316	2,720,550	12,042,098
2005 <sup>1</sup>	69,509	145,413	36,397	158,368	27,308	519,400	276,949	179,199	1,158,327	25,945	2,596,815	1,590,959	5,150,356	2,903,655	12,241,785
2006 <sup>1</sup>	86,981	133,701	29,302	155,512	41,101	378,697	287,999	193,503	896,420	31,193	2,234,409	1,597,831	5,929,967	3,479,961	13,242,168
2007 <sup>1</sup>	84,389	135,523	33,543	175,518	27,429	373,002	433,278	182,900	914,566	36,955	2,397,103	1,658,559	6,366,702	3,518,554	13,940,918
2008 <sup>1</sup>	95,054	208,056	38,331	177,621	26,039	288,299	239,992	169,500	694,093	26,857	1,963,842	1,733,259	6,280,226	3,355,452	13,332,779
2009 <sup>1</sup>	76,554	176,862	43,004	143,998	27,262	473,000	253,039	225,200	836,470	32,705	2,288,094	1,657,916	5,843,914	2,862,080	12,652,004
2010 <sup>1</sup>	49,649	168,422	36,980	139,070	32,019	322,361	235,718	187,464	868,635	25,198	2,065,516	1,823,345	7,329,953	3,134,567	14,353,381
2011 <sup>1</sup>	58,030	178,112	34,799	203,036	28,813	460,646	297,856	226,143	1,217,676	32,025	2,737,136	1,627,165	7,580,310	3,288,945	15,233,556
2012 <sup>1</sup>	71,421	150,901	40,041	135,346	24,988	459,347	324,491	220,341	1,272,624	33,328	2,732,828	1,841,004	6,918,156	3,289,189	14,781,177
2013 <sup>1</sup>	95,476	235,335	54,378	177,479	31,318	466,744	356,814	201,087	924,914	46,224	2,589,769	1,600,571	6,447,738	2,429,089	13,067,167
2014 <sup>1</sup>	82,537	188,655	45,117	117,926	31,797	545,033	310,271	175,388	1,052,983	24,673	2,574,380	1,527,084	6,122,384	2,423,133	12,646,981
2015 <sup>1</sup>	89,311	204,053	36,278	131,446	22,051	509,275	239,090	180,717	588,187	18,988	2,019,396	1,300,285	4,570,152	2,574,318	10,464,151
2016 <sup>1</sup>	73,845	153,083	25,962	126,986	14,945	437,297	248,885	124,870	960,935	18,797	2,185,605	1,573,788	4,902,754	2,605,419	11,267,566
2017 <sup>1</sup>	75,670	137,833	24,050	119,766	41,970	426,370	194,250	129,465	1,019,032	30,889	2,199,295	1,545,308	5,179,044	2,771,116	11,694,763
2018 <sup>1</sup>	72,346	137,540	57,016	102,243	32,401	470,711	216,623	152,260	768,698	23,172	2,033,010	1,568,956	3,796,435	2,936,163	10,334,564
2019 <sup>1</sup>	67,053	135,423	32,755	116,042	38,062	406,945	269,354	187,875	681,735	17,327	1,952,571	1,206,513	4,003,927	2,178,518	9,341,529
2020 <sup>1</sup>	61,980	220,023	42,700	127,292	20,339	446,554	367,196	185,276	954,843	21,462	2,447,658	1,339,758	4,069,487	2,580,793	10,437,695
2021 <sup>1</sup>	52,516	223,433	22,862	100,263	11,845	288,891	295,111	147,235	529,220	19,176	1,690,546	1,240,302	3,674,833	2,278,533	8,884,211
2022 <sup>1</sup>	39,246	125,313	22,948	76,783	9,165	336,946	133,644	128,455	873,728	15,084	1,761,314	1,090,302	3,402,510	1,788,089	8,042,216
<b>AVERAGE:</b>															
1999-2022	77,925	178,297	37,644	153,217	30,833	442,492	266,736	197,245	954,054	28,913	2,367,356	1,567,244	5,683,180	2,752,660	12,370,439
<b>% CHANGE FROM:</b>															
Prev. Year	-25%	-44%	0%	-23%	-23%	17%	-55%	-13%	65%	-21%	4%	-12%	-7%	-22%	-9%
Average	-50%	-30%	-39%	-50%	-70%	-24%	-50%	-35%	-8%	-48%	-26%	-30%	-40%	-35%	-35%

<sup>1</sup> Preliminary

<sup>2</sup> Pacific Flyway total includes Alaska

# **Age Ratios in the United States Harvest**

**MALLARD AGE RATIOS (IMMATURE/ADULT) IN THE ENTIRE SEASON HARVEST**  
 Derived from the Parts Collection Survey

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN	ATL	MISS	PAC	U.S.
											FLYWAY	FLYWAY	FLYWAY	FLYWAY	
1999	0.69	0.63	0.68	0.81	1.08	1.10	0.47	0.91	0.48	0.42	0.73	0.91	0.89	0.96	0.88
2000	0.55	0.41	0.44	0.66	0.62	0.86	0.24	0.81	0.47	0.47	0.54	0.92	0.68	1.02	0.74
2001	0.66	0.62	0.61	0.71	1.00	1.34	0.39	0.72	0.53	0.47	0.71	1.14	1.33	1.22	1.13
2002	0.48	0.51	0.60	0.71	0.89	0.92	0.33	1.04	0.33	0.42	0.60	0.96	0.90	1.17	0.87
2003 <sup>1</sup>	0.86	0.70	0.83	0.84	1.10	1.44	0.48	1.34	0.42	0.90	0.87	1.26	1.40	1.51	1.29
2004 <sup>1</sup>	0.70	0.57	0.60	0.55	1.22	1.21	0.56	1.17	0.53	0.59	0.74	1.37	1.03	1.43	1.06
2005 <sup>1</sup>	0.98	1.07	0.85	1.08	1.95	2.60	0.53	1.98	1.04	0.82	1.26	1.54	1.63	1.98	1.62
2006 <sup>1</sup>	0.73	0.75	0.96	1.04	0.84	2.36	0.63	1.63	0.69	0.86	1.05	1.35	1.44	1.82	1.45
2007 <sup>1</sup>	1.08	1.03	1.24	1.04	1.69	2.13	0.64	1.79	0.69	0.80	1.07	1.31	1.20	1.23	1.20
2008 <sup>1</sup>	0.55	0.65	0.75	0.67	1.21	1.33	0.27	1.20	0.41	0.54	0.70	1.22	1.06	1.19	1.04
2009 <sup>1</sup>	0.68	0.64	0.77	0.81	1.35	2.35	0.42	1.67	0.69	0.87	1.01	1.37	1.24	3.40	1.25
2010 <sup>1</sup>	0.86	1.26	1.02	1.34	1.49	2.44	0.64	2.50	0.87	1.30	1.29	1.30	1.59	1.63	1.53
2011 <sup>1</sup>	1.60	1.24	1.02	1.22	1.52	3.66	0.68	2.90	0.86	1.56	1.52	1.24	1.91	2.28	1.85
2012 <sup>1</sup>	0.92	0.74	1.15	0.99	1.31	3.20	0.39	2.37	0.66	1.09	1.17	1.38	1.68	1.35	1.46
2013 <sup>1</sup>	0.99	0.90	1.61	1.11	1.22	2.59	0.58	1.94	0.83	0.76	1.19	1.37	1.31	1.25	1.28
2014 <sup>1</sup>	1.10	1.10	1.30	1.50	1.90	3.20	0.70	2.30	1.00	0.80	1.43	1.33	1.66	1.25	1.50
2015 <sup>1</sup>	0.74	0.54	0.75	1.15	1.69	2.25	0.50	1.74	0.52	0.58	0.97	1.38	1.19	1.21	1.16
2016 <sup>1</sup>	0.65	0.59	0.57	0.77	1.12	1.66	0.41	1.75	0.51	0.68	0.78	1.24	1.09	1.25	1.07
2017 <sup>1</sup>	0.86	0.53	0.55	0.87	1.11	1.83	0.47	1.27	0.36	1.23	0.85	1.17	0.92	1.56	1.06
2018 <sup>1</sup>	0.67	0.63	1.12	0.86	0.66	2.22	0.42	1.65	0.58	0.76	0.90	1.12	1.07	0.94	1.00
2019 <sup>1</sup>	0.86	0.49	1.12	1.05	2.31	1.62	0.50	1.99	0.67	0.61	0.92	1.19	1.05	1.13	1.06
2020 <sup>1</sup>	0.99	0.57	0.79	0.74	1.18	1.52	0.47	1.68	0.48	0.63	0.82	1.06	1.19	1.02	1.05
2021 <sup>1</sup>	0.82	0.47	0.59	0.68	1.14	0.85	0.40	0.99	0.50	0.45	0.59	0.98	0.85	0.81	0.79
2022 <sup>1</sup>	0.97	0.66	1.35	0.80	1.21	2.35	0.68	1.63	0.73	1.08	1.01	1.09	1.12	1.12	1.10

<sup>1</sup> Preliminary

**FEMALE MALLARD AGE RATIOS (IMMATURE/ADULT) IN THE ENTIRE SEASON HARVEST**  
 Derived from the Parts Collection Survey

YR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999	1.16	1.35	1.36	1.35	1.33
2000	0.92	1.31	1.14	1.66	1.22
2001	1.38	1.81	2.52	1.95	2.09
2002	1.09	1.47	1.61	1.87	1.53
2003 <sup>1</sup>	1.67	1.89	2.47	2.48	2.26
2004 <sup>1</sup>	1.60	2.11	2.11	2.36	2.07
2005 <sup>1</sup>	2.63	2.40	3.13	3.38	3.02
2006 <sup>1</sup>	1.93	1.93	2.80	2.97	2.61
2007 <sup>1</sup>	2.10	1.73	2.09	1.84	1.94
2008 <sup>1</sup>	1.16	1.84	2.08	1.96	1.76
2009 <sup>1</sup>	2.19	2.00	2.78	2.28	2.31
2010 <sup>1</sup>	2.57	2.00	3.35	2.75	2.67
2011 <sup>1</sup>	2.68	1.84	3.79	4.12	3.11
2012 <sup>1</sup>	2.17	1.85	3.28	2.35	2.41
2013 <sup>1</sup>	2.49	2.00	2.70	2.02	3.00
2014 <sup>1</sup>	2.73	1.99	3.33	1.99	2.51
2015 <sup>1</sup>	2.01	2.10	2.68	2.00	2.23
2016 <sup>1</sup>	1.71	2.30	2.42	1.95	2.11
2017 <sup>1</sup>	1.80	2.06	2.05	2.67	2.22
2018 <sup>1</sup>	2.19	1.82	2.40	1.63	1.99
2019 <sup>1</sup>	2.41	1.74	2.61	1.91	2.21
2020 <sup>1</sup>	2.00	1.47	2.61	1.74	2.10
2021 <sup>1</sup>	1.34	1.54	2.14	1.48	1.75
2022 <sup>1</sup>	2.44	1.51	2.90	2.16	2.45

<sup>1</sup> Preliminary

**MALE MALLARD AGE RATIOS (IMMATURE/ADULT) IN THE REGULAR SEASON HARVEST**  
 Derived from the Parts Collection Survey

YR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1,999	0.61	0.74	0.70	0.83	0.72
2,000	0.45	0.78	0.54	0.83	0.59
2001	0.57	0.90	1.02	1.00	0.88
2002	0.49	0.77	0.70	0.96	0.70
2003 <sup>1</sup>	0.72	1.04	1.11	1.23	1.03
2004 <sup>1</sup>	0.59	1.12	0.79	1.20	0.84
2005 <sup>1</sup>	1.01	1.25	1.28	1.62	1.29
2006 <sup>1</sup>	0.89	1.13	1.13	1.49	1.17
2007 <sup>1</sup>	0.89	1.13	0.99	1.04	1.01
2008 <sup>1</sup>	0.61	1.00	0.82	0.97	0.85
2009 <sup>1</sup>	0.82	1.12	0.93	1.16	1.01
2010 <sup>1</sup>	1.04	1.04	1.19	1.33	1.15
2011 <sup>1</sup>	1.27	1.01	1.45	1.81	1.39
2012 <sup>1</sup>	0.94	1.18	1.28	1.07	1.12
2013 <sup>1</sup>	0.95	1.12	0.98	1.03	2.09
2014 <sup>1</sup>	1.18	1.06	1.23	1.04	1.13
2015 <sup>1</sup>	0.80	1.12	0.87	1.00	0.93
2016 <sup>1</sup>	0.62	0.89	0.80	1.05	0.85
2017 <sup>1</sup>	0.68	0.90	0.67	1.29	0.92
2018 <sup>1</sup>	0.71	0.88	0.79	0.76	0.78
2019 <sup>1</sup>	0.72	0.97	0.78	0.92	0.87
2020 <sup>1</sup>	0.63	0.90	0.90	0.83	0.82
2021 <sup>1</sup>	0.46	0.80	0.61	0.66	0.60
2022 <sup>1</sup>	0.75	0.95	0.82	0.89	0.84

<sup>1</sup> Preliminary

**NORTHERN PINTAIL AGE RATIOS (IMMATURE/ADULT) IN THE ENTIRE SEASON HARVEST**

Derived from the Parts Collection Survey

YR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999	0.88	1.16	1.26	0.97	1.05
2000	0.52	0.57	0.91	0.81	0.77
2001	0.87	1.04	1.41	0.62	0.93
2002	1.06	1.34	1.79	0.95	1.27
2003 <sup>1</sup>	1.53	2.29	2.49	0.97	1.54
2004 <sup>1</sup>	1.06	0.76	1.03	0.69	0.89
2005 <sup>1</sup>	1.27	2.07	1.29	1.38	1.38
2006 <sup>1</sup>	0.94	1.66	1.28	0.98	1.09
2007 <sup>1</sup>	0.82	1.70	1.43	1.03	1.13
2008 <sup>1</sup>	1.06	0.94	0.96	0.54	0.75
2009 <sup>1</sup>	1.09	0.66	1.30	0.98	1.07
2010 <sup>1</sup>	1.31	1.77	2.03	1.24	1.46
2011 <sup>1</sup>	0.90	1.30	1.67	1.44	1.35
2012 <sup>1</sup>	0.79	0.94	0.89	0.71	0.78
2013 <sup>1</sup>	1.06	1.18	1.71	0.98	1.21
2014 <sup>1</sup>	1.13	1.08	1.11	1.10	1.12
2015 <sup>1</sup>	0.98	0.68	0.88	0.70	0.79
2016 <sup>1</sup>	0.73	1.35	1.29	0.77	0.88
2017 <sup>1</sup>	0.86	1.31	1.30	0.88	1.01
2018 <sup>1</sup>	1.02	0.40	0.89	0.62	0.72
2019 <sup>1</sup>	1.38	1.56	1.29	0.99	1.17
2020 <sup>1</sup>	1.18	1.84	1.62	0.84	1.12
2021 <sup>1</sup>	1.43	0.91	1.60	0.79	1.15
2022 <sup>1</sup>	1.10	2.35	1.75	0.99	1.24

<sup>1</sup> Preliminary

**WOOD DUCK AGE RATIOS (IMMATURE/ADULT) IN THE ENTIRE SEASON HARVEST**

Derived from the Parts Collection Survey

YR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999	1.05	1.04	1.38	1.24	1.25
2000	0.63	1.22	0.99	2.18	1.04
2001	1.31	1.20	2.05	1.29	1.60
2002	1.03	1.15	1.67	1.25	1.43
2003 <sup>1</sup>	1.07	1.59	1.66	1.57	1.58
2004 <sup>1</sup>	1.36	1.28	1.53	2.39	1.47
2005 <sup>1</sup>	1.01	1.27	1.32	2.41	1.32
2006 <sup>1</sup>	1.08	0.99	1.61	2.06	1.37
2007 <sup>1</sup>	1.64	0.97	1.28	1.12	1.18
2008 <sup>1</sup>	1.63	1.21	1.77	1.23	1.53
2009 <sup>1</sup>	1.01	1.31	2.05	2.08	1.71
2010 <sup>1</sup>	1.42	1.20	1.78	1.43	1.54
2011 <sup>1</sup>	1.09	0.90	1.22	1.69	1.12
2012 <sup>1</sup>	0.97	1.09	1.25	1.36	1.19
2013 <sup>1</sup>	1.11	1.45	1.45	1.23	1.43
2014 <sup>1</sup>	1.13	1.33	2.04	1.96	1.69
2015 <sup>1</sup>	2.34	1.32	1.74	2.18	1.61
2016 <sup>1</sup>	0.87	1.37	1.29	1.70	1.29
2017 <sup>1</sup>	1.63	1.36	1.19	2.71	1.32
2018 <sup>1</sup>	1.33	1.38	1.34	1.99	1.37
2019 <sup>1</sup>	1.74	1.41	1.45	1.53	1.46
2020 <sup>1</sup>	1.12	0.93	1.01	1.82	1.00
2021 <sup>1</sup>	1.08	1.25	0.96	1.17	1.06
2022 <sup>1</sup>	1.22	1.30	1.05	1.44	1.16

<sup>1</sup> Preliminary

**GADWALL AGE RATIOS (IMMATURE/ADULT) IN THE ENTIRE SEASON HARVEST**

Derived from the Parts Collection Survey

YR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999	1.27	1.98	1.25	0.92	1.25
2000	0.56	0.79	0.71	0.92	0.68
2001	1.00	0.82	1.32	0.78	1.14
2002	0.80	0.52	0.68	1.01	0.74
2003 <sup>1</sup>	1.62	0.86	1.23	1.41	1.34
2004 <sup>1</sup>	0.92	0.73	0.93	0.96	0.93
2005 <sup>1</sup>	1.17	1.30	1.81	1.78	1.52
2006 <sup>1</sup>	0.94	1.35	1.39	1.13	1.19
2007 <sup>1</sup>	1.29	1.35	1.37	0.79	1.25
2008 <sup>1</sup>	0.70	0.79	0.74	0.79	0.74
2009 <sup>1</sup>	1.16	1.00	1.32	1.03	1.22
2010 <sup>1</sup>	1.68	1.82	1.72	1.34	1.66
2011 <sup>1</sup>	1.38	2.61	1.82	1.46	1.68
2012 <sup>1</sup>	0.95	1.13	1.21	0.84	1.10
2013 <sup>1</sup>	1.25	1.48	1.25	1.13	1.25
2014 <sup>1</sup>	1.29	1.68	1.32	1.32	1.33
2015 <sup>1</sup>	1.26	1.09	1.03	1.00	1.09
2016 <sup>1</sup>	0.94	1.28	1.02	0.97	1.01
2017 <sup>1</sup>	1.00	0.81	0.79	1.54	0.94
2018 <sup>1</sup>	1.10	0.92	1.10	1.05	1.08
2019 <sup>1</sup>	1.25	0.71	1.05	1.45	1.14
2020 <sup>1</sup>	1.31	0.70	1.06	0.92	1.12
2021 <sup>1</sup>	0.57	0.50	0.50	0.52	0.53
2022 <sup>1</sup>	1.25	2.75	1.27	1.02	1.29

<sup>1</sup> Preliminary

**AMERICAN WIGEON AGE RATIOS (IMMATURE/ADULT) IN THE ENTIRE SEASON HARVEST**

Derived from the Parts Collection Survey

YR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999	0.70	1.08	0.99	0.88	0.88
2000	0.44	0.50	0.59	0.94	0.66
2001	0.76	1.02	1.17	1.02	0.99
2002	0.88	0.92	1.31	1.67	1.30
2003 <sup>1</sup>	1.34	0.90	1.31	1.11	1.21
2004 <sup>1</sup>	0.80	0.75	1.30	1.23	1.09
2005 <sup>1</sup>	0.80	0.84	1.85	2.05	1.48
2006 <sup>1</sup>	0.83	1.95	2.62	1.38	1.40
2007 <sup>1</sup>	0.82	1.22	1.65	1.31	1.26
2008 <sup>1</sup>	0.94	0.67	0.91	1.09	1.02
2009 <sup>1</sup>	0.71	0.66	1.37	1.29	1.10
2010 <sup>1</sup>	1.11	1.79	1.69	1.34	1.41
2011 <sup>1</sup>	0.76	1.43	1.97	1.76	1.48
2012 <sup>1</sup>	0.73	0.99	1.38	1.21	1.08
2013 <sup>1</sup>	0.84	1.03	1.27	1.52	1.24
2014 <sup>1</sup>	0.95	0.68	1.70	1.58	1.35
2015 <sup>1</sup>	1.14	0.93	2.37	1.27	1.31
2016 <sup>1</sup>	0.67	0.50	1.71	0.95	0.93
2017 <sup>1</sup>	0.89	1.09	1.54	1.22	1.19
2018 <sup>1</sup>	0.97	0.60	1.97	1.16	1.12
2019 <sup>1</sup>	1.07	0.71	1.46	1.21	1.24
2020 <sup>1</sup>	1.13	0.70	1.64	1.10	1.16
2021 <sup>1</sup>	1.50	1.62	2.29	1.19	1.39
2022 <sup>1</sup>	1.08	1.30	2.28	1.66	1.55

<sup>1</sup> Preliminary



**REDHEAD AGE RATIOS (IMMATURE/ADULT) IN THE ENTIRE SEASON HARVEST**

Derived from the Parts Collection Survey

YR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999	1.75	2.24	3.02	0.80	1.93
2000	0.42	0.43	0.72	0.73	0.53
2001	0.71	0.46	1.97	0.44	0.93
2002	0.24	0.10	0.21	1.10	0.30
2003 <sup>1</sup>	1.64	0.54	1.58	1.69	1.53
2004 <sup>1</sup>	0.81	0.29	0.80	1.54	0.89
2005 <sup>1</sup>	2.63	2.18	3.15	2.11	2.70
2006 <sup>1</sup>	2.13	1.47	2.32	1.50	2.07
2007 <sup>1</sup>	2.21	1.47	2.45	1.18	2.09
2008 <sup>1</sup>	0.56	0.13	0.68	0.52	0.56
2009 <sup>1</sup>	1.56	0.38	1.62	0.70	1.32
2010 <sup>1</sup>	3.47	1.93	6.54	1.27	3.69
2011 <sup>1</sup>	2.15	2.30	4.51	2.46	3.03
2012 <sup>1</sup>	1.51	0.92	2.29	1.12	1.62
2013 <sup>1</sup>	2.25	1.46	2.92	1.82	2.32
2014 <sup>1</sup>	3.19	1.94	2.88	1.39	2.80
2015 <sup>1</sup>	1.33	0.83	2.00	0.51	1.38
2016 <sup>1</sup>	0.68	0.72	1.12	0.73	0.81
2017 <sup>1</sup>	1.43	0.76	1.23	1.67	1.27
2018 <sup>1</sup>	1.79	0.48	1.08	1.29	1.18
2019 <sup>1</sup>	1.81	0.77	1.83	3.05	1.73
2020 <sup>1</sup>	1.81	1.01	2.18	1.53	1.79
2021 <sup>1</sup>	0.85	0.70	0.82	0.58	0.76
2022 <sup>1</sup>	2.15	2.24	3.17	1.93	1.93

<sup>1</sup> Preliminary

**GREATER SCAUP AGE RATIOS (IMMATURE/ADULT) IN THE ENTIRE SEASON HARVEST**

Derived from the Parts Collection Survey

YR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999		0.99	1.74	0.46	0.84
2000		0.75	1.54	1.27	1.23
2001		1.46	2.27	0.48	0.92
2002	3.31	1.65	2.87	0.94	1.82
2003 <sup>1</sup>		0.98	1.37	0.72	0.96
2004 <sup>1</sup>	8.65	2.06	3.05	1.71	2.39
2005 <sup>1</sup>		0.87	2.58	1.06	1.49
2006 <sup>1</sup>		1.81	1.80	0.56	1.33
2007 <sup>1</sup>		0.78	1.26	1.23	1.19
2008 <sup>1</sup>		0.37	0.79	1.22	0.80
2009 <sup>1</sup>		0.63	1.24	1.19	1.06
2010 <sup>1</sup>		0.57	1.15	0.64	0.80
2011 <sup>1</sup>		0.86	2.01	0.48	1.22
2012 <sup>1</sup>		0.79	0.98	1.06	0.95
2013 <sup>1</sup>		1.85	1.09	1.52	1.38
2014 <sup>1</sup>		1.15	1.53	1.21	1.45
2015 <sup>1</sup>	1.28	1.69	2.21	1.31	1.82
2016 <sup>1</sup>		2.71	3.31	0.92	2.15
2017 <sup>1</sup>		1.21	2.31	1.19	1.50
2018 <sup>1</sup>		0.37	1.44	1.41	0.91
2019 <sup>1</sup>	0.70	0.96	2.39	1.86	1.59
2020 <sup>1</sup>		0.75	1.95	1.27	1.27
2021 <sup>1</sup>		0.83	1.61	0.70	1.01
2022 <sup>1</sup>		3.05	1.90	1.49	2.30

<sup>1</sup> Preliminary

**LESSER SCAUP AGE RATIOS (IMMATURE/ADULT) IN THE ENTIRE SEASON HARVEST**

Derived from the Parts Collection Survey

YR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999	0.88	0.26	0.62	1.02	0.57
2000	0.41	0.33	0.36	1.20	0.42
2001	1.04	0.67	0.60	1.65	0.75
2002	1.35	0.47	0.85	1.66	0.88
2003 <sup>1</sup>	0.95	0.77	1.33	1.58	1.16
2004 <sup>1</sup>	1.16	0.37	0.89	1.74	0.92
2005 <sup>1</sup>	0.54	0.50	0.57	2.11	0.63
2006 <sup>1</sup>	1.13	0.85	1.79	1.77	1.39
2007 <sup>1</sup>	1.08	0.77	1.05	1.36	1.05
2008 <sup>1</sup>	0.67	0.46	0.63	2.57	0.75
2009 <sup>1</sup>	0.82	0.52	0.53	1.37	0.66
2010 <sup>1</sup>	1.23	0.80	1.54	1.07	1.24
2011 <sup>1</sup>	1.29	1.18	1.55	1.29	1.39
2012 <sup>1</sup>	1.09	0.46	0.66	2.07	0.74
2013 <sup>1</sup>	2.22	0.58	1.15	1.41	1.14
2014 <sup>1</sup>	0.78	0.83	0.86	1.82	0.91
2015 <sup>1</sup>	0.83	0.88	0.88	1.47	0.93
2016 <sup>1</sup>	1.12	1.18	1.33	1.14	1.21
2017 <sup>1</sup>	1.01	0.91	1.06	1.81	1.06
2018 <sup>1</sup>	0.85	0.39	0.52	1.67	0.64
2019 <sup>1</sup>	0.89	0.90	1.18	2.71	1.56
2020 <sup>1</sup>	0.92	0.76	0.68	2.18	1.64
2021 <sup>1</sup>	1.03	1.77	1.38	1.40	1.36
2022 <sup>1</sup>	1.55	0.85	1.18	3.33	1.31

<sup>1</sup> Preliminary

**BLUE-WINGED TEAL AGE RATIOS (IMMATURE/ADULT) IN THE ENTIRE SEASON HARVEST**  
**Derived from the Parts Collection Survey**

<b>YR</b>	<b>CEN FLYWAY</b>	<b>ATL FLYWAY</b>	<b>MISS FLYWAY</b>	<b>PAC FLYWAY</b>	<b>U.S.</b>
1999	1.82	1.39	1.95	1.27	1.83
2000	1.76	0.74	1.39	0.96	1.42
2001	2.27	1.24	2.42	1.20	2.19
2002	1.90	0.80	1.96	1.13	1.74
2003 <sup>1</sup>	2.69	1.29	1.95	1.50	2.04
2004 <sup>1</sup>	1.57	0.88	1.34	0.87	1.29
2005 <sup>1</sup>	2.28	1.36	2.47	1.41	2.09
2006 <sup>1</sup>	2.10	1.39	1.75	1.07	1.74
2007 <sup>1</sup>	2.85	1.24	1.87	1.73	2.03
2008 <sup>1</sup>	1.59	0.86	0.92	0.83	1.03
2009 <sup>1</sup>	1.42	0.96	1.24	0.63	1.22
2010 <sup>1</sup>	1.57	0.97	1.71	0.94	1.52
2011 <sup>1</sup>	2.36	1.97	1.59	1.34	1.79
2012 <sup>1</sup>	1.85	1.25	1.29	1.14	1.39
2013 <sup>1</sup>	2.19	0.98	1.49	1.68	1.62
2014 <sup>1</sup>	1.46	0.85	1.16	1.19	1.24
2015 <sup>1</sup>	1.43	1.18	1.28	0.74	1.30
2016 <sup>1</sup>	0.95	0.93	1.26	0.83	1.04
2017 <sup>1</sup>	1.18	1.57	1.75	1.09	1.45
2018 <sup>1</sup>	1.59	0.94	1.76	1.30	1.57
2019 <sup>1</sup>	1.74	1.31	1.36	0.81	1.44
2020 <sup>1</sup>	1.53	2.25	1.58	0.71	1.54
2021 <sup>1</sup>	1.44	1.34	1.03	1.31	1.20
2022 <sup>1</sup>	1.64	1.82	1.96	1.72	1.80

<sup>1</sup> Preliminary and based on all-season harvest.

**GREEN-WINGED TEAL AGE RATIOS (IMMATURE/ADULT) IN THE ENTIRE SEASON HARVEST**  
**Derived from the Parts Collection Survey**

<b>YR</b>	<b>CEN FLYWAY</b>	<b>ATL FLYWAY</b>	<b>MISS FLYWAY</b>	<b>PAC FLYWAY</b>	<b>U.S.</b>
1999	1.33	2.37	1.63	1.04	1.47
2000	1.50	1.20	1.07	1.21	1.21
2001	1.79	1.16	1.98	1.03	1.56
2002	1.78	1.85	2.13	1.40	1.81
2003 <sup>1</sup>	2.10	1.83	1.91	1.14	1.71
2004 <sup>1</sup>	1.82	1.30	1.07	1.28	1.29
2005 <sup>1</sup>	1.37	1.67	1.96	1.74	1.72
2006 <sup>1</sup>	1.97	2.00	2.30	1.45	1.89
2007 <sup>1</sup>	1.83	1.90	1.98	1.22	1.66
2008 <sup>1</sup>	1.68	1.61	1.68	0.92	1.26
2009 <sup>1</sup>	1.59	1.62	1.23	1.05	1.25
2010 <sup>1</sup>	1.68	1.95	1.61	0.87	1.39
2011 <sup>1</sup>	1.81	1.97	2.00	1.28	1.75
2012 <sup>1</sup>	1.39	2.05	1.60	0.93	1.36
2013 <sup>1</sup>	1.71	1.77	1.80	1.35	1.66
2014 <sup>1</sup>	1.53	1.68	1.48	1.30	1.46
2015 <sup>1</sup>	1.53	1.66	1.63	1.27	1.48
2016 <sup>1</sup>	1.20	1.70	1.58	0.90	1.24
2017 <sup>1</sup>	1.59	1.52	1.50	1.09	1.38
2018 <sup>1</sup>	1.36	1.42	1.01	0.81	1.01
2019 <sup>1</sup>	1.81	1.78	1.30	1.10	1.34
2020 <sup>1</sup>	1.49	1.82	1.80	0.83	1.33
2021 <sup>1</sup>	2.01	1.82	1.59	0.84	1.39
2022 <sup>1</sup>	2.15	1.69	1.84	1.17	1.71

<sup>1</sup> Preliminary and based on all-season harvest.

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# **Sex Ratios in the United States Harvest**

**MALLARD ADULT SEX RATIOS (MALE/FEMALE) IN THE REGULAR SEASON HARVEST**  
**Derived from the Parts Collection Survey**

YR	CEN	ATL	MISS	PAC	U.S.
	FLYWAY	FLYWAY	FLYWAY	FLYWAY	
1999	3.57	2.70	2.77	2.90	2.91
2000	4.27	2.43	3.27	3.25	3.33
2001	4.76	2.82	3.79	3.25	3.79
2002	4.42	2.84	3.42	3.24	3.52
2003 <sup>1</sup>	4.98	2.83	3.65	3.40	3.75
2004 <sup>1</sup>	5.62	2.75	4.30	3.92	4.31
2005 <sup>1</sup>	5.31	3.00	4.17	3.79	4.12
2006 <sup>1</sup>	5.51	2.72	4.47	3.51	4.13
2007 <sup>1</sup>	5.96	2.40	4.13	3.22	3.93
2008 <sup>1</sup>	5.53	2.88	4.39	3.67	4.12
2009 <sup>1</sup>	6.44	2.64	5.08	3.38	4.39
2010 <sup>1</sup>	5.32	2.70	4.38	3.71	4.03
2011 <sup>1</sup>	4.91	2.78	4.16	3.95	3.95
2012 <sup>1</sup>	4.52	2.39	4.05	3.60	3.64
2013 <sup>1</sup>	5.43	2.63	4.24	3.55	3.97
2014 <sup>1</sup>	5.34	2.43	3.97	3.50	3.81
2015 <sup>1</sup>	5.94	2.86	4.84	3.91	4.62
2016 <sup>1</sup>	6.08	3.20	4.53	3.61	4.48
2017 <sup>1</sup>	5.49	3.19	4.54	4.09	4.44
2018 <sup>1</sup>	6.70	3.09	4.93	3.79	4.68
2019 <sup>1</sup>	7.28	2.57	5.79	3.71	5.04
2020 <sup>1</sup>	6.60	2.63	4.94	4.00	4.63
2021 <sup>1</sup>	6.14	3.14	5.44	4.52	5.08
2022 <sup>1</sup>	6.12	2.87	5.97	4.54	4.88

<sup>1</sup> Preliminary

**MALLARD IMMATURE SEX RATIOS (MALE/FEMALE) IN THE REGULAR SEASON HARVEST**  
**Derived from the Parts Collection Survey**

YR	CEN	ATL	MISS	PAC	U.S.
	FLYWAY	FLYWAY	FLYWAY	FLYWAY	
1999	1.87	1.48	1.46	1.78	1.58
2000	2.10	1.40	1.54	1.60	1.60
2001	1.96	1.40	1.51	1.66	1.59
2002	1.98	1.49	1.46	1.64	1.57
2003 <sup>1</sup>	2.22	1.57	1.67	1.73	1.74
2004 <sup>1</sup>	2.14	1.48	1.64	2.03	1.77
2005 <sup>1</sup>	2.12	1.57	1.75	1.85	1.80
2006 <sup>1</sup>	2.53	1.59	1.80	1.76	1.85
2007 <sup>1</sup>	2.53	1.57	1.95	1.83	1.97
2008 <sup>1</sup>	2.92	1.57	1.73	1.82	2.01
2009 <sup>1</sup>	2.42	1.48	1.71	1.72	1.83
2010 <sup>1</sup>	2.14	1.41	1.55	1.80	1.73
2011 <sup>1</sup>	2.33	1.53	1.59	1.74	1.80
2012 <sup>1</sup>	1.97	1.52	1.58	1.64	1.68
2013 <sup>1</sup>	2.07	1.48	1.53	1.80	1.72
2014 <sup>1</sup>	2.30	1.30	1.43	1.84	1.72
2015 <sup>1</sup>	2.36	1.53	1.58	1.96	1.88
2016 <sup>1</sup>	2.22	1.24	1.50	1.95	1.76
2017 <sup>1</sup>	2.06	1.39	1.48	1.97	1.76
2018 <sup>1</sup>	2.16	1.49	1.62	1.78	1.78
2019 <sup>1</sup>	2.17	1.43	1.72	1.79	1.80
2020 <sup>1</sup>	2.09	1.61	1.71	1.90	1.81
2021 <sup>1</sup>	2.13	1.65	1.56	2.01	1.76
2022 <sup>1</sup>	1.81	1.82	1.69	1.88	1.80

<sup>1</sup> Preliminary

# Duck Harvests in Canada









# **Duck Harvests in North America**

ESTIMATES OF ENTIRE SEASON MALLARD HARVESTS IN THE UNITED STATES (Harvest Information Program) AND CANADA

YR	UNITED STATES						CANADA					NORTH AMERICAN TOTAL
	ATLANTIC FLYWAY	MISSISSIPPI FLYWAY	CENTRAL FLYWAY	PACIFIC FLYWAY	ALASKA	U.S. TOTAL	EASTERN CANADA <sup>2</sup>	MB/SK/AB	BRITISH COLUMBIA	NT, NU and YT	CANADA TOTAL	
1999	444,068	3,137,726	995,528	1,295,088	23,385	5,895,795	214,495	370,479	48,002	220	633,196	6,528,991
2000	523,046	3,272,671	1,035,988	1,218,394	19,085	6,069,184	258,913	367,609	49,272	582	676,376	6,745,560
2001	472,682	2,796,047	1,178,357	1,003,857	27,711	5,478,655	261,086	294,227	35,575	872	591,760	6,070,415
2002	538,846	2,374,276	1,013,838	887,246	19,541	4,833,747	229,356	277,556	37,371	2,311	546,594	5,380,341
2003 <sup>1</sup>	427,301	2,483,361	962,154	1,033,457	24,824	4,931,097	209,694	265,888	35,384	520	511,486	5,442,583
2004 <sup>1</sup>	422,091	2,199,931	969,467	918,681	21,479	4,531,649	211,030	283,870	28,516	312	523,728	5,055,377
2005 <sup>1</sup>	444,305	2,049,383	868,144	1,074,807	30,288	4,466,927	199,226	310,506	33,586	688	544,006	5,010,933
2006 <sup>1</sup>	399,651	2,286,643	709,952	1,249,549	22,616	4,668,411	210,750	373,733	28,928	215	613,626	5,282,037
2007 <sup>1</sup>	429,917	2,514,119	806,861	1,107,485	20,039	4,878,421	200,457	314,166	30,167	1,162	545,952	5,424,373
2008 <sup>1</sup>	503,480	2,282,128	677,267	1,069,968	22,126	4,554,969	202,145	309,163	35,924	488	547,720	5,102,689
2009 <sup>1</sup>	419,279	2,075,916	721,474	896,866	21,078	4,134,613	179,940	259,784	32,736	67	472,527	4,607,140
2010 <sup>1</sup>	394,429	2,228,872	603,214	906,964	32,534	4,166,013	175,298	242,964	28,057	0	446,319	4,612,332
2011 <sup>1</sup>	315,897	2,240,248	773,332	1,059,280	20,338	4,409,095	182,467	294,098	32,990	334	509,889	4,918,984
2012 <sup>1</sup>	325,487	1,882,553	763,143	946,940	17,148	3,935,271	146,026	344,805	36,160	1,343	528,334	4,463,605
2013 <sup>1</sup>	328,029	1,836,788	740,084	715,358	17,125	3,637,384	172,845	343,075	29,986	923	546,829	4,184,213
2014 <sup>1</sup>	294,063	1,992,886	813,668	785,215	18,232	3,904,064	184,550	288,128	26,996	440	500,114	4,404,178
2015 <sup>1</sup>	250,114	1,695,598	714,448	766,165	6,990	3,433,315	184,925	324,548	28,664	0	538,137	3,971,452
2016 <sup>1</sup>	313,511	1,826,117	716,017	830,356	33,144	3,719,145	140,818	307,419	23,686	0	471,923	4,191,068
2017 <sup>1</sup>	286,376	1,643,472	610,977	863,583	21,152	3,425,560	145,999	258,958	25,962	658	431,577	3,857,137
2018 <sup>1</sup>	277,119	1,407,353	651,046	1,023,443	14,830	3,373,791	136,633	288,835	25,204	168	450,840	3,824,631
2019 <sup>1</sup>	222,255	1,454,937	528,764	670,036	20,079	2,896,071	127,401	260,057	22,946	592	410,996	3,307,067
2020 <sup>1</sup>	220,791	1,211,677	568,926	784,139	15,678	2,801,211	107,281	106,541	27,211	522	241,555	3,042,766
2021 <sup>1</sup>	179,879	1,184,068	508,582	658,087	10,864	2,541,480	99,759	158,567	23,439	432	282,197	2,823,677
2022 <sup>1</sup>	169,537	981,547	359,256	521,520	10,808	2,042,668	109,981	176,176	23,705	624	310,486	2,353,154
<b>AVERAGE:</b> 1999-2022	358,423	2,044,097	762,104	928,604	20,462	4,113,689	178,795	284,215	31,269	561	494,840	4,608,529
<b>% CHANGE FROM:</b>												
Prev. Year	-6%	-17%	-29%	-21%	-1%	-20%	10%	11%	1%	44%	10%	-17%
Average	-53%	-52%	-53%	-44%	-47%	-50%	-38%	-38%	-24%	11%	-37%	-49%

<sup>1</sup> Preliminary

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<sup>2</sup> NF, PE, NS, NB, PQ, and ON

# **Goose Harvests in North America**





ESTIMATED TOTAL GOOSE HARVESTS (Harvest Information Survey)

YR											CEN	ATL	MISS	PAC <sup>2</sup>	U.S.	CANADA	U.S. +	
	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	FLYWAY	FLYWAY	FLYWAY	FLYWAY	TOTAL	TOTAL	CANADA	
1999	65,204	85,700	19,407	102,300	7,043	174,000	42,999	167,501	553,099	9,436	1,226,689	495,912	1,275,870	455,307	3,453,778	842,857	4,296,635	
2000	94,975	119,000	35,528	125,701	7,803	139,700	61,801	131,801	639,100	25,613	1,381,022	513,974	1,385,591	433,538	3,714,125	963,917	4,678,042	
2001	65,350	87,499	19,539	100,600	19,708	162,184	24,600	190,000	489,300	13,486	1,172,266	789,170	1,292,293	358,216	3,611,945	992,264	4,604,209	
2002	76,083	115,400	30,874	70,900	8,866	130,200	36,299	156,500	393,354	15,471	1,033,947	782,786	1,186,643	328,281	3,331,657	908,578	4,240,235	
2003 <sup>1</sup>	114,998	159,700	37,717	114,677	6,585	149,799	41,901	185,801	299,399	23,408	1,133,985	737,340	1,528,350	422,194	3,821,869	1,005,736	4,827,605	
2004 <sup>1</sup>	72,505	103,700	27,390	72,700	4,661	138,201	49,801	129,398	248,100	20,619	867,075	682,330	1,235,600	403,124	3,188,129	888,785	4,076,914	
2005 <sup>1</sup>	80,322	108,300	18,210	113,700	5,167	153,302	42,499	103,101	457,300	18,881	1,100,782	841,105	1,275,300	443,362	3,660,549	974,614	4,635,163	
2006 <sup>1</sup>	82,859	90,400	25,483	69,299	3,912	153,700	55,100	158,699	298,400	21,163	959,015	714,287	1,444,901	460,881	3,579,084	999,737	4,578,821	
2007 <sup>1</sup>	74,431	84,699	24,208	71,501	6,517	138,100	62,200	98,999	361,056	11,877	933,588	935,285	1,330,901	464,967	3,664,741	961,027	4,625,768	
2008 <sup>1</sup>	93,528	120,900	16,154	92,700	2,721	133,460	40,100	121,400	272,400	22,529	915,892	1,006,048	1,342,900	557,075	3,821,915	1,156,009	4,977,924	
2009 <sup>1</sup>	77,076	115,201	26,789	82,500	2,878	136,699	32,501	118,500	196,499	17,118	805,761	922,200	1,163,401	435,639	3,327,001	944,761	4,271,762	
2010 <sup>1</sup>	51,663	75,800	18,261	107,108	1,986	130,224	31,755	97,057	252,073	20,524	786,451	832,595	1,131,204	439,827	3,190,077	944,707	4,134,784	
2011 <sup>1</sup>	40,459	91,653	21,785	77,797	8,528	147,610	31,971	106,398	236,157	14,902	777,260	580,417	1,081,670	439,296	2,878,643	1,065,057	3,943,700	
2012 <sup>1</sup>	87,389	92,967	46,313	113,810	5,261	184,865	49,981	140,875	208,387	28,528	958,376	764,500	1,020,719	447,212	3,190,807	1,010,763	4,201,570	
2013 <sup>1</sup>	97,148	151,837	28,769	133,593	2,405	199,593	99,761	153,982	148,754	26,665	1,042,507	705,637	1,195,450	404,626	3,348,220	1,061,069	4,409,289	
2014 <sup>1</sup>	102,460	218,285	46,682	114,603	8,297	190,101	60,805	90,449	340,395	15,791	1,187,868	660,316	995,224	477,697	3,321,105	1,161,892	4,482,997	
2015 <sup>1</sup>	68,911	108,920	41,828	90,927	2,284	162,378	42,119	73,130	92,562	15,086	698,145	515,631	913,083	410,647	2,537,506	1,013,425	3,550,931	
2016 <sup>1</sup>	108,741	127,998	24,767	128,489	2,099	179,612	49,237	87,002	196,634	24,525	929,104	739,649	1,178,171	396,385	3,243,309	980,010	4,223,319	
2017 <sup>1</sup>	118,689	114,793	36,621	143,230	1,132	219,553	60,791	124,973	231,935	35,069	1,086,786	645,360	1,349,984	491,960	3,543,290	1,104,701	4,647,991	
2018 <sup>1</sup>	70,762	65,782	38,069	100,198	8,356	138,519	39,199	74,803	149,526	19,135	704,347	425,388	843,927	491,185	2,464,847	927,486	3,392,333	
2019 <sup>1</sup>	64,495	70,813	46,702	105,729	1,565	159,630	64,883	74,822	173,654	19,351	781,644	425,835	1,023,160	439,665	2,670,304	962,562	3,632,866	
2020 <sup>1</sup>	58,542	106,381	49,321	76,981	3,949	142,341	91,823	137,320	157,441	15,914	840,012	403,914	1,058,447	556,848	2,859,222	618,708	3,477,930	
2021 <sup>1</sup>	79,640	131,181	39,328	108,159	3,489	162,740	75,112	96,253	103,081	27,053	713,584	309,067	1,009,434	413,168	2,445,251	787,739	3,232,990	
2022 <sup>1</sup>	50,838	81,508	25,402	77,718	3,311	100,767	81,900	48,773	74,445	23,196	567,862	298,352	703,630	408,759	1,978,603	787,931	2,766,534	
<b>AVERAGES:</b>	1999-2022	79,045	109,517	31,048	99,788	5,355	155,303	52,881	119,481	273,877	20,223	941,832	655,296	1,165,244	440,827	3,201,916	961,014	4,162,930
<b>% CHANGE FROM:</b>																		
Prev. Year	-36%	-38%	-35%	-28%	-5%	-38%	9%	-49%	-28%	-14%	-20%	-3%	-30%	-1%	-19%	0%	-14%	
Average	-36%	-26%	-18%	-22%	-38%	-35%	55%	-59%	-73%	15%	-40%	-54%	-40%	-7%	-38%	-18%	-34%	

<sup>1</sup> Preliminary

<sup>2</sup> Pacific Flyway total includes Alaska



**ESTIMATED ALL-SEASON HARVESTS OF CACKLING GEESE<sup>2</sup> FOR CENTRAL FLYWAY (Harvest Information Survey)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY
2018 <sup>1</sup>	24,367	14,326	1,644	10,943	1,393	8,648	11,963	559	50,209	995	125,047
2019 <sup>1</sup>	20,902	16,040	989	10,022	0	6,696	19,319	971	32,810	1,329	109,078
2020 <sup>1</sup>	22,201	22,330	3,128	10,104	842	6,073	19,613	6,139	34,951	1,419	126,801
2021 <sup>1</sup>	29,865	13,054	1,229	9,754	872	3,337	31,923	1,216	19,739	1,464	112,454
2022 <sup>1</sup>	13,824	11,711	1,216	5,489	795	2,981	25,418	745	23,652	1,461	87,290

<sup>1</sup> Preliminary

<sup>2</sup> New thresholds used differentiating between Canada and Cackling geese starting in 2018

**ESTIMATED ALL-SEASON HARVESTS OF CANADA GEESE<sup>2</sup> FOR CENTRAL FLYWAY (Harvest Information Survey)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY
2018 <sup>1</sup>	44,251	36,253	35,987	88,186	6,500	100,442	23,927	61,251	21,088	18,140	436,025
2019 <sup>1</sup>	41,057	33,997	45,383	94,038	1,445	117,097	39,174	53,243	24,808	17,578	467,820
2020 <sup>1</sup>	31,875	55,700	45,985	64,712	2,685	101,023	64,002	90,552	12,349	14,433	483,316
2021 <sup>1</sup>	46,575	90,108	34,873	91,232	2,416	96,192	34,927	73,761	25,222	25,450	520,755
2022 <sup>1</sup>	33,588	60,897	22,970	69,815	2,163	64,992	25,418	42,258	17,448	21,279	360,828

<sup>1</sup> Preliminary

<sup>2</sup> New thresholds used differentiating between Canada and Cackling geese starting in 2018

**ESTIMATED ALL-SEASON HARVESTS OF CACKLING AND CANADA GEESE FOR CENTRAL FLYWAY (Harvest Information Survey)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY
2018 <sup>1</sup>	68,618	50,579	37,632	99,129	7,892	109,091	35,890	61,810	71,297	19,135	561,072
2019 <sup>1</sup>	61,958	50,037	46,372	104,059	1,445	123,793	58,493	54,214	57,618	18,908	576,898
2020 <sup>1</sup>	54,077	78,030	49,113	74,816	3,528	107,096	83,615	96,691	47,300	15,852	610,117
2021 <sup>1</sup>	76,440	103,162	36,102	100,986	3,288	99,529	66,850	74,976	44,961	26,914	633,209
2022 <sup>1</sup>	47,411	72,608	24,187	75,303	2,958	67,973	50,835	43,002	41,100	22,740	448,118

<sup>1</sup> Preliminary



# **Goose Age Ratios in the United States Harvest**

**CANADA GOOSE AGE RATIOS (IMM/ADULT)<sup>2</sup>  
IN THE ENTIRE SEASON HARVEST**  
Derived from the Parts Collection Survey

YEAR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999	0.55	0.60	0.54	0.67	0.59
2000	0.53	0.41	0.50	0.60	0.49
2001	0.58	0.48	0.59	0.56	0.53
2002	0.45	0.40	0.61	0.51	0.50
2003 <sup>1</sup>	0.53	0.56	0.55	0.71	0.56
2004 <sup>1</sup>	0.40	0.46	0.38	0.61	0.43
2005 <sup>1</sup>	0.54	0.62	0.52	0.47	0.54
2006 <sup>1</sup>	0.47	0.53	0.54	0.45	0.51
2007 <sup>1</sup>	0.40	0.40	0.50	0.44	0.44
2008 <sup>1</sup>	0.51	0.59	0.51	0.38	0.52
2009 <sup>1</sup>	0.57	0.37	0.47	0.50	0.46
2010 <sup>1</sup>	0.60	0.63	0.55	0.45	0.57
2011 <sup>1</sup>	0.64	0.34	0.52	0.50	0.49
2012 <sup>1</sup>	0.55	0.46	0.40	0.45	0.46
2013 <sup>1</sup>	0.36	0.47	0.39	0.60	0.42
2014 <sup>1</sup>	0.47	0.36	0.37	0.59	0.42
2015 <sup>1</sup>	0.38	0.41	0.47	0.47	0.43
2016 <sup>1</sup>	0.44	0.44	0.42	0.71	0.46
2017 <sup>1</sup>	0.49	0.50	0.41	0.51	0.46
2018 <sup>1</sup>	0.28	0.24	0.32	0.40	0.30
2019 <sup>1</sup>	0.35	0.41	0.36	0.35	0.37
2020 <sup>1</sup>	0.46	0.48	0.37	0.36	0.41
2021 <sup>1</sup>	0.41	0.40	0.36	0.28	0.37
2022 <sup>1</sup>	0.25	0.36	0.33	0.24	0.30

<sup>1</sup>Preliminary  
<sup>2</sup> cackling geese calculated separately after 2020

**SNOW GOOSE (LESSER & GREATER) AGE RATIOS (IMM/ADULT)  
IN THE ENTIRE SEASON HARVEST**  
Derived from the Parts Collection Survey

YEAR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999	0.47	0.02	0.57	0.69	0.48
2000	0.34	1.77	0.41	0.39	0.44
2001	0.53	1.48	0.72	0.31	0.66
2002	0.32	0.27	0.27	0.42	0.31
2003 <sup>1</sup>	0.46	1.14	0.78	0.87	0.66
2004 <sup>1</sup>	0.19	1.02	0.22	0.51	0.26
2005 <sup>1</sup>	0.45	0.73	0.42	1.39	0.64
2006 <sup>1</sup>	0.50	0.54	0.70	0.70	0.60
2007 <sup>1</sup>	0.24	0.56	0.34	0.64	0.45
2008 <sup>1</sup>	0.56	1.48	0.27	0.18	0.62
2009 <sup>1</sup>	0.16	0.26	0.29	0.67	0.35
2010 <sup>1</sup>	0.46	0.45	0.40	0.59	0.48
2011 <sup>1</sup>	0.41	0.77	0.63	0.85	0.67
2012 <sup>1</sup>	0.39	0.42	0.27	0.73	0.45
2013 <sup>1</sup>	0.28	0.53	0.85	0.36	0.51
2014 <sup>1</sup>	0.50	1.03	0.43	0.50	0.62
2015 <sup>1</sup>	0.29	0.79	0.27	0.78	0.51
2016 <sup>1</sup>	0.57	0.55	0.38	0.76	0.58
2017 <sup>1</sup>	0.56	1.41	0.77	0.81	0.69
2018 <sup>1</sup>	0.08	0.05	0.19	0.39	0.22
2019 <sup>1</sup>	0.36	0.50	0.46	0.87	0.56
2020 <sup>1</sup>	0.23	0.55	0.17	0.54	0.35
2021 <sup>1</sup>	0.27	0.30	0.55	0.61	0.46
2022 <sup>1</sup>	0.62	0.60	1.20	0.71	0.66

<sup>1</sup>Preliminary

**CACKLING GOOSE AGE RATIOS (IMM/ADULT)<sup>2</sup>  
IN THE ENTIRE SEASON HARVEST**  
Derived from the Parts Collection Survey

YEAR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999					
2000					
2001					
2002					
2003 <sup>1</sup>					
2004 <sup>1</sup>					
2005 <sup>1</sup>					
2006 <sup>1</sup>					
2007 <sup>1</sup>					
2008 <sup>1</sup>					
2009 <sup>1</sup>					
2010 <sup>1</sup>					
2011 <sup>1</sup>					
2012 <sup>1</sup>					
2013 <sup>1</sup>					
2014 <sup>1</sup>					
2015 <sup>1</sup>					
2016 <sup>1</sup>					
2017 <sup>1</sup>					
2018 <sup>1</sup>					
2019 <sup>1</sup>					
2020 <sup>1</sup>					
2021 <sup>1</sup>	0.59		4.44	0.56	0.63
2022 <sup>1</sup>	0.40		0.61	0.48	

<sup>1</sup>Preliminary  
<sup>2</sup> cackling geese included with Canada geese prior to 2021  
\*Years without an age ratio estimate had <50 tails in the sample

**ROSS'S GOOSE AGE RATIOS (IMM/ADULT)  
IN THE ENTIRE SEASON HARVEST**  
Derived from the Parts Collection Survey

YEAR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999	2.64			1.04	2.23
2000	1.08			0.50	0.98
2001	1.96			0.72	1.92
2002	0.98			0.69	0.95
2003 <sup>1</sup>	2.22			1.25	1.93
2004 <sup>1</sup>	0.34			0.24	0.35
2005 <sup>1</sup>	1.55			0.91	1.60
2006 <sup>1</sup>	1.37			0.90	1.79
2007 <sup>1</sup>	0.91			0.22	0.64
2008 <sup>1</sup>	1.57		2.07	0.39	1.26
2009 <sup>1</sup>	0.70			0.10	0.54
2010 <sup>1</sup>	0.93			0.19	0.60
2011 <sup>1</sup>	1.22			0.31	0.74
2012 <sup>1</sup>	0.89			0.15	0.56
2013 <sup>1</sup>	1.06			0.36	0.79
2014 <sup>1</sup>	0.85			0.32	0.86
2015 <sup>1</sup>	0.61			0.69	0.68
2016 <sup>1</sup>	1.07		0.88	0.77	0.96
2017 <sup>1</sup>	0.79		1.48	0.86	0.96
2018 <sup>1</sup>	0.11			0.29	0.16
2019 <sup>1</sup>	0.97		1.25	0.71	0.92
2020 <sup>1</sup>	0.53			1.78	0.88
2021 <sup>1</sup>	0.77		0.95	1.51	1.06
2022 <sup>1</sup>	1.54			2.33	2.36

<sup>1</sup>Preliminary  
\*Years without an age ratio estimate had <50 tails in the sample

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**WHITE-FRONTED GOOSE AGE RATIOS (IMM/ADULT)  
IN THE ENTIRE SEASON HARVEST**  
Derived from the Parts Collection Survey

YEAR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
1999	0.74		0.86	1.57	0.85
2000	0.57		0.44	0.80	0.54
2001	0.46		0.66	0.68	0.58
2002	0.50		0.49	0.32	0.47
2003 <sup>1</sup>	1.27		0.82	0.53	0.92
2004 <sup>1</sup>	0.65		0.44	0.72	0.55
2005 <sup>1</sup>	0.81		0.58	1.16	0.77
2006 <sup>1</sup>	1.16		0.91	0.86	0.97
2007 <sup>1</sup>	0.70		0.31	0.68	0.48
2008 <sup>1</sup>	0.50		0.35	0.72	0.50
2009 <sup>1</sup>	0.50		0.35	0.72	0.50
2010 <sup>1</sup>	0.70		0.46	0.94	0.66
2011 <sup>1</sup>	0.87		1.06	0.71	0.87
2012 <sup>1</sup>	0.70		0.35	0.77	0.56
2013 <sup>1</sup>	0.76		0.48	0.43	0.53
2014 <sup>1</sup>	0.67		0.52	0.52	0.58
2015 <sup>1</sup>	0.69		0.78	1.05	0.83
2016 <sup>1</sup>	0.39		0.71	0.75	0.62
2017 <sup>1</sup>	0.56		0.64	0.29	0.53
2018 <sup>1</sup>	0.29		0.24	0.44	0.31
2019 <sup>1</sup>	0.56		0.63	0.55	0.60
2020 <sup>1</sup>	0.46		0.44	0.56	0.49
2021 <sup>1</sup>	0.37		0.57	0.50	0.52
2022 <sup>1</sup>	0.35		0.45	0.36	0.41

<sup>1</sup>Preliminary  
\*Years without an age ratio estimate had <50 tails in the sample

**Webless Game Bird  
Harvests, Hunter Activity,  
and Success in the  
United States**



**ESTIMATED CENTRAL UNIT WHITE-WINGED DOVE HARVEST (Harvest Information Program)**

YR	CO	KS	NM	OK	TX	CU	EU	WU	U.S.
2003 <sup>1</sup>	0	954	40,353	4,652	778,155	824,115	12,867	159,887	996,869
2004 <sup>1</sup>	0	769	46,536	3,527	1,066,300	1,117,132	4,653	171,421	1,293,207
2005 <sup>1</sup>	2,873	1,689	52,094	7,993	1,095,132	1,159,780	12,385	174,014	1,346,179
2006 <sup>1</sup>	906	2,092	66,105	5,514	974,501	1,049,117	46,054	164,300	1,259,471
2007 <sup>1</sup>	3,293	8,778	64,014	17,081	1,522,099	1,615,265	53,180	196,326	1,864,771
2008 <sup>1</sup>	4,813	1,324	49,070	5,241	1,314,921	1,375,368	58,411	179,894	1,613,673
2009 <sup>1</sup>	4,809	4,137	64,527	5,518	1,243,489	1,322,480	85,705	192,735	1,600,920
2010 <sup>1</sup>	4,877	2,229	29,475	4,610	1,436,829	1,478,019	22,051	165,176	1,665,245
2011 <sup>1</sup>	4,109	5,780	34,758	4,261	1,551,987	1,600,896	46,500	198,333	1,845,729
2012 <sup>1</sup>	8,511	0	79,530	3,579	1,414,818	1,506,439	26,032	128,942	1,661,412
2013 <sup>1</sup>	2,268	2,572	33,823	5,341	1,299,710	1,343,714	30,648	152,180	1,526,541
2014 <sup>1</sup>	1,470	2,274	60,856	7,199	1,767,860	1,839,659	28,180	138,725	2,006,565
2015 <sup>1</sup>	955	301	62,316	5,888	1,963,071	2,032,531	9,544	120,001	2,162,076
2016 <sup>1</sup>	2,326	280	35,573	10,701	1,469,670	1,518,551	16,875	131,704	1,667,130
2017 <sup>1</sup>	1,755	289	22,360	13,293	1,252,803	1,290,451	25,171	109,412	1,425,035
2018 <sup>1</sup>	2,924	410	44,943	7,837	1,481,229	1,537,343	23,393	110,752	1,671,488
2019 <sup>1</sup>	1,004	1,873	44,972	5,675	1,574,562	1,628,087	27,580	92,380	1,748,047
2020 <sup>1</sup>	2,969	248	82,295	10,443	939,590	1,035,545	31,065	95,608	1,162,583
2021 <sup>1</sup>	479	1,266	63,121	4,023	1,267,484	1,336,373	9,650	167,783	1,513,806
2022 <sup>1</sup>	2,779	11,248	27,787	4,938	771,985	818,736	43,448	83,590	945,774
AVERAGE: 2003-2022	2,656	2,426	50,225	6,866	1,309,310	1,371,480	30,670	146,658	1,548,826

<sup>1</sup>Preliminary

**ESTIMATES OF TOTAL CENTRAL UNIT WHITE-WINGED DOVE HUNTER DAYS AFIELD BY STATE OF HARVEST (Harvest Information Program)**

YR	CO	KS	NM	OK	TX	CU	EU	WU	U.S.
2003 <sup>1</sup>	-	1,823	15,018	1,034	357,028	374,903	15,497	101,501	491,901
2004 <sup>1</sup>	-	915	13,401	3,394	383,283	400,993	5,857	112,463	519,313
2005 <sup>1</sup>	3,079	1,419	20,998	5,830	432,998	464,324	9,471	94,405	568,200
2006 <sup>1</sup>	2,451	4,266	17,464	8,719	459,378	492,278	26,897	89,739	608,914
2007 <sup>1</sup>	19,712	6,170	26,351	11,232	519,507	582,972	39,189	102,147	724,308
2008 <sup>1</sup>	9,137	3,376	13,740	8,487	468,181	502,921	31,228	124,451	658,600
2009 <sup>1</sup>	6,588	3,885	20,388	4,756	425,005	460,622	38,983	105,780	605,385
2010 <sup>1</sup>	4,331	4,489	10,388	8,426	470,352	497,986	20,680	117,099	635,765
2011 <sup>1</sup>	3,701	4,444	16,839	6,776	458,529	490,289	31,459	98,949	620,697
2012 <sup>1</sup>	5,602	2,400	24,400	3,594	423,317	456,913	31,694	81,296	569,903
2013 <sup>1</sup>	2,789	4,277	13,089	11,385	359,966	391,506	27,038	95,867	514,411
2014 <sup>1</sup>	4,244	4,920	15,555	9,915	472,834	507,467	30,406	30,406	611,851
2015 <sup>1</sup>	3,635	5,805	13,182	5,523	511,578	539,723	16,871	59,615	616,209
2016 <sup>1</sup>	1,291	421	9,848	5,748	522,096	539,405	12,768	72,944	625,117
2017 <sup>1</sup>	3,504	2,115	7,949	9,274	407,384	430,226	25,438	63,823	519,487
2018 <sup>1</sup>	2,543	205	18,271	2,409	374,924	398,352	14,094	56,552	468,997
2019 <sup>1</sup>	3,475	3,709	13,850	7,919	426,523	454,475	14,805	45,782	515,062
2020 <sup>1</sup>	4,341	2,371	23,562	7,718	469,843	507,835	25,759	52,220	588,209
2021 <sup>1</sup>	1,877	2,442	23,613	6,618	333,500	368,050	10,742	51,038	429,830
2022 <sup>1</sup>	2,422	9,219	10,647	7,161	204,645	234,094	22,809	43,891	300,793
AVERAGE: 2003-2022	4,236	3,314	16,428	6,796	424,044	454,767	22,584	79,998	559,648

<sup>1</sup>Preliminary

**ESTIMATES OF ACTIVE NUMBERS OF CENTRAL UNIT WHITE-WINGED DOVE HUNTERS BY STATE OF HARVEST IN THE CENTRAL MANAGEMENT UNIT (Harvest Information Program)**

YR	CO	KS	NM	OK	TX
2003 <sup>1</sup>	0	399	3,299	258	77,211
2004 <sup>1</sup>	0	366	3,383	710	106,369
2005 <sup>1</sup>	961	335	4,002	2,219	109,257
2006 <sup>1</sup>	1,135	562	3,639	1,895	105,319
2007 <sup>1</sup>	2,332	1,789	5,038	2,884	133,208
2008 <sup>1</sup>	3,286	1,306	3,174	2,104	134,888
2009 <sup>1</sup>	2,493	1,804	3,662	1,768	108,579
2010 <sup>1</sup>	1,998	1,124	3,011	2,526	129,213
2011 <sup>1</sup>	1,343	1,547	4,555	1,801	119,769
2012 <sup>1</sup>	2,363	4,803	870	870	108,125
2013 <sup>1</sup>	1,744	1,625	3,123	3,924	93,848
2014 <sup>1</sup>	1,861	1,304	4,264	1,851	130,377
2015 <sup>1</sup>	1,402	1,519	3,486	2,155	133,697
2016 <sup>1</sup>	415	140	2,748	2,496	137,537
2017 <sup>1</sup>	2,097	1,397	3,100	2,627	118,295
2018 <sup>1</sup>	772	189	6,209	1,247	130,514
2019 <sup>1</sup>	888	1,224	4,653	1,776	125,880
2020 <sup>1</sup>	2,190	1,918	6,222	2,633	121,104
2021 <sup>1</sup>	1,009	1,100	6,997	2,346	96,389
2022 <sup>1</sup>	1,344	4,527	3,515	3,933	99,857

<sup>1</sup>Preliminary

**AVERAGE SEASONAL CENTRAL UNIT WHITE-WINGED DOVE BAG PER HUNTER BY STATE OF HARVEST IN THE CENTRAL MANAGEMENT UNIT (Harvest Information Program)**

YR	CO	KS	NM	OK	TX
2003 <sup>1</sup>	0.0	2.4	12.2	18.0	10.1
2004 <sup>1</sup>	0.0	2.1	13.8	5.0	10.0
2005 <sup>1</sup>	3.0	5.0	13.0	3.6	10.0
2006 <sup>1</sup>	0.8	3.7	18.2	2.9	9.3
2007 <sup>1</sup>	1.4	4.9	12.7	5.9	11.4
2008 <sup>1</sup>	1.5	1.0	15.5	2.5	9.7
2009 <sup>1</sup>	1.9	2.3	17.6	3.1	11.5
2010 <sup>1</sup>	2.4	2.0	9.8	1.8	11.1
2011 <sup>1</sup>	3.1	3.7	7.6	2.4	13.0
2012 <sup>1</sup>	3.6	1.6	16.6	4.1	13.1
2013 <sup>1</sup>	1.3	1.6	10.8	1.4	13.8
2014 <sup>1</sup>	0.8	1.7	14.3	3.9	13.6
2015 <sup>1</sup>	0.7	0.2	17.9	2.7	14.7
2016 <sup>1</sup>	5.6	2.0	12.9	4.3	10.7
2017 <sup>1</sup>	0.8	0.2	7.2	5.1	10.6
2018 <sup>1</sup>	3.8	2.2	7.2	6.3	11.4
2019 <sup>1</sup>	1.1	1.5	9.7	3.2	12.5
2020 <sup>1</sup>	1.4	0.1	13.2	4.0	7.8
2021 <sup>1</sup>	0.5	1.2	9.0	1.7	13.1
2022 <sup>1</sup>	2.1	2.5	7.9	1.3	7.7

<sup>1</sup>Preliminary

**ESTIMATED FOUR CORNERS BAND-TAILED PIGEON HARVEST (Harvest Information Program)**

YR	AZ	CO	NM	UT	Four Corners	Pacific Coast	U.S.
2003 <sup>1</sup>	1,400	900	400	100	2,800	14,400	17,200
2004 <sup>1</sup>	1,400	500	700	200	2,800	17,900	20,700
2005 <sup>1</sup>	2,200	100	300	100	2,700	13,500	16,200
2006 <sup>1</sup>	500	600	100	400	1,600	14,900	16,500
2007 <sup>1</sup>	1,000	900	2,800	200	4,900	12,700	17,600
2008 <sup>1</sup>	1,614	2,523	582	0	4,719	30,151	34,870
2009 <sup>1</sup>	2,339	1,396	1,270	0	5,005	22,638	27,643
2010 <sup>1</sup>	671	1,457	2,661	223	5,012	18,384	23,396
2011 <sup>1</sup>	952	298	466	93	1,809	11,933	13,742
2012 <sup>1</sup>	1,325	1,091	332	98	2,846	10,851	13,697
2013 <sup>1</sup>	879	40	190	509	1,618	6,808	8,327
2014 <sup>1</sup>	736	424	207	142	1,509	12,033	13,543
2015 <sup>1</sup>	464	171	100	17	752	7,347	8,098
2016 <sup>1</sup>	479	213	177	239	1,108	5,865	6,972
2017 <sup>1</sup>	82	30	163	0	276	6,033	6,308
2018 <sup>1</sup>	128	N/A	58	11	197	11,631	11,828
2019 <sup>1</sup>	487	16	52	43	599	9,685	10,284
2020 <sup>1</sup>	73	4	219	46	342	6,082	6,423
2021 <sup>1</sup>	126	41	122	17	306	5,564	5,870
2022 <sup>1</sup>	329	49	231	0	608	2,851	3,459
AVERAGE: 2003-2022	859	566	556	122	2,075	12,063	14,133

<sup>1</sup> Preliminary

**ESTIMATES OF TOTAL FOUR CORNERS BAND-TAILED PIGEON HUNTER DAYS AFIELD BY STATE OF HARVEST (Harvest Information Program)**

YR	AZ	CO	NM	UT	Four Corners	Pacific Coast	U.S.
2003 <sup>1</sup>	3,700	2,100	1,400	600	7,800	18,200	26,000
2004 <sup>1</sup>	2,300	700	300	100	3,400	13,900	17,300
2005 <sup>1</sup>	1,600	300	400	200	2,500	11,000	13,500
2006 <sup>1</sup>	1,100	1,700	300	200	3,300	15,400	18,700
2007 <sup>1</sup>	5,000	3,800	3,600	400	12,800	13,500	26,300
2008 <sup>1</sup>	3,316	6,080	2,140	677	12,213	31,284	43,498
2009 <sup>1</sup>	4,146	6,127	2,343	593	13,209	24,384	37,593
2010 <sup>1</sup>	5,819	3,895	3,195	670	13,578	13,679	27,257
2011 <sup>1</sup>	944	652	851	340	2,787	12,769	15,556
2012 <sup>1</sup>	4,765	1,292	540	196	6,794	9,795	16,589
2013 <sup>1</sup>	840	539	376	254	2,009	6,201	8,209
2014 <sup>1</sup>	1,915	778	274	355	3,322	8,779	12,100
2015 <sup>1</sup>	1,727	628	493	133	2,981	6,187	9,168
2016 <sup>1</sup>	421	136	128	130	815	6,335	7,149
2017 <sup>1</sup>	140	56	296	32	524	6,125	6,649
2018 <sup>1</sup>	566	N/A	210	57	833	8,929	9,762
2019 <sup>1</sup>	1,760	62	191	73	2,086	10,677	12,764
2020 <sup>1</sup>	1,378	54	385	80	1,897	5,001	6,898
2021 <sup>1</sup>	1,020	150	265	74	1,509	6,267	7,776
2022 <sup>1</sup>	816	73	363	151	1,402	2,334	3,736
AVERAGE: 2003-2022	2,164	1,533	903	266	4,788	11,537	16,325

<sup>1</sup> Preliminary

**ESTIMATES OF ACTIVE NUMBERS OF FOUR CORNERS BAND-TAILED PIGEON HUNTERS BY STATE OF HARVEST IN THE FOUR CORNERS POPULATION (Harvest Information Program)**

YR	AZ	CO	NM	UT
2003 <sup>1</sup>	1,500	400	400	300
2004 <sup>1</sup>	900	300	100	<50
2005 <sup>1</sup>	800	200	100	100
2006 <sup>1</sup>	600	900	100	200
2007 <sup>1</sup>	2,100	1,400	800	300
2008 <sup>1</sup>	1,288	2,324	550	315
2009 <sup>1</sup>	1,322	2,390	500	198
2010 <sup>1</sup>	1,770	1,068	931	335
2011 <sup>1</sup>	538	210	257	155
2012 <sup>1</sup>	1,087	285	146	131
2013 <sup>1</sup>	380	242	113	254
2014 <sup>1</sup>	982	297	150	71
2015 <sup>1</sup>	596	214	140	67
2016 <sup>1</sup>	129	58	56	22
2017 <sup>1</sup>	82	32	105	12
2018 <sup>1</sup>	149	N/A	94	19
2019 <sup>1</sup>	488	34	68	30
2020 <sup>1</sup>	370	30	109	37
2021 <sup>1</sup>	319	71	117	31
2022 <sup>1</sup>	498	55	198	53

<sup>1</sup> Preliminary

**AVERAGE SEASONAL FOUR CORNERS BAND-TAILED PIGEON BAG PER HUNTER BY STATE OF HARVEST IN THE FOUR CORNERS POPULATION (Harvest Information Program)**

YR	AZ	CO	NM	UT
2003 <sup>1</sup>	1.0	2.3	1.1	0.5
2004 <sup>1</sup>	1.5	1.6	4.9	3.8
2005 <sup>1</sup>	2.6	0.8	3.2	1.5
2006 <sup>1</sup>	0.9	0.7	0.4	2.5
2007 <sup>1</sup>	0.5	0.6	3.5	0.6
2008 <sup>1</sup>	1.3	1.1	1.1	0.0
2009 <sup>1</sup>	1.8	0.6	2.5	0.0
2010 <sup>1</sup>	0.4	1.4	2.9	0.7
2011 <sup>1</sup>	1.8	1.4	1.8	0.6
2012 <sup>1</sup>	1.2	3.8	2.3	0.8
2013 <sup>1</sup>	2.3	0.2	1.7	2.0
2014 <sup>1</sup>	0.8	1.4	1.4	2.0
2015 <sup>1</sup>	0.8	0.8	0.7	0.3
2016 <sup>1</sup>	3.7	3.7	3.1	11.0
2017 <sup>1</sup>	1.0	0.9	1.6	0.0
2018 <sup>1</sup>	0.9	N/A	0.6	0.6
2019 <sup>1</sup>	1.0	0.5	0.8	1.4
2020 <sup>1</sup>	0.2	0.1	2.0	1.3
2021 <sup>1</sup>	0.4	0.6	1.0	0.5
2022 <sup>1</sup>	0.7	0.9	1.2	0.0

<sup>1</sup> Preliminary



# **Waterfowl Population Surveys**





# **Tundra Swan Harvests**

**ESTIMATED RETRIEVED HARVESTS OF EASTERN AND WESTERN POPULATION TUNDRA SWANS**

Year	EASTERN POPULATION							WESTERN POPULATION					TOTAL	
	MT	ND	SD	DE	NC	VA	TOTAL	UT	ID	NV	MT	AK		TOTAL
1962								320					320	320
1963								392					392	392
1964								335					335	335
1965								336					336	336
1966								491					491	491
1967								246					246	246
1968								520					520	520
1969								1,377		87			1,464	1,464
1970								1,078		208	179		1,465	1,465
1971								1,109		102	91		1,302	1,302
1972								1,028		124	150		1,302	1,302
1973								1,191		109	101		1,401	1,401
1974								1,377		190	259		1,826	1,826
1975								1,383		188	266		1,837	1,837
1976								1,109		206	139		1,454	1,454
1977								1,575		84	214		1,873	1,873
1978								1,152		90	146		1,388	1,388
1979								1,293		214	275		1,782	1,782
1980								1,156		103	250		1,509	1,509
1981								1,619		301	177		2,097	2,097
1982								1,244		161	139		1,544	1,544
1983	34						34	1,168		169	218		1,555	1,589
1984	22				313		335	1,194		229	221		1,644	1,979
1985	19				2,523		2,542	673		145	185		1,003	3,545
1986	41				2,302		2,343	947		230	200		1,343	3,686
1987	27				2,684	117	2,828	600		94	280		974	3,802
1988	25	191			2,488	117	2,821	854		78	260	16	1,208	4,029
1989	41	511			2,128	133	2,813	694		81	302	17	1,094	3,907
1990	59	474	339		2,855	128	3,855	874		67	275	16	1,232	5,087
1991	52	704	444		2,940	205	4,345	774		62	79	8	923	5,268
1992	37	833	814		2,609	187	4,480	450		29	221	17	717	5,197
1993	18	712	545		2,773	130	4,178	337		55	290	26	708	4,886
1994	62	690	483		3,750	194	5,179	768		89	326	40	1,223	6,402
1995	56	805	172		2,833	217	4,083	682		72	182	57	993	5,076
1996	61	663	233		2,177	195	3,329	1,578		119	302	50	2,049	5,378
1997	101	870	403		2,325	217	3,916	1,371		131	300	58	1,860	5,776
1998	81	618	233		2,363	248	3,543	2,040		185	276	51	2,552	6,095
1999	93	867	223		2,290	128	3,601	1,564		212	226	91	2,094	5,695
2000	115	633	151		2,515	179	3,593	666		78	217	112	1,073	4,666
2001	93	561	337		2,322	144	3,457	271		62	289	113	735	4,192
2002	51	688	193		2,363	177	3,472	548		45	167	51	811	4,283
2003	56	235	41		2,355	174	2,861	795		78	119	77	1,069	3,930
2004	105	719	134		1,745	159	2,862	657		83	255	51	1,046	3,908
2005	93	772	137		2,436	195	3,633	899		100	284	41	1,324	4,957
2006	64	611	163		2,291	163	3,292	904		155	169	71	1,299	4,591
2007	64	652	144		2,313	193	3,366	884		217	306	64	1,471	4,837
2008	53	886	220		2,501	243	3,903	731		136	199	67	1,133	5,036
2009	70	956	297		2,239	165	3,727	812		56	292	80	1,241	4,968
2010	44	745	191		2,535	229	3,744	725		118	209	60	1,112	4,856
2011	65	704	261		2,494	145	3,669	695		144	247	95	1,181	4,850
2012	77	611	157		2,538	172	3,555	929		203	294	55	1,481	5,036
2013	67	769	306		2,509	170	3,821	376		26	239	62	703	4,524
2014	401	795	280		2,509	165	4,150	768		25	167	47	1,007	5,157
2015	105	635	229		2,611	173	3,753	903		8	264	70	1,246	4,999
2016	86	562	82		2,045	131	2,906	812		127	222	36	1,198	4,104
2017	47	772	232		3,206	252	4,509	833		127	112	28	1,100	5,609
2018	58	857	179		2,812	204	4,110	947		233	121	38	1,339	5,449
2019	50	702	214	40	2,942	197	4,145	1,188		228	148	66	1,630	5,775
2020	76	543	189	22	2,473	132	3,435	1,350	18	266	157	38	1,829	5,264
2021	87	316	86	35	2,389	133	3,046	1,072	18	126	238	90	1,544	4,590
2022	98	725	142	180	2,558	151	3,854	885	11	149	220	24	1,289	5,143
AVERAGES:														
1962-69								502		87			513	513
1970-79								1,230		152	182		1,563	1,563
1980-89	30	351			2,073	122	1,959	1,015		156	223	17	1,397	2,769
1990-99	62	724	389		2,692	185	4,051	1,044		102	248	41	1,435	5,486
2000-09	59	671	182		2,308	179	3,417	717		101	230	73	1,120	4,537
2010-19	100	715	213	40	2,620	184	3,836	818		124	203	56	1,200	5,036
2020-29	87	528	139	79	2,473	139	3,445	1,102	16	180	205	51	1,554	4,999
Start-2022	71	668	250	69	2,463	174	3,427	881	16	120	227	54	1,276	4,703

# Central Flyway Frameworks

**SUMMARY OF CENTRAL FLYWAY FRAMEWORKS FOR REGULAR CANADA GOOSE SEASONS, 2015-2024**

**2015      2016      2017      2018      2019      2020      2021      2022      2023      2024**

**EAST TIER STATES - ND, SD, NE, KS, OK, & Eastern Goose Zone of TX**

Beginning Shooting Time	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise
Ending Shooting Time	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset
Earliest Opening Date	September 26	September 24	September 23	September 22	September 21	September 26	September 25	September 24	September 23
Latest Closing Date	February 14	February 12	February 18	February 17	February 16	February 14	February 13	February 12	February 18
Season Length	107	107	107	107	107	107	107	107	107
Daily Bag/Possession	8/24	8/24	8/24	8/24	8/24	8/24	8/24	8/24	24-Aug

**WEST TIER STATES - MT, WY, CO, NM, & Western Goose Zone of TX**

Beginning Shooting Time	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise
Ending Shooting Time	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset
Earliest Opening Date	September 26	September 24	September 23	September 22	September 21	September 26	September 25	September 24	September 23
Latest Closing Date	February 14	February 12	February 18	February 17	February 16	February 14	February 13	February 12	February 18
Season Length <sup>1</sup>	107/95	107/95	107/95	107/95	107/95	107/95	107/95	107/95	107/95
Daily Bag/Possession	5/15	5/15	5/15	5/15	5/15	5/15	5/15	5/15	15-May

<sup>1</sup> MT, WY, CO, NM/Western Goose Zone of TX.

**SUMMARY OF CENTRAL FLYWAY FRAMEWORKS FOR LIGHT GOOSE HUNTING, 2015-2024**

2015
2016
2017
2018
2019
2020
2021
2022
2023
2024

**EAST TIER STATES - ND, SD, NE, KS, OK, & Eastern Goose Zone of TX**

Beginning Shooting Time	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise
Ending Shooting Time	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset
Earliest Opening Date	September 26	September 24	September 23	September 22	September 21	September 26	September 25	September 24	September 23
Latest Closing Date	March 10	March 10	March 10	March 10	March 10	March 10	March 10	March 10	March 10
Season Length	107	107	107	107	107	107	107	107	107
Daily Bag/Possession	50/None	50/None	50/None	50/None	50/None	50/None	50/None	50/None	50/None

**WEST TIER STATES - MT, WY, CO, NM, & Western Goose Zone of TX**

Beginning Shooting Time	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise
Ending Shooting Time	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset
Earliest Opening Date	September 26	September 24	September 23	September 22	September 21	September 26	September 25	September 24	September 23
Latest Closing Date	March 10	March 10	March 10	March 10	March 10	March 10	March 10	March 10	March 10
Season Length	107	107	107	107	107	107	107	107	107
Daily Bag/Possession	50/None	50/None	50/None	50/None	50/None	50/None	50/None	50/None	50/None

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24-Jan-24



# SUMMARY OF CENTRAL FLYWAY FRAMEWORKS FOR SANDHILL CRANE HUNTING, 2015-2024<sup>4</sup>

## Mid-Continent Population-All states except Nebraska

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Beginning Shooting Time	1/2 hr. before sunrise <sup>1</sup>	1/2 hr. before sunrise <sup>1</sup>	1/2 hr. before sunrise <sup>1</sup>	1/2 hr. before sunrise <sup>1</sup>	1/2 hr. before sunrise <sup>1</sup>	1/2 hr. before sunrise <sup>1</sup>	1/2 hr. before sunrise <sup>1</sup>	1/2 hr. before sunrise <sup>1</sup>	1/2 hr. before sunrise <sup>1</sup>	1/2 hr. before sunrise <sup>1</sup>
Ending Shooting Time	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset
Opening Date	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01
Closing Date	Feb 28	Feb 28	Feb 28	Feb 28	Feb 28	Feb 28	Feb 28	Feb 28	Feb 28	Feb 28
Season Length	93 <sup>2</sup> , 58 <sup>3</sup> , 37 <sup>6</sup>	93 <sup>2</sup> , 58 <sup>3</sup> , 37 <sup>6</sup>	93 <sup>2</sup> , 58 <sup>3</sup> , 37 <sup>6</sup>	93 <sup>2</sup> , 58 <sup>3</sup> , 37 <sup>6</sup>	93 <sup>2</sup> , 58 <sup>3</sup> , 37 <sup>6</sup>	93 <sup>2</sup> , 58 <sup>3</sup> , 37 <sup>6</sup>	93 <sup>2</sup> , 58 <sup>3</sup> , 37 <sup>6</sup>	93 <sup>2</sup> , 58 <sup>3</sup> , 37 <sup>6</sup>	93 <sup>2</sup> , 58 <sup>3</sup> , 37 <sup>6</sup>	93 <sup>2</sup> , 58 <sup>3</sup> , 37 <sup>6</sup>
Daily Bag/Possession <sup>5</sup>	3 9	3 9	3 9	3 9	3 9	3 9	3 9	3 9	3 9	3 9

<sup>1</sup> Kansas begins at sunrise.

<sup>2</sup> OK and portions of TX and NM.

<sup>3</sup> CO, KS, MT, ND, portions of SD and WY.

<sup>4</sup> Area 2 in ND and Area C in TX.

<sup>5</sup> Bag/possession limit is 2/6 in Area 2 in ND and Area C in TX.

<sup>6</sup> Area C in TX.

## Rocky Mountain Population-RMP hunt areas in CO, MT, NM, WY

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Beginning Shooting Time	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise
Ending Shooting Time	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset
Opening Date	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01	Sep 01
Closing Date	Jan 31	Jan 31	Jan 31	Jan 31	Jan 31	Jan 31	Jan 31	Jan 31	Jan 31	Jan 31
Season Length	30	30	30	60 <sup>1</sup>	60 <sup>1</sup>	60 <sup>1</sup>	60 <sup>1</sup>	60 <sup>1</sup>	60 <sup>1</sup>	60 <sup>1</sup>
Daily Bag/Possession	3 9/season	3 9/season	3 9/season	3 9/season	3 9/season	3 9/season	3 9/season	3 9/season	3 9/season	3 9/season

<sup>1</sup> Season may not be split into more than 3 segments.



**SUMMARY OF CENTRAL FLYWAY FRAMEWORKS FOR DUCK HUNTING, 2015-2024**

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Beginning Shooting Time	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise	1/2 hr. before sunrise
Ending Shooting Time	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset	Sunset
Opening Date	Sep 26	Sep 24	Sep 23	Sep 22	Sep 21	Sep 26	Sep 25	Sep 24	Sep 23	
Closing Date	Jan 31	Jan 29	Jan 28	Jan 27	Jan 31	Jan 31	Jan 31	Jan 31	Jan 31	Jan 31
Season Length	74 +23 HP <sup>1</sup>	74 +23 HP <sup>1</sup>	74 +23 HP <sup>1</sup>	74 +23 HP <sup>1</sup>	74 +23 HP <sup>1</sup>	74 +23 HP <sup>1</sup>	74 +23 HP <sup>1</sup>	74 +23 HP <sup>1</sup>	74 +23 HP <sup>1</sup>	74 +23 HP <sup>1</sup>
Daily Bag/ Possession <sup>3</sup>	6 18	6 18	6 18	6 18	6 18	6 18	6 18	6 18	6 18	6 18
<b>Species/Sex Restrictions</b>										
Mallard (M)	5	5	5	5	5	5	5	5	5	5
Mallard (F)	2	2	2	2	2	2	2	2	2	2
Pintail	2	2	1	2	1	1	1	1	1	1
H. Merganser <sup>2</sup>	2	2	2	2	2	2	2	6	6	6
Canvasback	2	2	2	2	2	2	2	2	2	2
Redhead	2	2	2	2	2	2	2	2	2	2
Scaup	3	3	3	3	3	1	1	1	1	1
Wood Duck	3	3	3	3	3	3	3	3	3	3
Mottled Duck	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>4</sup>

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<sup>1</sup> HP = High Plains Management Unit: Additional days must be taken no earlier than the Saturday closest to December 10.  
<sup>2</sup> Starting in 2022, the mergansers are included in aggregate with ducks with no species limits  
<sup>3</sup> In addition, ND, SD, MT and WY may take an additional 2 and 6 (bag/possession) blue-winged teal during the first 16 days of their regular duck season.  
<sup>4</sup> Bag limit is 1 and season closed for the 1st 5 days of the season in Texas only; elsewhere bag limit is 6 and no opening season restriction.

# **Adaptive Harvest Management Criteria**

### 1995-96 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 1995-96 hunting season

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
4.5	M	M	M	L	L	L	L	L	L	L
5.0	L	L	L	L	L	L	L	L	L	L
5.5	L	L	L	L	L	L	L	L	L	L
6.0	L	L	L	L	L	L	L	L	L	L
6.5	L	L	L	L	L	L	L	L	L	L
7.0	L	L	L	L	L	L	L	L	L	L
7.5	L	L	L	L	L	L	L	L	L	L
8.0	L	L	L	L	L	L	L	L	L	L
8.5	L	L	L	L	L	L	L	L	L	L
9.0	L	L	L	L	L	L	L	L	L	L
9.5	L	L	L	L	L	L	L	L	L	L
10.0	L	L	L	L	L	L	L	L	L	L
10.5	L	L	L	L	L	L	L	L	L	L
11.0	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. The 1995-96 optimal choice is indicated by grey-shaded cell (1995 values = 9.32 million mallards and 3.89 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds counted in Prairie Canada during May surveys.

### 1996-97 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 1996-97 hunting season

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
4.5										
5.0								R	R	R
5.5						R	R	R	R	M
6.0	R	R	R	R	R	R	M	M	L	L
6.5	R	R	R	M	M	M	L	L	L	L
7.0	M	M	M	L	L	L	L	L	L	L
7.5	M	L	L	L	L	L	L	L	L	L
8.0	L	L	L	L	L	L	L	L	L	L
8.5	L	L	L	L	L	L	L	L	L	L
9.0	L	L	L	L	L	L	L	L	L	L
9.5	L	L	L	L	L	L	L	L	L	L
10.0	L	L	L	L	L	L	L	L	L	L
10.5	L	L	L	L	L	L	L	L	L	L
11.0	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. The 1996-97 optimal choice is indicated by grey-shaded cell (1996 values = 8.89 million mallards and 5.00 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds counted in Prairie Canada during May surveys.

### 1997-98 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 1997-98 hunting season.

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
4.5										
5.0										
5.5								VR	VR	VR
6.0			VR	VR	VR	VR	VR	R	R	R
6.5	VR	VR	VR	VR	R	R	R	M	M	M
7.0	R	R	R	R	R	M	M	M	L	L
7.5	R	R	M	M	M	M	L	L	L	L
8.0	M	M	M	M	L	L	L	L	L	L
8.5	M	M	L	L	L	L	L	L	L	L
9.0	L	L	L	L	L	L	L	L	L	L
9.5	L	L	L	L	L	L	L	L	L	L
10.0	L	L	L	L	L	L	L	L	L	L
10.5	L	L	L	L	L	L	L	L	L	L
11.0	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: VR = very restrictive, R = restrictive, M = moderate, L = liberal. 1997-98 optimal choice is indicated by grey-shaded cell (1997 values = 10.97 million mallards and 5.06 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds counted in Prairie Canada during May surveys.

### 1998-99 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 1998-99 hunting season.

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
4.5										
5.0										VR
5.5								VR	VR	R
6.0		VR	VR	VR	VR	VR	R	R	R	M
6.5	VR	VR	VR	R	R	R	M	M	M	L
7.0	R	R	R	R	M	M	M	L	L	L
7.5	R	M	M	M	M	L	L	L	L	L
8.0	M	M	M	L	L	L	L	L	L	L
8.5	M	L	L	L	L	L	L	L	L	L
9.0	L	L	L	L	L	L	L	L	L	L
9.5	L	L	L	L	L	L	L	L	L	L
10.0	L	L	L	L	L	L	L	L	L	L
10.5	L	L	L	L	L	L	L	L	L	L
11.0	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: VR = very restrictive, R = restrictive, M = moderate, L = liberal. 1998-99 optimal choice is indicated by large-framed cell (1998 values = 10.62 million mallards and 2.52 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 1999-2000 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 1999 hunting season.

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
4.5										VR
5.0										R
5.5							VR	VR	VR	R
6.0		VR	VR	VR	VR	VR	R	R	R	M
6.5	VR	VR	VR	R	R	R	M	M	M	L
7.0	R	R	R	R	M	M	M	L	L	L
7.5	R	M	M	M	M	L	L	L	L	L
8.0	M	M	M	L	L	L	L	L	L	L
8.5	M	L	L	L	L	L	L	L	L	L
9.0	L	L	L	L	L	L	L	L	L	L
9.5	L	L	L	L	L	L	L	L	L	L
10.0	L	L	L	L	L	L	L	L	L	L
10.5	L	L	L	L	L	L	L	L	L	L
11.0	L	L	L	L	L	L	L	L	L	L
11.5	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: VR = very restrictive, R = restrictive, M = moderate, L = liberal. 1999-2000 optimal choice is indicated by grey-shaded cell (1999 values = 11.8 million mallards and 3.9 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2000-2001 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2000 hunting season.

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
4.5										VR
5.0							VR	VR	R	R
5.5	VR	VR	VR	VR	VR	R	R	R	M	M
6.0	VR	R	R	R	R	M	M	M	L	L
6.5	R	R	M	M	M	M	L	L	L	L
7.0	M	M	M	M	L	L	L	L	L	L
7.5	M	M	L	L	L	L	L	L	L	L
8.0	L	L	L	L	L	L	L	L	L	L
8.5	L	L	L	L	L	L	L	L	L	L
9.0	L	L	L	L	L	L	L	L	L	L
9.5	L	L	L	L	L	L	L	L	L	L
10.0	L	L	L	L	L	L	L	L	L	L
10.5	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: VR = very restrictive, R = restrictive, M = moderate, L = liberal. 2000-2001 optimal choice is indicated by grey-shaded cell (2000 values = 10.5 million mallards and 2.4 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

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### 2001-2002 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2001 hunting season.

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
4.5										VR
5.0					VR	VR	VR	VR	R	R
5.5	VR	VR	VR	VR	R	R	R	M	M	M
6.0	R	R	R	R	M	M	M	M	L	L
6.5	R	R	M	M	M	L	L	L	L	L
7.0	M	M	M	L	L	L	L	L	L	L
7.5	M	L	L	L	L	L	L	L	L	L
8.0	L	L	L	L	L	L	L	L	L	L
8.5	L	L	L	L	L	L	L	L	L	L
9.0	L	L	L	L	L	L	L	L	L	L
9.5	L	L	L	L	L	L	L	L	L	L
10.0	L	L	L	L	L	L	L	L	L	L
10.5	L	L	L	L	L	L	L	L	L	L
11.0	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: VR = very restrictive, R = restrictive, M = moderate, L = liberal. 2001-2002 optimal choice is indicated by grey-shaded cell (2001 values = 8.7 million mallards and 2.7 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2002-2003 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2002 hunting season.

MALLARDS <sup>2</sup>	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
4.5											
5.0											
5.5											
6.0								VR	VR	VR	VR
6.5							VR	R	R	R	R
7.0	R	R	R	R	R	M	M	M	M	L	L
7.5	R	R	M	M	M	L	L	L	L	L	L
8.0	M	L	L	L	L	L	L	L	L	L	L
8.5	L	L	L	L	L	L	L	L	L	L	L
9.0	L	L	L	L	L	L	L	L	L	L	L
9.5	L	L	L	L	L	L	L	L	L	L	L
10.0	L	L	L	L	L	L	L	L	L	L	L
10.5	L	L	L	L	L	L	L	L	L	L	L
11.0	L	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: VR = very restrictive, R = restrictive, M = moderate, L = liberal. 2002-2003 optimal choice is indicated by grey-shaded cell (2002 values = 8.5 million mallards and 1.4 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2003-2004 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2003 hunting season.

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=5.25										
5.50-6.50	R	R	R	R	R	R	R	R	R	R
6.75	R	R	R	R	R	R	R	R	M	M
7.0	R	R	R	R	R	R	R	M	M	L
7.25	R	R	R	R	M	M	L	L	L	L
7.5	R	R	R	M	L	L	L	L	L	L
7.75	R	M	M	L	L	L	L	L	L	L
8.0	M	M	M	L	L	L	L	L	L	L
8.25	M	L	L	L	L	L	L	L	L	L
>=8.5	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2003-2004 optimal choice is indicated by grey-shaded cell (2003 values = 8.8 million mallards and 2.7 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2004-2005 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2004 hunting season.

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=5.25	C	C	C	C	C	C	C	C	C	C
5.50-6.25	R	R	R	R	R	R	R	R	R	R
6.50	R	R	R	R	R	R	R	R	R	M
6.75	R	R	R	R	R	R	R	M	M	L
7.00	R	R	R	R	R	M	M	M	L	L
7.25	R	R	R	M	M	M	L	L	L	L
7.50	R	R	M	M	L	L	L	L	L	L
7.75	M	M	L	L	L	L	L	L	L	L
8.00	M	L	L	L	L	L	L	L	L	L
>=8.5	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: C = closed, R = restrictive, M = moderate, L = liberal. 2004-2005 optimal choice is indicated by grey-shaded cell (2004 values = 8.36 million mallards and 2.51 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2005-2006 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2005 hunting season.

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=5.25	C	C	C	C	C	C	C	C	C	C
5.50-6.25	R	R	R	R	R	R	R	R	R	R
6.50	R	R	R	R	R	R	R	R	R	M
6.75	R	R	R	R	R	R	M	M	M	L
7.00	R	R	R	R	R	M	M	L	L	L
7.25	R	R	R	M	M	M	L	L	L	L
7.50	R	M	M	M	L	L	L	L	L	L
7.75	M	M	M	L	L	L	L	L	L	L
8.00	M	M	L	L	L	L	L	L	L	L
8.25	L	L	L	L	L	L	L	L	L	L
>=8.5	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2005-2006 optimal choice is indicated by grey-shaded cell (2005 values = 7.54 million mallards and 3.92 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2006-2007 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2006 hunting season.

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=5.25	C	C	C	C	C	C	C	C	C	C
5.50-6.25	R	R	R	R	R	R	R	R	R	R
6.50	R	R	R	R	R	R	R	R	M	M
6.75	R	R	R	R	R	R	R	M	M	L
7.00	R	R	R	R	M	M	M	L	L	L
7.25	R	R	R	M	M	L	L	L	L	L
7.50	R	R	M	M	L	L	L	L	L	L
7.75	M	L	M	L	L	L	L	L	L	L
8.00	M	L	L	L	L	L	L	L	L	L
>=8.25	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: C = closed, R = restrictive, M = moderate, L = liberal. 2006-2007 optimal choice is indicated by grey-shaded cell (2006 values = 7.86 million mallards and 4.45 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

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### 2007-2008 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2007 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=5.25	C	C	C	C	C	C	C	C	C	C
5.50-6.25	R	R	R	R	R	R	R	R	R	R
6.50	R	R	R	R	R	R	R	R	R	M
6.75	R	R	R	R	R	R	M	M	M	L
7.00	R	R	R	R	R	M	M	L	L	L
7.25	R	R	R	M	L	L	L	L	L	L
7.50	R	M	M	L	L	L	L	L	L	L
7.75	M	M	M	L	L	L	L	L	L	L
8.00	M	L	L	L	L	L	L	L	L	L
>=8.25	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2007-2008 optimal choice is indicated by grey-shaded cell (2007 values = 9.05 million mallards and 5.04 million ponds).

<sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.

<sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2008-2009 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2008 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-5.50	R	R	R	R	R	R	R	R	R	R
5.75	R	R	R	R	R	R	R	R	R	M
6.00	R	R	R	R	R	R	R	M	L	L
6.25	R	R	R	R	M	M	M	L	L	L
6.50	R	R	R	M	M	L	L	L	L	L
6.75	R	M	M	L	L	L	L	L	L	L
7.00	M	M	M	L	L	L	L	L	L	L
>=7.25	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2008-2009 optimal choice is indicated by grey-shaded cell (2008 values = 7.87 million mallards and 3.05 million ponds).

<sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.

<sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2009-2010 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2009 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-5.75	R	R	R	R	R	R	R	R	R	R
6.00	R	R	R	R	R	R	R	R	M	M
6.25	R	R	R	R	R	R	M	M	M	L
6.50	R	R	R	R	M	M	M	L	L	L
6.75	R	R	R	M	L	L	L	L	L	L
7.00	R	M	M	L	L	L	L	L	L	L
7.25	M	M	L	L	L	L	L	L	L	L
7.50	M	L	L	L	L	L	L	L	L	L
>=7.75	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2009-2010 optimal choice is indicated by grey-shaded cell (2009 values = 8.71 million mallards and 3.57 million ponds).

<sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.

<sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2010-2011 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2010 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-5.75	R	R	R	R	R	R	R	R	R	R
6.00	R	R	R	R	R	R	R	R	M	M
6.25	R	R	R	R	R	R	M	M	M	L
6.50	R	R	R	R	M	M	M	L	L	L
6.75	R	R	R	M	L	L	L	L	L	L
7.00	R	M	M	M	L	L	L	L	L	L
7.25	M	L	L	L	L	L	L	L	L	L
7.50	L	L	L	L	L	L	L	L	L	L
>=7.75	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2010-2011 optimal choice is indicated by grey-shaded cell (2010 values = 8.60 million mallards and 3.73 million ponds).

<sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.

<sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

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### 2011-2012 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2011 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.0	R	R	R	R	R	R	R	R	R	R
6.25	R	R	R	R	R	R	R	R	M	M
6.50	R	R	R	R	R	R	M	M	L	L
6.75	R	R	R	R	R	M	M	L	L	L
7.00	R	R	R	M	M	L	L	L	L	L
7.25	R	M	M	M	L	L	L	L	L	L
7.50	M	M	L	L	L	L	L	L	L	L
7.75	M	L	L	L	L	L	L	L	L	L
>=8.0	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2011-2012 optimal choice is indicated by grey-shaded cell (2011 values = 9.46 million mallards and 4.89 million ponds).

<sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.

<sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2012-2013 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2012 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.0	R	R	R	R	R	R	R	R	R	R
6.25	R	R	R	R	R	R	R	R	R	M
6.50	R	R	R	R	R	R	R	M	M	M
6.75	R	R	R	R	R	M	M	M	L	L
7.00	R	R	R	M	M	M	L	L	L	L
7.25	R	R	M	M	L	L	L	L	L	L
7.50	R	M	L	L	L	L	L	L	L	L
7.75	M	L	L	L	L	L	L	L	L	L
>=8.0	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2011-2012 optimal choice is indicated by grey-shaded cell (2012 values = 10.96 million mallards and 3.89 million ponds).

<sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS and MN, WI, and MI.

<sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2013-2014 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2013 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.25	R	R	R	R	R	R	R	R	R	R
6.50	R	R	R	R	R	R	R	R	M	M
6.75	R	R	R	R	R	R	R	M	M	M
7.00	R	R	R	R	M	M	L	L	L	L
7.25	R	R	M	M	L	L	L	L	L	L
7.50	R	R	M	M	L	L	L	L	L	L
7.75	M	M	L	L	L	L	L	L	L	L
>=8.0	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2013-2014 optimal choice is indicated by grey-shaded cell (2013 values = 10.80 million mallards and 4.55 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2014-2015 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2014 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.25	R	R	R	R	R	R	R	R	R	R
6.50	R	R	R	R	R	R	R	R	R	M
6.75	R	R	R	R	R	R	R	M	M	L
7.00	R	R	R	R	M	M	M	M	L	L
7.25	R	R	R	M	M	M	L	L	L	L
7.50	R	R	M	M	L	L	L	L	L	L
7.75	M	M	L	L	L	L	L	L	L	L
>=8.0	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2014-2015 optimal choice is indicated by grey-shaded cell (2014 values = 11.04 million mallards and 4.63 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2015-2016 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2015 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.25	R	R	R	R	R	R	R	R	R	R
6.50	R	R	R	R	R	R	R	R	R	M
6.75	R	R	R	R	R	R	R	R	M	M
7.00	R	R	R	R	R	M	M	M	L	L
7.25	R	R	R	R	M	L	L	L	L	L
7.50	R	R	M	M	L	L	L	L	L	L
7.75	R	M	M	L	L	L	L	L	L	L
8.00	M	M	L	L	L	L	L	L	L	L
>=8.25	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2015-2016 optimal choice is indicated by grey-shaded cell (2015 values = 11.79 million mallards and 4.15 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2016-2017 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2016 hunting season, based on the regulatory choice (L), mallards and ponds in 2015.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.00	R	R	R	R	R	R	R	R	R	R
6.25	R	R	R	R	R	R	R	R	R	M
6.50	R	R	R	R	R	R	R	R	L	L
6.75	R	R	R	R	R	M	L	L	L	L
7.00	R	R	R	R	M	L	L	L	L	L
7.25	R	R	R	R	L	L	L	L	L	L
7.50	R	R	R	L	L	L	L	L	L	L
7.75	R	R	L	L	L	L	L	L	L	L
8.00	R	L	L	L	L	L	L	L	L	L
>=8.25	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2016-2017 optimal choice is indicated by grey-shaded cell (2016 values = 11.79 million mallards and 4.15 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2017-2018 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2017 hunting season, based on the regulatory choice (L), mallards and ponds in 2016.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.00	R	R	R	R	R	R	R	R	R	R
6.25 #	R	R	R	R	R	R	R	R	R	R
6.50 #	R	R	R	R	R	R	R	R	M	L
6.75 #	R	R	R	R	R	R	L	L	L	L
7.00 #	R	R	R	R	R	R	L	L	L	L
7.25 #	R	R	R	R	M	L	L	L	L	L
7.50 #	R	R	R	M	L	L	L	L	L	L
7.75 #	R	R	M	L	L	L	L	L	L	L
8.00 #	R	M	L	L	L	L	L	L	L	L
8.25	M	L	L	L	L	L	L	L	L	L
>=8.50	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2017-2018 optimal choice is indicated by grey-shaded cell (2016 values = 11.89 million mallards and 3.49 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

### 2018-2019 AHM MATRIX

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2018 hunting season, based on the regulatory choice (L), mallards and ponds in 2017.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.00	R	R	R	R	R	R	R	R	R	R
6.25	R	R	R	R	R	R	R	R	R	R
6.50	R	R	R	R	R	R	R	R	M	L
6.75	R	R	R	R	R	R	R	L	L	L
7.00	R	R	R	R	R	R	L	L	L	L
7.25	R	R	R	R	M	L	L	L	L	L
7.50	R	R	R	M	L	L	L	L	L	L
7.75	R	R	M	L	L	L	L	L	L	L
8.00	R	M	L	L	L	L	L	L	L	L
8.25	M	L	L	L	L	L	L	L	L	L
>=8.50	L	L	L	L	L	L	L	L	L	L

- <sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2018-2019 optimal choice is indicated by grey-shaded cell (2017 values = 10.64 million mallards and 4.33 million ponds).
- <sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.
- <sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

**2019-2020 AHM MATRIX**

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2019 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.00	R	R	R	R	R	R	R	R	R	R
6.25	R	R	R	R	R	R	R	R	R	M
6.50	R	R	R	R	R	R	R	R	L	L
6.75	R	R	R	R	R	R	M	L	L	L
7.00	R	R	R	R	R	L	L	L	L	L
7.25	R	R	R	R	L	L	L	L	L	L
7.50	R	R	R	L	L	L	L	L	L	L
7.75	R	R	L	L	L	L	L	L	L	L
8.00	R	L	L	L	L	L	L	L	L	L
>=8.25	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2019-2020 optimal choice is indicated by grey-shaded cell (2018 values = 9.57 million mallards and 3.66 million ponds). See annual AHM report for finer-grained optimal choice matrix.  
<sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.  
<sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

**2020-2021 AHM MATRIX**

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2020 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.25	R	R	R	R	R	R	R	R	R	R
6.50	R	R	R	R	R	R	R	R	R	M
6.75	R	R	R	R	R	R	R	L	L	L
7.00	R	R	R	R	R	R	L	L	L	L
7.25	R	R	R	R	M	L	L	L	L	L
7.50	R	R	R	M	L	L	L	L	L	L
7.75	R	R	M	L	L	L	L	L	L	L
8.00	R	M	L	L	L	L	L	L	L	L
8.25	M	L	L	L	L	L	L	L	L	L
>=8.5	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2020-2021 optimal choice is indicated by grey-shaded cell (2019 values = 9.73 million mallards and 2.86 million ponds). See annual AHM report for finer-grained optimal choice matrix.  
<sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.  
<sup>3</sup> Estimated number (millions) of ponds in Prairie Canada during May surveys.

**2021-2022 AHM MATRIX**

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2021 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.25	R	R	R	R	R	R	R	R	R	R
6.50	R	R	R	R	R	R	R	R	M	L
6.75	R	R	R	R	R	R	R	L	L	L
7.00	R	R	R	R	R	R	L	L	L	L
7.25	R	R	R	R	M	L	L	L	L	L
7.50	R	R	R	M	L	L	L	L	L	L
7.75	R	R	M	L	L	L	L	L	L	L
8.00	R	M	L	L	L	L	L	L	L	L
8.25	M	L	L	L	L	L	L	L	L	L
>=8.5	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2020-2021 optimal choice is indicated by grey-shaded cell (values predicted because no survey due to COVID-19 pandemic). See annual AHM report for finer-grained optimal choice matrix.  
<sup>2</sup> Predicted number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.  
<sup>3</sup> Predicted number (millions) of ponds in Prairie Canada during May surveys.

**2022-2023 AHM MATRIX**

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2022 hunting season.

MALLARDS <sup>2</sup>	CANADIAN PONDS <sup>3</sup>									
	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
<=4.5	C	C	C	C	C	C	C	C	C	C
4.75-6.25	R	R	R	R	R	R	R	R	R	R
6.50	R	R	R	R	R	R	R	R	M	L
6.75	R	R	R	R	R	R	R	L	L	L
7.00	R	R	R	R	R	R	L	L	L	L
7.25	R	R	R	R	M	L	L	L	L	L
7.50	R	R	R	M	L	L	L	L	L	L
7.75	R	R	M	L	L	L	L	L	L	L
8.00	R	M	L	L	L	L	L	L	L	L
8.25	M	L	L	L	L	L	L	L	L	L
>=8.5	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. 2020-2021 optimal choice is indicated by grey-shaded cell (values predicted because no survey due to COVID-19 pandemic). See annual AHM report for finer-grained optimal choice matrix.  
<sup>2</sup> Predicted number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.  
<sup>3</sup> Predicted number (millions) of ponds in Prairie Canada during May surveys.

**2023-2024 AHM MATRIX**

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2023 hunting season.

MALLARDS <sup>2</sup>	PONDS <sup>3</sup>									
	4.25	4.5	4.75	5.0	5.25	5.5	5.75	6.0	6.25	6.5
4.75	R	R	M	M	M	M	L	L	L	L
5.00	M	M	M	L	L	L	L	L	L	L
5.25	L	L	L	L	L	L	L	L	L	L
5.50	L	L	L	L	L	L	L	L	L	L
5.75	L	L	L	L	L	L	L	L	L	L
6.00	L	L	L	L	L	L	L	L	L	L
6.25	L	L	L	L	L	L	L	L	L	L
6.50	L	L	L	L	L	L	L	L	L	L
6.75	L	L	L	L	L	L	L	L	L	L
7.00	L	L	L	L	L	L	L	L	L	L
>=7.25	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. choice is indicated by grey-shaded cell (2022 values = 7.16 million mallards and 5.45 million ponds). See annual AHM report for finer-grained optimal choice matrix.  
 For 2023, Mid-continent Mallard AHM moved to using an IPM, total ponds, and the NAWMP constraint was removed  
<sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.  
<sup>3</sup> Estimated Total ponds (in millions) observed in the United States and Canada in the WBPHS (strata 26-49).

**2024-2025 AHM MATRIX**

Optimal regulatory choices<sup>1</sup> for midcontinent mallards during the 2024 hunting season.

MALLARDS <sup>2</sup>	PONDS <sup>3</sup>									
	4.25	4.5	4.75	5.0	5.25	5.5	5.75	6.0	6.25	6.5
4.75	R	R	M	M	M	L	L	L	L	L
5.00	M	M	L	L	L	L	L	L	L	L
5.25	L	L	L	L	L	L	L	L	L	L
5.50	L	L	L	L	L	L	L	L	L	L
5.75	L	L	L	L	L	L	L	L	L	L
6.00	L	L	L	L	L	L	L	L	L	L
6.25	L	L	L	L	L	L	L	L	L	L
6.50	L	L	L	L	L	L	L	L	L	L
6.75	L	L	L	L	L	L	L	L	L	L
7.00	L	L	L	L	L	L	L	L	L	L
>=7.25	L	L	L	L	L	L	L	L	L	L

<sup>1</sup> Package choices: R = restrictive, M = moderate, L = liberal. choice is indicated by grey-shaded cell (2022 values = 7.16 million mallards and 5.45 million ponds). See annual AHM report for finer-grained optimal choice matrix.  
 For 2023, Mid-continent Mallard AHM moved to using an IPM, total ponds, and the NAWMP constraint was removed  
<sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPHS (strata 13-18, 20-50, 75-77) and MN, WI, and MI.  
<sup>3</sup> Estimated Total ponds (in millions) observed in the United States and Canada in the WBPHS (strata 26-49).

## **Historical Membership, Meeting Locations, and Awards:**

- **Central Flyway Council**
- **Central Flyway Waterfowl Technical Committee**
- **Central Flyway Webless Game Bird Technical Committee**
- **Central Management Unit – Mourning Dove Technical Committee**
- **Central Flyway Non-game Technical Committee**
- **Central Flyway Meeting Locations**
- **Gay Simpson and Joe Gabig Award Recipients**
- **Central Flyway SRC Consultants**
- **USFWS Services Regulations Committee**
- **USFWS Flyway Representatives**
- **USFWS Regional Migratory Bird Chiefs**





# CENTRAL FLYWAY WATERFOWL TECHNICAL COMMITTEE

## 1954-2023

	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	AB	NWT	SK
1954	J.R. Grieb	J. Coats	W.G. Freeman	H.W. Miller	H.C. Pickens	B. Fashingbauer	R.D. Gray	E.H. Smith	J.R. Singleton	R. LaPatterson			
1955	J.R. Grieb	J. Coats	W.G. Freeman	H.W. Miller	H.C. Pickens	B. Fashingbauer	M. Dodson	R. Murdy	J.R. Singleton	R.M. Ballou			
1956	J.R. Grieb	O. Gasswint	W.G. Freeman	H.W. Miller	L. Lee	C.H. Schroeder	M. Dodson	R. Murdy	J.R. Singleton	R.M. Ballou			
1957	J.R. Grieb	O. Gasswint	W.G. Freeman	H.W. Miller	L. Lee	C.H. Schroeder	B. Atkins	R. Murdy	J.R. Singleton	R.M. Ballou			
1958	J.R. Grieb	O. Gasswint	W.G. Freeman	H.W. Miller	W.S. Huey	C.H. Schroeder	J.F. Sykora	M.E. Anderson	J.R. Singleton	R.M. Ballou			J.L. Nelson
1959	J.R. Grieb	D.C. Coleman	W.G. Freeman	H.W. Miller	W.S. Huey	C.H. Schroeder	J.F. Sykora	M.E. Anderson	J.R. Singleton	R.M. Ballou			J.L. Nelson
1960	J.R. Grieb	D.C. Coleman	W.G. Freeman	G. Schildman	W.S. Huey	C.H. Schroeder	F.F. Copelin	M.E. Anderson	J.R. Singleton	G.F. Wakestraw			J.L. Nelson
1961	J.R. Grieb	D.C. Coleman	D.W. Witt	G. Schildman	W.S. Huey	C.H. Schroeder	F.F. Copelin	M.E. Anderson	J.R. Singleton	G.F. Wakestraw			J.L. Nelson
1962	J.R. Grieb	D.C. Coleman	D.W. Witt	G. Schildman	W.S. Huey	C.H. Schroeder	F.F. Copelin	M.E. Anderson	E.A. Walker	G.F. Wakestraw			J.L. Nelson
1963	J.R. Grieb	M.D. Schwillig	D.W. Witt	G. Schildman	L. Gordon	C.H. Schroeder	F.F. Copelin	R.D. Hart	A.J. Springs	G.F. Wakestraw			J.L. Nelson
1964	J.R. Grieb	M.D. Schwillig	D.W. Witt	G. Schildman	G.W. Merrill	C.H. Schroeder	C.O. Gilliam	R.D. Hart	A.J. Springs	G.F. Wakestraw			R. Caldwell
1965	J.R. Grieb	M.D. Schwillig	D.W. Witt	G. Schildman	G.W. Merrill	C.H. Schroeder	C.O. Gilliam	C. Twedt	A.J. Springs	G.F. Wakestraw			R. Caldwell
1966	J.R. Grieb	M.D. Schwillig	D.W. Witt	G. Schildman	G.W. Merrill	C.H. Schroeder	C.O. Gilliam	C. Twedt	A.J. Springs	G.F. Wakestraw	W. Wishart		R. Caldwell
1967	J.R. Grieb	M.D. Schwillig	D.W. Witt	G. Schildman	G.W. Merrill	C.H. Schroeder	C.O. Gilliam	R.C. Drewien	C.D. Stutzenbaker	G.F. Wakestraw	W. Wishart		R. Caldwell
1968	J.R. Grieb	M.D. Schwillig	D.W. Witt	G. Schildman	G.W. Merrill	C.H. Schroeder	L. Due	R.C. Drewien	C.D. Stutzenbaker	G.F. Wakestraw	W. Wishart		R. Caldwell
1969	H.D. Funk	M.D. Schwillig	D.W. Witt	G. Schildman	G.W. Merrill	C.H. Schroeder	L. Due	R.C. Drewien	C.D. Stutzenbaker	G.F. Wakestraw	D. Neave		D.S. Gray
1970	H.D. Funk	M.D. Schwillig	D.W. Witt	G. Schildman	G.W. Merrill	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	G.F. Wakestraw	D. Neave		D.S. Gray
1971	H.D. Funk	M.D. Schwillig	D.W. Witt	G. Schildman	G.W. Merrill	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	G.F. Wakestraw	D. Neave		D.S. Gray
1972	H.D. Funk	M.D. Schwillig	J. Egan	G. Schildman	G.W. Merrill	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	G.F. Wakestraw	D. Neave		D.S. Gray
1973	H.D. Funk	M.D. Schwillig	J. Egan	G. Schildman	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	G.F. Wakestraw	T. Burgess		D.S. Gray
1974	H.D. Funk	M.D. Schwillig	J. Egan	G. Schildman	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	G.F. Wakestraw	H. Weaver		D.S. Gray
1975	H.D. Funk	M.D. Schwillig	D.W. Witt	N. Dey	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	G.F. Wakestraw	H. Weaver		D.S. Gray
1976	H.D. Funk	M.D. Schwillig	D.W. Witt	N. Dey	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	G.F. Wakestraw	H. Weaver		D.S. Gray
1977	H.D. Funk	M.D. Schwillig	D.W. Witt	N. Dey	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	G.F. Wakestraw	H. Weaver		D. Brewster
1978	H.D. Funk	M.J. Kraft	D.W. Witt	N. Dey	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	R. Saul	H. Weaver		D. Brewster
1979	H.D. Funk	M.J. Kraft	D.W. Witt	J. Hyland	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	R. Saul	H. Weaver		D. Brewster
1980	H.D. Funk	M.J. Kraft	T.C. Hinz	J. Hyland	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	R. Saul	H. Weaver		S. Barber
1981	H.D. Funk	M.J. Kraft	T.C. Hinz	J. Hyland	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	R. Saul	H. Weaver		M. Killaby
1982	H.D. Funk	M.J. Kraft	T.C. Hinz	J. Hyland	J.L. Sands	M.A. Johnson	L. Due	T. Kuck	C.D. Stutzenbaker	R. Saul	H. Weaver		D. Brewster
1983	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	G. Downer	M.A. Johnson	L. Due	R. Fowler	C.D. Stutzenbaker	R. Saul	H. Weaver		D. Brewster
1984	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	J. Herring	M.A. Johnson	L. Due	S.G. Simpson	C.D. Stutzenbaker	R. Saul	H. Weaver		D. Brewster
1985	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	J. Herring	M.A. Johnson	M.E. O'Mellia	S.G. Simpson	C.D. Stutzenbaker	R. Saul	H. Weaver		D. Brewster
1986	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	J. Herring	M.A. Johnson	M.E. O'Mellia	S.G. Simpson	D.W. Witt	R. Saul	H. Weaver		J. Mulhern
1987	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	G. Schmidt	M.A. Johnson	M.E. O'Mellia	S.G. Simpson	R.L. Jensen	R. Saul	H. Weaver		J. Mulhern
1988	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	J. Ward	M.A. Johnson	M.E. O'Mellia	S.G. Simpson	R.L. Jensen	R. Saul	K. Lungle	R. Bromley	J. Mulhern
1989	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	J. Ward	M.A. Johnson	M.E. O'Mellia	D. Hansen	R.L. Jensen	R. Saul	K. Lungle	R. Bromley	J. Mulhern
1990	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	J. Ward	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	R.L. Jensen	R. Saul	K. Lungle	R. Bromley	J. Mulhern
1991	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	J. Ward	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	R.L. Jensen	R. Saul	K. Lungle	R. Bromley	J. Mulhern
1992	H.D. Funk	M.J. Kraft	J. Hansen	P. J. Gabig	B. Hale	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	R.L. Jensen	R. Saul	K. Lungle	R. Bromley	J. Mulhern
1993	H.D. Funk	M.J. Kraft	J. Hansen	P. J. Gabig	B. Hale	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	B. Sullivan	R. Saul	K. Lungle	R. Bromley	J. Mulhern
1994	J.K. Ringelman	M.J. Kraft	J. Hansen	P. J. Gabig	B. Hale	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	B. Sullivan	R. Saul	K. Lungle	R. Bromley	J. Mulhern
1995	J.K. Ringelman	M.J. Kraft	J. Hansen	P. J. Gabig	B. Hale	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	B. Sullivan	L. Roberts	K. Lungle	R. Bromley	J. Mulhern
1996	J.K. Ringelman	M.J. Kraft	J. Hansen	P. J. Gabig	B. Hale	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	B. Sullivan	L. Roberts	K. Lungle	R. Bromley	J. Mulhern
1997	J. Gammonley	M.J. Kraft	J. Hansen	P. J. Gabig	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	B. Sullivan	L. Roberts	K. Lungle	R. Case	J. Mulhern
1998	J. Gammonley	M.J. Kraft	J. Hansen	P. J. Gabig	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	B. Sullivan	L. Roberts	K. Lungle	R. Case	D. McKinnon
1999	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	B. Sullivan	L. Roberts	K. Lungle	R. Case	D. McKinnon
2000	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	R. Case	D. McKinnon
2001	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	R. Case	D. McKinnon
2002	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	R. Case	D. McKinnon
2003	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	D. Morrison	L. Roberts	R. Milson	R. Case	D. Brewster
2004	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	D. Morrison	L. Roberts	R. Milson	R. Case	M. Gollop
2005	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	D. Morrison	L. Roberts	R. Milson	R. Case	M. Gollop
2006	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	R. Case	M. Gollop
2007	J. Gammonley	F.M. McNew	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	R. Case	M. Gollop
2008	J. Gammonley	F.M. McNew	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	M.E. O'Mellia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	R. Case	M. Gollop
2009	J. Gammonley	F.M. McNew	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	J. Richardson	S.J. Vaa	D. Morrison	L. Roberts	J. Caswell		M. Gollop
2010	J. Gammonley	F.M. McNew	J. Hansen	M. Vrtiska	T. Mitchusson	M.A. Johnson	J. Richardson	S.J. Vaa	D. Morrison	L. Roberts	J. Caswell		M. Gollop
2011	J. Gammonley	F.M. McNew	J. Hansen	M. Vrtiska	B. Hale	M.A. Johnson	J. Richardson	R. Murano	K. Kraai	L. Roberts	J. Caswell	N. McCutchen	M. Gollop
2012	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	J. Sands	M.A. Johnson	J. Richardson	R. Murano	K. Kraai	L. Roberts	J. Caswell	S. Carrière	M. Gollop
2013	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	K. Madden	M.A. Johnson	J. Richardson	R. Murano	K. Kraai	L. Roberts	J. Caswell	S. Carrière	M. Gollop
2014	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	K. Madden	M.A. Johnson	J. Richardson	R. Murano	K. Kraai	L. Roberts	J. Caswell	S. Carrière	K. Conkin
2015	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	K. Madden	M.A. Johnson	J. Richardson	R. Murano	K. Kraai	L. Roberts	J. Caswell	S. Carrière	K. Conkin
2016	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	M. Cline	M.L. Szymanski	J. Richardson	R. Murano	K. Kraai	N. Huck	J. Caswell	S. Carrière	K. Conkin
2017	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	M. Cline	M.L. Szymanski	J. Richardson	R. Murano	K. Kraai	N. Huck	J. Caswell	S. Carrière	K. Conkin
2018	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	M. Cline	M.L. Szymanski	J. Richardson	R. Murano	K. Kraai	N. Huck	J. Caswell	S. Carrière	K. Conkin
2019	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	M. Cline	M.L. Szymanski	J. Richardson	R. Murano	K. Kraai	N. Huck	J. Caswell	S. Carrière	K. Conkin
2020	J. Gammonley	T. Bidrowski	J. Hansen	Vrtiska/ Inselman	M. Cline	M.L. Szymanski	J. Richardson	R. Murano	K. Kraai	N. Smith	J. Caswell	S. Carrière	K. Conkin
2021	J. Gammonley	T. Bidrowski	J. Hansen	W. Inselman	M. Cline	M.L. Szymanski	J. Morel	R. Murano	K. Kraai	N. Smith	J. Caswell	S. Carrière	K. Conkin
2022	J. Gammonley	T. Bidrowski	J. Hansen	M. Garrick	M. Cline	M.L. Szymanski	J. Morel	R. Murano	K. Kraai	N. Smith	J. Caswell	S. Carrière	K. Conkin
2023	J. Gammonley	T. Bidrowski	F. McNew	J. McKinney	M. Cline	M.L. Szymanski	P. Smith	R. Murano	K. Kraai	N. Smith	J. Caswell	S. Carrière	K. Conkin

FILE: S:\MBO\CF\_D\PROJECTS\ADMINISTRATIVE\HISTORIC\CF MEMBERS.XLS

**CENTRAL FLYWAY WEBLESS MIGRATORY GAME BIRD TECHNICAL COMMITTEE  
1966-2023**

	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	IA	AR	MO	MN	MB	AB	NWT	SK
1966	J.R. Grieb	M.D. Schwillig	D.W. Witt	G. Schildman	G.W. Merrill	C.H. Schroeder	C.O. Gilliam	C. Tvedt	A.J. Springs	G.F. Wrakestraw			K. Sadler	E. Kopischke				
1967	H.D. Funk	M.D. Schwillig	D.W. Witt	K. Johnson	G.W. Merrill	C.H. Schroeder	C.O. Gilliam	R.C. Drewien	C.D. Stutzenbaker	G.F. Wrakestraw	G. Klonglan		K. Sadler	E. Kopischke				
1968	H.D. Funk	M.D. Schwillig	D.W. Witt	K. Johnson	G.W. Merrill	C.H. Schroeder	C.O. Gilliam	R.C. Drewien	C.D. Stutzenbaker	G.F. Wrakestraw	R. Bishop		K. Sadler	E. Kopischke				
1969	H.D. Funk	M.D. Schwillig	D.W. Witt	K. Johnson	G.W. Merrill	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	G.F. Wrakestraw	R. Bishop		K. Sadler	E. Kopischke				
1970	H.D. Funk	M.D. Schwillig	D.W. Witt	K. Johnson	G.W. Merrill	C.H. Schroeder	L. Due	T. Kuck	T. L. Clark	G.F. Wrakestraw	R. Bishop		K. Sadler	E. Kopischke				
1971	C.E. Braun	M.D. Schwillig	D.W. Witt	J.T. Sweet	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	T. L. Clark	G.F. Wrakestraw	R. Bishop		K. Sadler	E. Kopischke				
1972	C.E. Braun	M.D. Schwillig	D.W. Witt	J.T. Sweet	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	K.E. Gamble	G.F. Wrakestraw	A. Farris		K. Sadler	E. Kopischke				
1973	C.E. Braun	M.J. Kraft	D.W. Witt	J.T. Sweet	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	K.E. Gamble	G.F. Wrakestraw	A. Farris		K. Sadler	E. Kopischke				
1974	C.E. Braun	M.J. Kraft	D.W. Witt	J.T. Sweet	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	T. L. Clark	G.F. Wrakestraw	A. Farris		K. Sadler	E. Kopischke				
1975	C.E. Braun	M.J. Kraft	D.W. Witt	J.T. Sweet	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	J. Dunks	G.F. Wrakestraw	C. Schwartz		K. Sadler	E. Kopischke				
1976	C.E. Braun	M.J. Kraft	D.W. Witt	J.T. Sweet	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	J. Dunks	G.F. Wrakestraw	C. Schwartz		K. Sadler	R.L. Jensen				
1977	C.E. Braun	M.J. Kraft	D.W. Witt	J.T. Sweet	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	J. Dunks	G.F. Wrakestraw	R. George		K. Sadler	R.L. Jensen				
1978	C.E. Braun	M.J. Kraft	D.W. Witt	J.T. Sweet	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	J. Dunks	G.F. Wrakestraw	R. George		K. Sadler	R.L. Jensen				
1979	C.E. Braun	M.J. Kraft	D.W. Witt	J.T. Sweet	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	J. Dunks	G.F. Wrakestraw	R. George		K. Sadler	R.L. Jensen				
1980	C.E. Braun	M.J. Kraft	T.C. Hinz	J.T. Sweet	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	J. Dunks	R. Saul	R. George		K. Sadler	R.L. Jensen				
1981	H.D. Funk	M.J. Kraft	T.C. Hinz	J.T. Sweet	J.L. Sands	C.H. Schroeder	L. Due	T. Kuck	C.D. Stutzenbaker	R. Saul	R. George		K. Sadler	R.L. Jensen				
1982	H.D. Funk	M.J. Kraft	T.C. Hinz	J. Hyland	J.L. Sands	M.A. Johnson	L. Due	T. Kuck	R. George	R. Saul	R. Bishop		K. Sadler	R.L. Jensen				
1983	H.D. Funk	G.J. Horak	T.C. Hinz	J. Hyland	G. Downer	M.A. Johnson	L. Due	T. Kuck	R. George	R. Saul	R. Bishop		K. Sadler	R.L. Jensen				
1984	H.D. Funk	G.J. Horak	T.C. Hinz	P.J. Gabig	G. Downer	M.A. Johnson	L. Due	S.G. Simpson	R. George	R. Saul	R. Bishop		K. Sadler	R.L. Jensen				
1985	H.D. Funk	G.J. Horak	T.C. Hinz	P.J. Gabig	J. Herring	M.A. Johnson	L. Due	S.G. Simpson	R. George	R. Saul	R. Bishop		K. Sadler	R.L. Jensen				
1986	H.D. Funk	G.J. Horak	T.C. Hinz	P.J. Gabig	J. Herring	S.C. Kohn	M.E. O'Meilia	S.G. Simpson	R. George	R. Saul	R. Bishop	S. Yaich	D.L. Hallett	R.L. Jensen				
1987	H.D. Funk	G.J. Horak	T.C. Hinz	P.J. Gabig	J. Gonzales	S.C. Kohn	M.E. O'Meilia	S.G. Simpson	R. George	R. Saul	R. Bishop	S. Yaich	D.L. Hallett	R.L. Jensen				
1988	H.D. Funk	G.J. Horak	T.C. Hinz	P.J. Gabig	J. Ward	S.C. Kohn	M.E. O'Meilia	S.G. Simpson	R. George	R. Saul	R. Bishop	S. Yaich	D.L. Hallett	T. Eberhardt				
1989	H.D. Funk	G.J. Horak	T.C. Hinz	P.J. Gabig	J. Ward	S.C. Kohn	M.E. O'Meilia	S.G. Simpson	R. George	R. Saul	R. Bishop	S. Yaich	D.L. Hallett	T. Eberhardt				
1990	H.D. Funk	M.J. Kraft	T.C. Hinz	P.J. Gabig	J. Ward	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	R. George	R. Saul	R. Bishop	S. Yaich	J.H. Schulz	T. Eberhardt				
1991	H.D. Funk	M.J. Kraft	J. Hansen	P.J. Gabig	J. Ward	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	R. George	R. Saul	G. Zenner	S. Yaich	J.H. Schulz	A. Berner				
1992	H.D. Funk	M.J. Kraft	J. Hansen	P.J. Gabig	B. Hale	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	R. George	R. Saul	G. Zenner	S. Yaich	J.H. Schulz	A. Berner				
1993	H.D. Funk	M.J. Kraft	J. Hansen	P.J. Gabig	B. Hale	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	R. Saul	G. Zenner	T. Moser	J.H. Schulz	A. Berner				
1994	J.K. Ringelman	M.J. Kraft	J. Hansen	P.J. Gabig	B. Hale	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	R. Saul	G. Zenner	T. Moser	J.H. Schulz	A. Berner				
1995	J.K. Ringelman	H. Hands	J. Hansen	P.J. Gabig	B. Hale	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	G. Zenner	T. Moser	J.H. Schulz	A. Berner				
1996	J.K. Ringelman	H. Hands	J. Hansen	P.J. Gabig	B. Hale	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	G. Zenner	T. Moser	J.H. Schulz	A. Berner	M. Gillespie	K. Lungle	R. Bromley	J. Mulhern
1997	J. Gammonley	H. Hands	J. Hansen	P.J. Gabig	T. Mitchusson	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	M. Gillespie	K. Lungle	R. Bromley	J. Mulhern
1998	J. Gammonley	H. Hands	J. Hansen	P.J. Gabig	T. Mitchusson	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	M. Hill	J.H. Schulz	A. Berner	M. Gillespie	K. Lungle	R. Case	D. McKinnon
1999	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	M. Hill	J.H. Schulz	A. Berner	M. Gillespie	K. Lungle	R. Case	D. McKinnon
2000	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts								
2001	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts								
2002	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts								
2003	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts								
2004	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts								
2005	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	M.L. Szymanski	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts								
2006	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	M.L. Szymanski	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts								
2007	J. Gammonley	H. Hands	J. Hansen	J. Lusk	T. Mitchusson	M.L. Szymanski	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts								
2008	J. Gammonley	H. Hands	J. Hansen	J. Lusk	T. Mitchusson	M.L. Szymanski	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts								
2009	J. Gammonley	H. Hands	J. Hansen	J. Lusk	T. Mitchusson	M.L. Szymanski	J. Richardson	S.J. Vaa	C. Mason	L. Roberts								
2010	J. Gammonley	F.M. McNew	J. Hansen	J. Lusk	T. Mitchusson	M.L. Szymanski	J. Richardson	S.J. Vaa	C. Mason	L. Roberts								
2011	J. Gammonley	T. Bidrowski	J. Hansen	J. Lusk	B. Hale	M.L. Szymanski	J. Richardson	R. Murano	C. Mason	L. Roberts								
2012	J. Gammonley	T. Bidrowski	J. Hansen	J. Lusk	J. Sands	M.L. Szymanski	J. Richardson	R. Murano	C. Mason	L. Roberts								
2013	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	K. Madden	M.L. Szymanski	J. Richardson	R. Murano	S. Oldenburger	L. Roberts								
2014	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	K. Madden	M.L. Szymanski	J. Richardson	R. Murano	S. Oldenburger	L. Roberts								
2015	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	K. Madden	M.L. Szymanski	J. Richardson	R. Murano	S. Oldenburger	L. Roberts								
2016	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	M. Cline	A. Dinges	J. Richardson	R. Murano	S. Oldenburger	N. Huck								
2017	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	M. Cline	A. Dinges	J. Richardson	R. Murano	S. Oldenburger	N. Huck								
2018	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	M. Cline	A. Dinges	J. Richardson	R. Murano	O. Fitzsimmons	N. Huck								
2019	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Richardson	R. Murano	O. Fitzsimmons	N. Huck								
2020	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Richardson	R. Murano	O. Fitzsimmons	N. Smith								
2021	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Morel	R. Murano	O. Fitzsimmons	N. Smith								
2022	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Morel	R. Murano	O. Fitzsimmons	N. Smith								
2023	J. Gammonley	R. Schultheis	F. McNew	J. Lusk	M. Cline	A. Dinges	P. Smith	R. Murano	O. Fitzsimmons	N. Smith								

\* The name and composition of the CMUTC was changed in 1999 to Central Flyway Webless Migratory Game Bird Technical Committee. Voting membership restricted to CF States/Provin

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## CENTRAL MANAGEMENT UNIT DOVE TECHNICAL COMMITTEE 2000-2023

	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	IA	AR	MO	MN
2000	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S. C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz		J.H. Schulz	S. Maxon
2001	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S. C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	M. Checkett	J.H. Schulz	S. Maxon
2002	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S. C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	M. Checkett	J.H. Schulz	S. Maxon
2003	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S. C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz		J.H. Schulz	S. Maxon
2004	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S. C. Kohn	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	A. James	J.H. Schulz	S. Maxon
2005	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	M.L. Szymanski	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	A. James	J.H. Schulz	W. Penning
2006	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	M.L. Szymanski	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz		J.H. Schulz	W. Penning
2007	J. Gammonley	H. Hands	J. Hansen	J. Lusk	T. Mitchusson	M.L. Szymanski	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	L. Naylor	J.H. Schulz	W. Penning
2008	J. Gammonley	H. Hands	J. Hansen	J. Lusk	T. Mitchusson	M.L. Szymanski	M.E. O'Meilia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	L. Naylor	J.H. Schulz	W. Penning
2009	J. Gammonley	H. Hands	J. Hansen	J. Lusk	T. Mitchusson	M.L. Szymanski	J. Richardson	S.J. Vaa	C. Mason	L. Roberts	T. Bogenschutz	L. Naylor	J.H. Schulz	W. Penning
2010	J. Gammonley	F.M. McNew	J. Hansen	J. Lusk	T. Mitchusson	M.L. Szymanski	J. Richardson	S.J. Vaa	C. Mason	L. Roberts	T. Bogenschutz	L. Naylor	J.H. Schulz	W. Penning
2011	J. Gammonley	T. Bidrowski	J. Hansen	J. Lusk	B. Hale	M.L. Szymanski	J. Richardson	R. Murano	C. Mason	L. Roberts	T. Bogenschutz	L. Naylor	J.H. Schulz	W. Penning
2012	J. Gammonley	T. Bidrowski	J. Hansen	J. Lusk	J. Sands	M.L. Szymanski	J. Richardson	R. Murano	C. Mason	L. Roberts	T. Bogenschutz	L. Naylor	J.H. Schulz	S. Cordts
2013	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	K. Madden	M.L. Szymanski	J. Richardson	R. Murano	S. Oldenburger	L. Roberts	T. Bogenschutz	L. Naylor	R. Bredesen	S. Cordts
2014	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	K. Madden	M.L. Szymanski	J. Richardson	R. Murano	S. Oldenburger	L. Roberts	T. Bogenschutz	L. Naylor	R. Bredesen	S. Cordts
2015	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	K. Madden	M.L. Szymanski	J. Richardson	R. Murano	S. Oldenburger	L. Roberts	T. Bogenschutz	L. Naylor	T. Thompson	S. Cordts
2016	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	M. Cline	A. Dinges	J. Richardson	R. Murano	S. Oldenburger	N. Huck	T. Bogenschutz	L. Naylor	T. Thompson	S. Cordts
2017	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	M. Cline	A. Dinges	J. Richardson	R. Murano	S. Oldenburger	N. Huck	T. Bogenschutz	C. Jackson	T. Thompson	S. Cordts
2018	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	M. Cline	A. Dinges	J. Richardson	R. Murano	O. Fitzsimmons	N. Huck	T. Bogenschutz	C. Jackson	T. Thompson	S. Cordts
2019	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Richardson	R. Murano	O. Fitzsimmons	N. Huck	T. Bogenschutz	C. Jackson	T. Thompson	S. Cordts
2020	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Richardson	R. Murano	O. Fitzsimmons	N. Smith	T. Bogenschutz	C. Jackson	T. Thompson	S. Cordts
2021	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Morel	R. Murano	O. Fitzsimmons	N. Smith	T. Bogenschutz	L. Naylor	A. Raedeke	S. Cordts
2022	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Morel	R. Murano	O. Fitzsimmons	N. Smith	T. Bogenschutz	L. Naylor	A. Raedeke	S. Cordts
2023	J. Gammonley	R. Schultheis	F. McNew	J. Lusk	M. Cline	A. Dinges	P. Smith	R. Murano	O. Fitzsimmons	N. Smith	T. Bogenschutz	L. Naylor	A. Raedeke	S. Cordts

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**CENTRAL FLYWAY NONGAME MIGRATORY BIRD TECHNICAL COMMITTEE  
2006-2023**

	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	AB	SK	NWT	FWS <sup>1,2</sup>
2006	D. Klute	H. Hands	A. Begley	J. Jorgensen	S. Williams	S. Johnson	-	E. Dowd Stukel	D. Schlitter	A. Orabona				S. Jones
2007	D. Klute	H. Hands	A. Begley	J. Jorgensen	H. Walker	S. Johnson	-	E. Dowd Stukel	D. Schlitter	A. Orabona				S. Jones
2008	D. Klute	H. Hands	A. Begley	J. Jorgensen	H. Walker	S. Johnson	-	E. Dowd Stukel	D. Schlitter	A. Orabona				S. Jones
2009	D. Klute	H. Hands	A. Begley	J. Jorgensen	H. Walker	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona				S. Jones
2010	D. Klute	F.M. McNew	C. Wightman	J. Jorgensen	H. Walker	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona				S. Jones
2011	D. Klute	T. Bidrowski	C. Wightman	J. Jorgensen	H. Walker	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona				S. Jones
2012	D. Klute	T. Bidrowski	C. Wightman	J. Jorgensen	H. Walker	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona				S. Jones
2013	D. Klute	R. Schultheis	L. Hanauksa-Brown	J. Jorgensen	M. Neal	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona				S. Jones
2014	D. Klute	R. Schultheis	L. Hanauksa-Brown	J. Jorgensen	P. Darr	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona				B. Howe
2015	D. Klute	R. Schultheis	A. Begley	J. Jorgensen	P. Darr	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona				D. Krueper
2016 <sup>3</sup>	D. Klute	R. Schultheis	A. Begley	J. Jorgensen	P. Darr	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona	J. Caswell	K. Conkin	S. Carriere	K. Kruse
2017	L. Rossi	D. Riedle	A. Begley	J. Jorgensen	P. Darr	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona	J. Caswell	K. Conkin	S. Carriere	K. Kruse
2018	L. Rossi	D. Riedle	A. Begley	J. Jorgensen	E. Duvuvuei	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona	J. Caswell	K. Conkin	S. Carriere	K. Kruse, S. Somershoe
2019	L. Rossi	D. Riedle	A. Begley	J. Jorgensen	E. Duvuvuei	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona	J. Caswell	K. Conkin	S. Carriere	K. Kruse, S. Somershoe
2020	L. Rossi	D. Riedle	B. Skone	J. Jorgensen	E. Duvuvuei	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona	J. Caswell	K. Conkin	S. Carriere	K. Kruse, S. Somershoe
2021	L. Rossi	D. Riedle	B. Skone	J. Jorgensen	E. Duvuvuei	S. Johnson	M. Howerly	E. Dowd Stukel	C. Shackelford	A. Orabona	J. Caswell	K. Conkin	S. Carriere	K. Kruse, S. Somershoe
2022	L. Rossi	D. Riedle	B. Skone	J. Jorgensen	E. Duvuvuei	S. Johnson	M. Howerly	E. Dowd Stukel	T. Homayoun	A. Orabona	J. Caswell	K. Conkin	S. Carriere	D. Collins, S. Somershoe
2023	L. Rossi	D. Riedle	B. Skone	J. Jorgensen	E. Duvuvuei	S. Johnson	M. Howerly	E. Dowd Stukel	T. Homayoun	Z. Wallace	J. Caswell	K. Conkin	S. Carriere	D. Collins, S. Somershoe

<sup>1</sup> Nongame Liaison (ex-officio member)

<sup>2</sup> In 2018 changed to Regional Contacts

<sup>3</sup> In 2016 Canadian provinces were incorporated

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## Central Flyway Meeting Locations

YEAR	Technical Comm. Working Meeting	Council Spring Meeting	Technical Comm. Spring Meeting	Council and Technical Summer Meeting
1975		Pittsburg, PA	Denver, CO	Oklahoma City, OK
1976		Washington, D.C.	Denver, CO	Sheridan, WY
1977		Atlanta, GA	Denver, CO	Calgary , Alberta
1978		Phoenix, AZ	Kearney, NE	North Platte, NE
1979		Toronto, Canada		Albuquerque, NM
1980		Miami Beach, FL	Port Authur, TX	McCallen, TX
1981			Billings, MT	Billings, MT
1982		Portland, OR	Ft. Collins, CO	Colorado Springs, CO
1983		Kansas City, MO	Ft. Collins, CO	Rapid City, SD
1984	1st meeting	Boston, MA	Wichita, KS	Wichita, KS
1985		Washington, D.C.	Bismarck, ND	Bismarck, ND
1986		Reno, NV	Oklahoma City, OK	Tulsa, OK
1987		Quebec City, Canada	Cheyenne, WY	Cheyenne, WY
1988		Louisville, KY	Port Authur, TX	Calgary , Alberta
1989		Washington, D.C.	Kearney, NE	North Platte, NE
1990		Denver, CO	Albuquerque, NM	Angel Fire, NM
1991	McCallen, TX	Edmonton, Alberta	Lubbock, TX	Corpus Christi, TX
1992		Charlotte, NC	Kearney, NE	Yellowknife, NWT
1993	Billings, MT	Washington, D.C.	Great Falls, MT	Great Falls, MT
1994		Anchorage, AK	Alamosa, CO	Crested Butte, CO
1995	Albuquerque, NM	Minneapolis, MN	Pierre, SD	Custer State Park, SD
1996		Tulsa, OK	Great Bend, KS	Kansas City, MO
1997		Washington, D.C.	Kearney, NE	Cypress Hills, SASK
1998		Orlando, FL	Harlingen, TX	Bismarck, ND
1999		San Francisco, CA	Lawton, OK	Bartlesville, OK
2000		Rosemount, IL	Cody, WY	Memphis, TN
2001		Washington, D.C.	Lethbridge, Alberta	Edmonton, Alberta
2002	Wichita, KS	Dallas, TX	Lincoln, NE	Omaha, NE
2003	Socorro, NM	Winston-Salem, NC	Albuquerque, NM	Santa Fe, NM
2004	Amarillo, TX	Spokane, WA	Corpus Christi, TX	Austin, TX
2005	Amarillo, TX	Arlington, VA	Billings, MT	Helena, MT
2006	Socorro, NM	Columbus, OH	Ft. Collins, CO	Estes Park, CO
2007	Socorro, NM	Portland, OR	Brookings, SD	Spearfish, SD
2008	Socorro, NM	Phoenix, AZ	Great Bend, KS	Kansas City, KS
2009	Socorro, NM	Arlington, VA	Corpus Christi, TX	Bismarck, ND
2010	Socorro, NM	Milwaukee, WI	Tulsa, OK	Norman, OK
2011	Socorro, NM	Kansas City, MO	Laramie, WY	Cody, WY
2012	Amarillo, TX	Atlanta, GA	Grand Island, NE	Canmore, Alberta
2013	Alburquerque, NM	Arlington, VA	Alburquerque, NM	Ruidoso, NM
2014	Amarillo, TX	Denver, CO	Galveston, TX	Kerville, TX
2015 <sup>a</sup>	Corpus Christi, TX	Omaha, NE	Bozeman, MT	Bozeman, MT
2016		Pittsburgh, PA	Colorado Springs, CO	Steamboat Springs, CO
2017		Spokane, WA	Wichita, KS	Manhattan, KS
2018		Norfolk, VA	Wichita, KS	Waskesiu Lake, Saskatchewan
2019		Denver, CO	Port Aransas, TX	Alta, WY
2020		Omaha, NE	North Platte, NE	Virtual due to COVID-19
2021		Virtual due to COVID-19	Virtual due to COVID-19	Angel Fire, NM
2022		Virtual due to COVID-19	Virtual due to COVID-19	South Padre Island, TX
2023		St. Louis, MO	South Padre Island, TX	Bozeman, MT

<sup>a</sup> Due to the change in the Federal Regulations cycle (SEIS13), additional TC and Council meeting was held in Denver, CO in Sept.

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## Gay Simpson Award

*This award is offered by the Central Flyway Council in memory of Gay Simpson whose abbreviated life was highlighted by perceptive and aggressive waterfowl research and management. It is presented to South Dakota State University students who have demonstrated outstanding research in the ecology or management of Central Flyway waterfowl or their habitats.*

## P. Joseph Gabig Award

*This award is offered by the Central Flyway Council in memory of Joe Gabig who was tireless in his pursuit of scientifically-based research and management of our nation's migratory game bird resources and their habitats and in his support of sound hunting programs. It is presented to college and university students whose project is conducted wholly or partly in Nebraska and who have demonstrated leadership and/or made a significant contribution to the science of conservation or management of wetlands or migratory game birds or their habitats<sup>1</sup>.*

### Recipient

### Recipient

1990	Kent Luttschwager	
1991	Cathy Henry	
1992	Dr. Charles Dieter	
1993	Lisa Peskin Sausville	
1994	Mark Humpert	
1995	Dr. Rex Johnson	
1996	Dr. Jeff Gleason	
1997	Dr. Dave Naugle	
1998	Dr. Diane Granfors	
1999	Tate Fischer	
2000	Dr. Joshua Stafford	
2001	Shawn May	
2002	Kent Werlin	
2003	Bryan Rieger	
2004	Rachel Mockler	
2005	Kimberly Strand	
2006	Sharon N. Kahara	
2007	Jennifer L. Gutscher	Zach Cunningham, University of Nebraska-Lincoln
2008	Tandi L. Perkins	Ingrid Barcelo, University of Nebraska-Lincoln
2009	Nick Docken	-----
2010	Heather N. McWilliams	Scott Groepper, University of Nebraska-Lincoln
2011	-----	Todd Buckley, University of Nebraska-Lincoln
2012	Cody Warner	Dustin Casady, University of Nebraska-Kearney
2013	Anna Sidie-Slettedahl	Matt Haugen, University of Nebraska-Lincoln
2014	Adam Janke	-----
2015	Ryann Cressey	-----
2016	Matt Gottlob	-----
2017	Neal Martorelli	Heather Johnson, University of Nebraska-Kearney
2018	Fred Oslund	-----
2019	Charles "Will" Gallman	Matthew Hinrichs, University of Nebraska-Lincoln
2020	Cynthia Anchor	-----
2021	-----	
2022	Samantha Fino	
2023	Sam Kucia	

<sup>1</sup> Criteria modified in 2018.

**CENTRAL FLYWAY COUNCIL CONSULTANTS TO THE  
U.S. FISH AND WILDLIFE SERVICE REGULATIONS COMMITTEE**

<b>YEAR</b>	<b>CONSULTANT</b>	
1975	Jack R. Grieb (CO)	
1976 <sup>1</sup>	Dick Wettersten (KS)	Jack R. Grieb (CO)
1977	William J. Bailey (NE)	Wynn Freeman (MT)
1978	William J. Bailey (NE)	Wynn Freeman (MT)
1979	Ted L. Clark (TX)	Harold Olson (NM)
1980	K.L. Kool (SD)	Jack R. Grieb (CO)
1981	K.L. Kool (SD)	Jack R. Grieb (CO)
1982	K.L. Kool (SD)	Jack R. Grieb (CO)
1983	Charles Schroeder (ND)	Jack R. Grieb (CO)
1984	Charles Schroeder (ND)	Dale Witt (MT)
1985	Steve Lewis (OK)	Dale Witt (MT)
1986	Steve Lewis (OK)	Dale Strickland (WY)
1987	Dale Witt (TX)	Dale Strickland (WY)
1988	Dale Witt (TX)	Dale Strickland (WY)
1989	K.L. Kool (SD)	Arnie Olson (MT)
1990	William J. Bailey (NE)	Bill Montoya (NM)
1991	Robert Jessen (TX)	Bill Montoya (NM)
1992	Robert Jessen (TX)	Ronnie George (TX)
1993	Lloyd Jones (ND)	Tom Hinz (MT)
1994	Vernon Bevill (TX)	Tom Hinz (MT)
1995	Vernon Bevill (TX)	Tom Hinz (MT)
1996	Vernon Bevill (TX)	Tom Hinz (MT)
1997	Vernon Bevill (TX)	Tom Hinz (MT)
1998	Vernon Bevill (TX)	Tom Hinz (MT)
1999	Vernon Bevill (TX)	George Vandel (SD)
2000	Randy Kreil (ND)	George Vandel (SD)
2001	Randy Kreil (ND)	George Vandel (SD)
2002	Randy Kreil (ND)	George Vandel (SD)
2003	Randy Kreil (ND)	George Vandel (SD)
2004	Randy Kreil (ND)	George Vandel (SD)
2005	Randy Kreil (ND)	George Vandel (SD)
2006	Vernon Bevill (TX)	George Vandel (SD)
2007	Vernon Bevill (TX)	Jeffrey Herbert (MT)
2008	Vernon Bevill (TX)	Jeffrey Herbert (MT)
2009	Vernon Bevill (TX)	Jeffrey Herbert (MT)
2010	Jeffrey Herbert (MT)	Michael O'Melia (OK)
2011	Jeffrey Herbert (MT)	Michael O'Melia (OK)
2012	Dave Morrison (TX)	John Emmerich (WY)
2013	Dave Morrison (TX)	--
2014	Dave Morrison (TX)	Cal Baca (NM)
2015	Dave Morrison (TX)	--
2016	Dave Morrison (TX)	Jeff Ver Steeg (CO)
2017	Dave Morrison (TX)	Jeff Ver Steeg (CO)
2018	Dave Morrison (TX)	Jeff Ver Steeg (CO)
2019	Stewart Liley (NM)	Jeff Ver Steeg (CO)
2020	Stewart Liley (NM)	Jeff Ver Steeg (CO)
2021	Stewart Liley (NM)	Jeff Ver Steeg (CO)
2022	Stewart Liley (NM)	Jeff Ver Steeg (CO)
2023	Stewart Liley (NM)	Shaun Oldenburger (TX)

<sup>1</sup> Chairman Wrakestraw also attended meeting



# SERVICE REGULATIONS COMMITTEE

## U.S. Fish & Wildlife Service

### 1975-2023

YR	CHAIR	DMBM	REGION 1	REGION 2	REGION 3	REGION 4	REGION 5	REGION 6	REGION 7	REGION 8	REGION 9	RESEARCH	ADVISOR
1975	H.K. Nelson	J.P. Rogers/R.I. Smith	R.K. Martinson		J. Hemphill								
1976	H.K. Nelson	J.P. Rogers/R.I. Smith	R.K. Martinson		J. Hemphill								
1977	H.K. Nelson	J.P. Rogers/R.I. Smith	R.K. Martinson		J. Hemphill								
1978	H.K. Nelson	J.P. Rogers/R.I. Smith	R.K. Martinson										
1979	H.K. Nelson	R.I. Smith	R.K. Martinson										
1980	J.P. Rogers	J.P. Rogers	R.K. Martinson		H.K. Nelson						R. Myshak/R.N. Smith		
1981	R.E. Gilmore	J.P. Rogers	R.K. Martinson		H.K. Nelson						R.E. Lambertson		
1982	R. Putz	J.P. Rogers			H.K. Nelson	J.W. Pulliam					R.E. Lambertson		
1983	J.P. Rogers	J.P. Rogers			H. Benson	J.W. Pulliam					R.E. Lambertson		
1984	J.P. Rogers	J.P. Rogers			H.K. Nelson	J.W. Pulliam					R.E. Lambertson		
1985	R. Lambertson	R.D. Sparrow			H.K. Nelson	J.W. Pulliam						R.N. Smith	
1986	R. Lambertson	R.D. Sparrow			H.K. Nelson	J.W. Pulliam						R.N. Smith	
1987	H.K. Nelson	R.D. Sparrow	R.L. Wallenstrom			J.W. Pulliam		G.L. Butterbaugh				R.N. Smith	
1988	H.K. Nelson	R.D. Sparrow	R.L. Wallenstrom <sup>1</sup>	M. Spear <sup>1</sup>	J.C. Gritman	J.W. Pulliam		G.L. Butterbaugh	W. Steiglitz <sup>1</sup>		M. Plenert	R.N. Smith	
1989	M. Plenert	B.K. Williams		M. Spear	J.C. Gritman	J.W. Pulliam		G.L. Butterbaugh	W. Steiglitz			R.N. Smith	
1990	M. Plenert/D. Olsen	T.J. Dwyer			J.C. Gritman	J.W. Pulliam		G.L. Butterbaugh	W. Steiglitz			R.N. Smith	
1991	D. Olsen	T.J. Dwyer			J.C. Gritman	J.W. Pulliam		G.L. Butterbaugh	W. Steiglitz			R.N. Smith	
1992	D. Olsen	T.J. Dwyer			J.S. Marler		R.E. Lambertson	R.O. Morgenweck	W. Steiglitz			D. Buffington	
1993	D. Olsen	P.R. Schmidt	M. Plenert	J.G. Rogers	J.S. Marler		R.E. Lambertson	R.O. Morgenweck				D. Buffington	
1994	W.F. Hartwig	P.R. Schmidt	M. Plenert	J.G. Rogers	J.S. Marler		R.E. Lambertson						
1995	R.G. Streeter	P.R. Schmidt		N. Kaufman		N. Clough				D.B. Allen			
1996	R.G. Streeter	P.R. Schmidt		N. Kaufman		N. Clough		R.O. Morgenweck		D.B. Allen			
1997	R.G. Streeter	P.R. Schmidt		N. Kaufman	W.F. Hartwig <sup>1</sup>	N. Clough <sup>1</sup>		R.O. Morgenweck		D.B. Allen			
1998	J.G. Rogers/D. Ashe	P.R. Schmidt		N. Kaufman	W.F. Hartwig			R.O. Morgenweck		D.B. Allen			
1999	D. Ashe	R. West/J. Andrew	A. Badgely		W.F. Hartwig		R.E. Lambertson	R.O. Morgenweck					
2000	D. Ashe/T.O. Melius	J. Andrew		N. Kaufman <sup>1</sup>	W.F. Hartwig	S.D. Hamilton				D.B. Allen <sup>1</sup>			
2001	T.O. Melius	J. Andrew		N. Kaufman	W.F. Hartwig	S.D. Hamilton				D.B. Allen			
2002	T.O. Melius	J. Andrew/R.J. Blohm				S.D. Hamilton	M. Parker	R.O. Morgenweck		D.B. Allen			
2003	P.R. Schmidt	B.A. Millsap				S.D. Hamilton	M. Parker	R.O. Morgenweck		D.B. Allen			
2004	P.R. Schmidt	B.A. Millsap					M. Moriarity	R.O. Morgenweck		R. Gould			
2005	P.R. Schmidt	B.A. Millsap			R. Thorson		M. Moriarity	R.O. Morgenweck		R. Gould			
2006	P.R. Schmidt	B.A. Millsap	D.B. Allen		R. Thorson		M. Moriarity			T.O. Melius			R.O. Morgenweck
2007	P.R. Schmidt	R.J. Blohm		B. Tuggle	R. Thorson		M. Moriarity			S. Thompson			R.O. Morgenweck
2008	P.R. Schmidt	R.J. Blohm		B. Tuggle	R. Thorson	S.D. Hamilton				T.O. Melius			R.O. Morgenweck
2009	P.R. Schmidt	R.J. Blohm		B. Tuggle	T.O. Melius	S.D. Hamilton				G. Haskett			R.O. Morgenweck
2010	P.R. Schmidt	R.J. Blohm			T.O. Melius		M. Moriarity	S. Guertin		G. Haskett			R.O. Morgenweck
2011	T.O. Melius/J. Ford	J.B. Bortner			T.O. Melius		M. Moriarity	S. Guertin		G. Haskett			R.O. Morgenweck
2012	J. Ford	J.B. Bortner			T.O. Melius		W. Weber	S. Guertin		G. Haskett			
2013	J. Ford	J.B. Bortner		B. Tuggle	T.O. Melius		W. Weber			G. Haskett			
2014	J. Ford	J.B. Bortner		B. Tuggle		C. Dohner	W. Weber				R. Lohofener		
2015	J. Ford	J.B. Bortner		B. Tuggle		C. Dohner	W. Weber				R. Lohofener		
2016	J. Ford	J.B. Bortner	R. Thorson	B. Tuggle	T.O. Melius		C. Dohner				R. Lohofener		
2017	J. Ford	J.B. Bortner	R. Thorson		T.O. Melius	C. Dohner/M. Oetker			M. Hogan <sup>2</sup>				
2018	J. Ford	K.D. Richkus	R. Thorson		C. Wooley <sup>3</sup>				M. Hogan <sup>2</sup>	G. Siekaniec			
2019	J. Ford	K.D. Richkus			C. Wooley				M. Hogan <sup>2</sup>	G. Siekaniec			
2020	J. Ford	K.D. Richkus		A. Lueders			W. Weber		M. Hogan <sup>2</sup>	G. Siekaniec			
2021	J. Ford	K.D. Richkus		A. Lueders			W. Weber			G. Siekaniec			
2022	J. Ford	K.D. Richkus		A. Lueders		L. Miranda	W. Weber			K. Cogswell <sup>3</sup>			
2023	J. Ford	K.D. Richkus	H. Morrison			M. Oetker <sup>3</sup>	K. Hastie <sup>3</sup>				P. Souza		

<sup>1</sup> Partial Year

<sup>2</sup> Deputy Regional Director

<sup>3</sup> Acting Regional Director

1987-present - Chief, Division of Migratory Bird Management serves as non-voting Executive Secretary

# USFWS FLYWAY REPRESENTATIVES

1949-2023

**ATLANTIC FLYWAY**      **MISSISSIPPI FLYWAY**      **CENTRAL FLYWAY**      **PACIFIC FLYWAY**

1949				<i>Leo K. Couch</i>
1950				<i>Leo K. Couch</i>
1951				<i>Leo K. Couch</i>
1952	C. Edward Addy	<i>vacant</i>	<i>vacant</i>	John C. Chattin
1953	C. Edward Addy	Arthur S. Hawkins	Cecil S. Williams	John C. Chattin
1954	C. Edward Addy	Arthur S. Hawkins	Cecil S. Williams	John C. Chattin
1955	C. Edward Addy	Arthur S. Hawkins	Cecil S. Williams	John C. Chattin
1956	C. Edward Addy	Arthur S. Hawkins	Cecil S. Williams	John C. Chattin
1957	C. Edward Addy	Arthur S. Hawkins	Cecil S. Williams	John C. Chattin
1958	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1959	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1960	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1961	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1962	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1963	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1964	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1965	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1966	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1967	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1968	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1969	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1970	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1971	C. Edward Addy	Arthur S. Hawkins	Raymond J. Buller	John C. Chattin
1972	C. Edward Addy	<i>vacant</i>	Raymond J. Buller	John C. Chattin
1973	<i>vacant</i>	Kenneth E. Gamble	Raymond J. Buller	John C. Chattin
1974	Warren W. Blandin	Kenneth E. Gamble	Raymond J. Buller	John C. Chattin
1975	Warren W. Blandin	Kenneth E. Gamble	Harvey W. Miller	John C. Chattin
1976	Warren W. Blandin	Kenneth E. Gamble	Harvey W. Miller	John C. Chattin
1977	Warren W. Blandin	Kenneth E. Gamble	Harvey W. Miller	James C. Bartonek
1978	Warren W. Blandin	Kenneth E. Gamble	Harvey W. Miller	James C. Bartonek
1979	Warren W. Blandin	Kenneth E. Gamble	Harvey W. Miller	James C. Bartonek
1980	Warren W. Blandin	Kenneth E. Gamble	Harvey W. Miller	James C. Bartonek
1981	Warren W. Blandin	Kenneth E. Gamble	Harvey W. Miller	James C. Bartonek
1982	Warren W. Blandin	Kenneth E. Gamble	Harvey W. Miller	James C. Bartonek
1983	<i>vacant</i>	Kenneth E. Gamble	Harvey W. Miller	James C. Bartonek
1984	Jerome R. Serie	Kenneth E. Gamble	Harvey W. Miller	James C. Bartonek
1985	Jerome R. Serie	Kenneth E. Gamble	Harvey W. Miller	James C. Bartonek
1986	Jerome R. Serie	Kenneth E. Gamble	Harvey W. Miller	James C. Bartonek
1987	Jerome R. Serie	Kenneth E. Gamble	Harvey W. Miller	James C. Bartonek
1988	Jerome R. Serie	Kenneth E. Gamble	Wilbur N. Ladd	James C. Bartonek
1989	Jerome R. Serie	Kenneth E. Gamble	Wilbur N. Ladd	James C. Bartonek
1990	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	James C. Bartonek
1991	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	James C. Bartonek
1992	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	James C. Bartonek
1993	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	James C. Bartonek
1994	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	James C. Bartonek
1995	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	James C. Bartonek
1996	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	Robert E. Trost
1997	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	Robert E. Trost
1998	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	Robert E. Trost
1999	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	Robert E. Trost
2000	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	Robert E. Trost
2001	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	Robert E. Trost
2002	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	Robert E. Trost
2003	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	Robert E. Trost
2004	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	Robert E. Trost
2005	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	Robert E. Trost
2006	Jerome R. Serie	Kenneth E. Gamble	David E. Sharp	Robert E. Trost
2007	Paul I. Padding	James R. Kelley	David E. Sharp	Robert E. Trost
2008	Paul I. Padding	James R. Kelley	David E. Sharp	Robert E. Trost
2009	Paul I. Padding	James R. Kelley	David E. Sharp	Robert E. Trost
2010	Paul I. Padding	James R. Kelley	David E. Sharp	Robert E. Trost
2011	Paul I. Padding	James R. Kelley	James A. Dubovsky	Robert E. Trost
2012	Paul I. Padding	James R. Kelley	James A. Dubovsky	Robert E. Trost
2013	Paul I. Padding	James R. Kelley	James A. Dubovsky	Robert E. Trost
2014	Paul I. Padding	James R. Kelley	James A. Dubovsky	Todd A. Sanders
2015	Paul I. Padding	James R. Kelley	James A. Dubovsky	Todd A. Sanders
2016	Paul I. Padding	James R. Kelley	James A. Dubovsky	Todd A. Sanders
2017	Paul I. Padding	James R. Kelley	James A. Dubovsky	Todd A. Sanders
2018	Paul I. Padding	James R. Kelley	James A. Dubovsky	Todd A. Sanders
2019	Paul I. Padding	T. Cooper (acting)	James A. Dubovsky	Todd A. Sanders
2020	P. Devers (acting)	T. Cooper (acting)	James A. Dubovsky	Todd A. Sanders
2021	Pat K. Devers	Dave P. Scott	D. Olson (acting)	Todd A. Sanders
2022	Pat K. Devers	Dave P. Scott	Thomas R. Cooper	Todd A. Sanders
2023	Pat K. Devers	Dave P. Scott	Thomas R. Cooper	Todd A. Sanders

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## FWS REGIONAL<sup>a</sup> MIGRATORY BIRD COORDINATORS/CHIEFS<sup>b</sup>

YEAR	REGION 1	REGION 2	REGION 3	REGION 4	REGION 5	REGION 6	REGION 7	REGION 8
1973			John W. Ellis		William French			
1974			John W. Ellis		William French			
1975			John W. Ellis	Donald H. Orr	William French			
1976	James Monnie	Larry Smith	John W. Ellis	Donald H. Orr	William French	Robert L. Croft	James C. Bartonek	
1977	James Monnie	Larry Smith	John W. Ellis	Donald H. Orr	William French	Robert L. Croft	James C. Bartonek	
1978	James Monnie	Larry Smith	John W. Ellis	Donald H. Orr	William French	Robert L. Croft	Wilbur N. Ladd	
1979	Richard Bauer	Larry Smith	John W. Ellis	Donald H. Orr	William French	Robert L. Croft	Wilbur N. Ladd	
1980	Richard Bauer	Larry Smith	John W. Ellis	Donald H. Orr	William French	Robert L. Croft	<i>vacant</i>	
1981	Richard Bauer	Larry Smith	John W. Ellis	Donald H. Orr	William French	Robert L. Croft	E. Frank Bowers	
1982	Richard Bauer	Larry Smith	John W. Ellis	Donald H. Orr	William French	Robert L. Croft	Dirk V. Derksen	
1983	Richard Bauer	Larry Smith	John W. Ellis	Donald H. Orr	<i>vacant</i>	Robert L. Croft	Dirk V. Derksen	
1984	Richard Bauer	Larry Smith	John W. Ellis	E. Frank Bowers	George Haas	Robert L. Croft	Dirk V. Derksen	
1985	Richard Bauer	Jeffrey Haskins	John W. Ellis	E. Frank Bowers	George Haas	Robert L. Croft	Richard S. Pospahala	
1986	Richard Bauer	Jeffrey Haskins	Robert O. Oetting	E. Frank Bowers	George Haas	Robert L. Croft	Richard S. Pospahala	
1987	Richard Bauer	Jeffrey Haskins	Robert O. Oetting	E. Frank Bowers	George Haas	Wilbur N. Ladd	<i>vacant</i>	
1988	Richard Bauer	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	<i>vacant</i>	
1989	Richard Bauer	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	<i>vacant</i>	
1990	Richard Bauer	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robin L. West	
1991	Richard Bauer	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robin L. West	
1992	Richard Bauer	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robin L. West	
1993	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robin L. West	
1994	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robin L. West	
1995	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robert R. Leedy	
1996	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robert R. Leedy	
1997	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robert R. Leedy	
1998	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robert R. Leedy	
1999	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robert R. Leedy	
2000	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robert R. Leedy	
2001	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robert R. Leedy	
2002	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robert R. Leedy	
2003	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robert R. Leedy	
2004	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	E. Frank Bowers	George Haas	John E. Cornely	Robert R. Leedy	
2005	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	David Viker	Diane Pence	John E. Cornely	Robert R. Leedy	
2006	J. Bradley Bortner	Jeffrey Haskins	Stephen D. Wilds	David Viker	Diane Pence	John E. Cornely	Russ Oates	
2007	J. Bradley Bortner	Jeffrey Haskins	<i>vacant</i>	David Viker	Diane Pence	James A. Dubovsky	Russ Oates	
2008	J. Bradley Bortner	Jeffrey Haskins	Jane West	David Viker	Diane Pence	James A. Dubovsky	Russ Oates	
2009	J. Bradley Bortner	Jeffrey Haskins	Jane West	David Viker	Diane Pence	James A. Dubovsky	Russ Oates	Marie E. Strassburger
2010	J. Bradley Bortner	Jeffrey Haskins	Jane West	David Viker	Diane Pence	James A. Dubovsky	Russ Oates	Marie E. Strassburger
2011	J. Bradley Bortner	Jeffrey Haskins	Jane West	<i>vacant</i>	Sherry Morgan	Casey Stemler	Russ Oates	Marie E. Strassburger
2012	Nanette Seto	Jeffrey Haskins	Jane West	Emily Jo Williams	Sherry Morgan	Casey Stemler	Russ Oates	Marie E. Strassburger
2013	Nanette Seto	Greg Hughes	Jane West	Emily Jo Williams	Sherry Morgan	Casey Stemler	Eric Taylor	Marie E. Strassburger
2014	Nanette Seto	Greg Hughes	Barb Jones	Emily Jo Williams	Pam Toschik	Casey Stemler	Eric Taylor	Marie E. Strassburger
2015	Nanette Seto	Greg Hughes	Tom Cooper	Laurel Barnhill	Pam Toschik	Casey Stemler	Eric Taylor	<i>vacant</i>
2016	Nanette Seto	Greg Hughes	Tom Cooper	Laurel Barnhill	Pam Toschik	Casey Stemler	Eric Taylor	<i>vacant</i>
2017	Nanette Seto	Scott Carleton	Tom Cooper	Laurel Barnhill	Pam Toschik	Casey Stemler	Eric Taylor	Amedee Brickey
2018	Nanette Seto	Scott Carleton	Tom Cooper	Laurel Barnhill	Pam Toschik	Brian Smith	Eric Taylor	Amedee Brickey
2019	Nanette Seto	Scott Carleton	Tom Cooper	Laurel Barnhill	Pam Toschik	Brian Smith	Eric Taylor	Amedee Brickey
2020	Nanette Seto	Scott Carleton	Tom Cooper	<i>Position eliminated</i>	Pam Toschik	Brian Smith	Eric Taylor	Amedee Brickey
2021	Nanette Seto	Kristin Madden	Tom Cooper		Pam Toschik	Brian Smith	Eric Taylor	T. Lehman (acting)
2022	Nanette Seto	Kristin Madden	A. Forbes (acting)		Pam Toschik	Brian Smith	Eric Taylor	Daniel Blake
2023	Nanette Seto	Kristin Madden	Brian Smith		Pam Toschik	<i>vacant</i>	<i>vacant</i>	Daniel Blake

<sup>a</sup> FWS REGIONS: Portland (1), Albuquerque (2), Minneapolis (3), Atlanta (4), Hadley (5), Denver (6), Anchorage (7), Sacramento (8).

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<sup>b</sup> Prior to 2000, Migratory Birds was part of Refuges and lead was called Coordinator; when Migratory Birds was separated from Refuges in 2000, Regional leads were Chiefs.