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# CENTRAL FLYWAY

## HARVEST AND POPULATION SURVEY DATA BOOK - 2022



Compiled by:  
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Central Flyway Representative Office

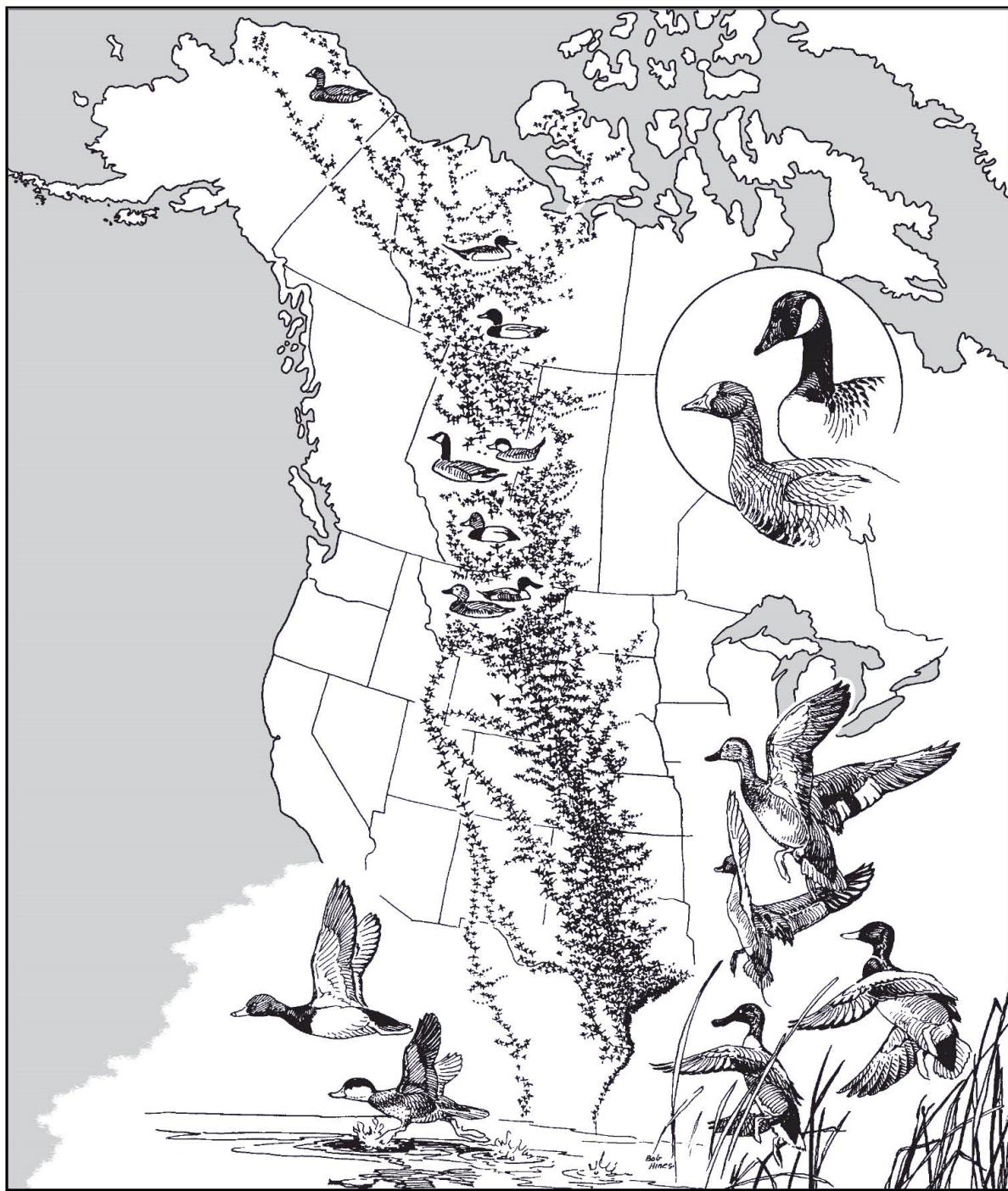
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# CENTRAL FLYWAY

## 1948-2022

74 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**

**MIGRATORY GAME BIRD HUNTING PERMITS BY PROVINCE/TERRITORY OF PURCHASE IN CANADA**

YR	NF	PE	NS	NB	PQ	ON	MB	SK	AB	BC	NT	YT	NU	TOTAL
1966	13,269	3,271	7,220	8,535	35,868	144,063	37,784	44,744	52,911	32,394	N/A	N/A		380,059
1967	14,863	3,094	7,883	7,739	32,491	146,493	35,620	44,651	55,892	33,195	N/A	N/A		381,921
1968	17,645	3,649	9,022	9,558	37,110	139,182	38,712	43,596	53,623	33,301	N/A	N/A		385,398
1969	19,089	3,794	8,848	10,110	39,477	134,037	41,611	45,347	53,602	32,764	N/A	N/A		388,679
1970	21,347	3,962	9,926	10,293	46,009	135,231	39,230	47,722	59,986	31,350	N/A	N/A		405,056
1971	23,460	4,513	11,381	11,146	50,276	133,563	40,960	49,448	62,902	30,225	N/A	N/A		417,874
1972	23,682	4,492	12,158	11,336	53,082	131,427	41,133	50,004	63,309	31,032	N/A	N/A		421,655
1973	27,919	4,972	15,071	12,869	57,247	141,277	41,711	51,307	67,012	33,456	N/A	N/A		452,841
1974	25,127	5,038	13,791	11,916	58,345	136,469	37,167	51,504	66,127	27,764	591	323		434,162
1975	30,115	4,963	13,990	12,930	63,768	148,670	42,846	57,723	69,191	25,918	721	485		471,320
1976	29,621	5,756	13,326	13,743	66,453	143,816	46,681	61,669	75,739	26,561	893	513		484,771
1977	36,188	6,158	15,744	14,209	72,828	156,895	46,438	60,029	82,175	28,357	902	607		520,530
1978	37,297	6,396	16,297	15,249	74,745	159,698	50,169	57,958	77,117	28,561	821	638		524,946
1979	35,490	5,888	14,098	13,409	73,209	150,224	49,344	56,174	77,021	28,263	755	584		504,459
1980	31,362	5,802	14,257	12,471	76,133	147,952	48,340	54,081	79,318	27,943	732	525		498,916
1981	31,401	5,611	14,130	12,287	75,178	141,677	46,528	42,856	66,163	28,243	764	514		465,352
1982	31,215	5,461	13,728	12,759	72,850	144,436	45,273	47,236	64,968	26,522	800	572		465,820
1983	30,977	5,898	13,468	12,758	67,700	139,569	40,443	45,383	61,742	24,170	750	474		443,332
1984	31,309	5,525	12,896	11,486	65,308	140,521	35,238	37,720	51,717	21,892	850	496		414,958
1985	25,652	5,171	10,749	10,354	60,823	130,089	31,753	36,445	44,880	18,753	713	361		375,743
1986	25,498	5,300	11,047	11,083	59,685	131,930	33,570	37,692	45,042	17,924	692	358		379,821
1987	21,080	4,959	10,299	9,897	55,124	122,472	30,207	29,930	40,122	16,259	523	391		341,263
1988	23,655	4,906	10,264	10,646	57,206	117,310	25,108	23,258	34,513	15,595	496	367		323,324
1989	24,707	4,838	10,092	9,971	54,605	114,292	23,898	22,916	34,559	14,694	420	308		315,300
1990	24,831	4,625	10,115	9,974	54,700	115,130	22,641	22,964	32,212	13,851	431	240		311,714
1991	20,738	4,209	10,104	9,997	53,739	108,802	22,122	22,414	29,399	13,601	352	300		295,777
1992	20,317	3,753	9,193	9,338	49,267	103,403	20,048	20,620	28,059	12,429	348	256		277,031
1993	20,585	3,609	8,988	9,008	47,675	95,824	19,199	19,771	26,787	11,818	327	287		263,878
1994	20,399	3,380	9,314	9,468	46,537	92,344	18,838	20,254	26,211	11,037	320	294		258,396
1995	20,231	3,479	9,176	8,674	38,955	83,720	19,630	20,554	25,747	9,855	342	318		240,681
1996	16,312	3,303	8,652	8,536	36,004	80,194	19,702	20,475	27,299	10,069	318	306		231,170
1997	14,289	3,051	7,731	7,573	31,435	72,522	18,918	20,109	26,863	10,186	278	268		213,223
1998	13,101	2,946	7,681	7,095	30,115	70,427	18,494	21,822	22,239	9,816	286	231		204,253
1999	13,120	2,671	7,411	6,828	31,960	67,084	17,524	21,685	21,415	9,317	292	231		199,538
2000	12,220	2,805	7,072	6,402	31,375	63,678	15,856	21,962	21,792	9,010	272	224	2	192,668
2001	17,185	2,445	6,647	5,982	30,480	58,483	15,059	18,425	19,543	8,200	224	251	24	182,948
2002	16,069	2,342	6,317	5,943	29,994	56,677	14,905	17,339	17,815	7,480	250	217	28	175,376
2003	15,756	2,316	5,926	6,069	30,450	56,953	15,132	18,208	18,373	6,541	244	159	12	176,139
2004	14,821	2,124	5,727	5,715	30,065	55,570	14,292	18,339	18,782	6,409	192	182	24	172,242
2005	13,574	2,012	5,485	5,556	28,877	53,164	13,892	18,611	19,340	6,187	193	204	30	167,125
2006	14,224	1,474	5,382	5,331	28,035	54,404	14,246	18,647	19,403	5,833	202	167	20	167,368
2007	15,680	1,620	5,467	5,406	28,836	53,667	14,089	19,381	20,460	6,130	186	207	22	171,151
2008	16,155	1,578	5,573	5,531	29,767	55,039	13,648	18,082	20,463	6,371	190	183	26	172,606
2009	15,686	1,687	5,555	5,564	29,700	55,624	12,708	17,898	19,378	6,639	217	190	34	170,880
2010	15,762	1,775	5,704	5,550	30,599	55,674	12,761	17,995	19,939	6,442	247	200	52	172,700
2011	15,826	1,761	5,619	5,595	30,866	56,314	11,896	17,533	21,433	6,314	251	234	26	173,668
2012	17,449	1,784	5,794	5,818	31,352	57,426	12,421	20,112	21,866	6,800	261	254	38	181,375
2013	17,548	1,742	5,825	6,182	31,943	62,009	12,765	21,376	22,736	7,108	287	259	44	189,824
2014	15,957	1,768	5,289	5,969	32,506	61,539	12,219	20,518	23,429	7,474	391	281	54	187,394
2015	15,109	1,704	5,096	5,566	31,265	59,975	12,386	21,099	25,096	7,558	341	301	63	185,559
2016	14,695	1,681	5,109	5,686	30,902	58,105	11,721	20,756	25,394	7,076	329	286	69	181,809
2017	13,825	1,213	4,726	5,077	30,414	53,232	8,165	19,862	24,261	6,883	284	297	49	168,288
2018	12,871	1,193	4,601	5,049	29,803	51,502	8,504	19,701	24,416	7,029	266	275	63	165,273
2019	12,381	1,214	4,700	5,081	28,479	50,659	7,875	18,270	24,328	7,047	283	286	85	161,271
2020	12,615	1,231	4,583	5,053	28,727	50,801	6,031	9,057	23,153	7,592	313	296	83	149,560
2021	11,412	1,201	4,470	5,017	28,889	48,549	6,694	11,648	22,483	7,298	254	305	61	148,394

**AVERAGES:**

1966-69	16,217	3,452	8,243	8,986	36,237	140,944	38,432	44,585	54,007	32,914	N/A	N/A		384,014
1970-79	29,025	5,214	13,578	12,710	61,596	143,727	43,568	54,354	70,058	29,149	781	525		463,761
1980-89	27,686	5,347	12,093	11,371	64,461	133,025	36,036	37,752	52,302	21,200	674	437		402,383
1990-99	18,392	3,503	8,837	8,649	42,039	88,945	19,712	21,067	26,623	11,198	329	273		249,566
2000-09	15,137	2,040	5,915	5,750	29,758	56,326	14,383	18,689	19,535	6,880	217	198	41	174,850
2010-19	15,142	1,584	5,246	5,557	30,813	56,644	11,071	19,722	23,290	6,973	294	267	54	176,716
1966-20	20,406	3,448	8,906	8,685	44,451	97,318	25,253	30,623	38,924	16,081	425	323	41	294,764

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

AVERAGES:											
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	1,252
1975-2021	1,892	1,054	308	824	6,095	1,473	466	24,530	138	36,335	1,252

<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	
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		3,500		3,500
1971							2,495		500		3,495		3,495
1972							2,500		500		3,500		3,500
1973							2,500		500		3,500		3,500
1974							2,500		500		3,500		3,500
1975							2,500		500		3,500		3,500
1976							2,500		500		3,500		3,500
1977							2,488		500		3,488		3,488
1978							2,500		500		3,500		3,500
1979							2,500		500		3,500		3,500
1980							2,500		500		3,500		3,500
1981							2,500		500		3,500		3,500
1982							2,500		500		3,500		3,500
1983	109						109						3,759
1984	108			1,000			1,108						4,758
1985	120			6,000			6,120						9,758
1986	170			6,000			6,170						9,778
1987	171			5,968			6,139						9,732
1988	99	400		5,995	600		7,094						10,466
1989	167	1,000		5,444	600		7,211						10,665
1990	173	1,000	500	5,989	600		8,262						11,640
1991	204	2,000	1,000	6,000	600		9,804						13,146
1992	217	2,000	1,502	5,961	600		10,280						13,469
1993	212	2,000	1,500	6,000	400		10,112						13,487
1994	232	2,000	1,500	6,000	600		10,332						13,754
1995	291	2,000	1,500	6,000	600		10,391						14,234
1996	372	2,000	1,235	5,000	600		9,207						13,026
1997	364	2,000	1,077	5,000	600		9,041						12,873
1998	429	2,000	1,216	5,000	600		9,245						13,179
1999	432	2,000	863	5,000	600		8,895						12,890
2000	434	2,000	850	5,000	600		8,884						12,041
2001	398	2,000	983	5,000	600		8,981						12,044
2002	393	2,000	1,060	5,000	600		9,053						12,067
2003	423	2,200	1,002	5,000	600		9,225						12,238
2004	320	2,200	820	5,000	600		8,940						11,945
2005	348	2,200	811	5,000	600		8,959						12,002
2006	340	2,200	811	5,000	600		8,951						12,218
2007	323	2,200	1,064	5,000	600		9,187						12,499
2008	307	2,200	958	5,000	600		9,065						12,282
2009	327	2,200	1,242	5,000	600		9,369						12,515
2010	369	2,200	1,234	5,000	600		9,403						12,584
2011	320	2,200	1,156	5,000	600		9,276						12,531
2012	338	2,200	1,266	5,000	600		9,404						12,719
2013	354	2,200	1,259	5,000	600		9,413						12,590
2014	401	2,200	1,216	5,000	600		9,417						12,310
2015	432	2,200	1,299	5,000	600		9,531						12,263
2016	410	2,200	1,083	5,000	600		9,293						12,311
2017	338	2,700	1,068	6,250	750		11,106						14,296
2018	354	2,700	1,189	6,250	750		11,243						14,502
2019	500	2,700	1,185	6,115	801	84	11,385						15,422
2020	500	2,200	1,166	4,895	638	67	9,466						13,500
2021	500	2,200	1,197	4,895	638	67	9,497						13,540

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# **Waterfowl Hunter Activity and Success**

### ESTIMATES OF ACTIVE DUCK HUNTERS BY STATE OF HARVEST (Harvest Information Program)<sup>1</sup>

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY
1999	14,000	16,900	12,300	20,200	2,200	39,200	13,800	24,000	86,300	4,600
2000	14,000	14,900	11,300	19,200	3,100	32,200	13,500	18,400	115,600	4,300
2001	17,533	16,344	11,044	18,392	5,054	36,414	10,781	22,411	139,853	4,248
2002	12,733	15,426	14,742	16,976	4,385	34,385	14,691	19,158	103,372	4,413
2003 <sup>2</sup>	13,400	15,100	14,200	18,500	3,900	37,100	13,800	18,200	61,100	4,300
2004 <sup>2</sup>	13,600	19,200	14,400	16,800	3,300	36,900	15,300	18,800	84,900	3,400
2005 <sup>2</sup>	12,300	11,600	12,100	15,600	2,900	36,300	16,100	15,500	91,500	3,600
2006 <sup>2</sup>	12,416	12,663	12,941	15,992	2,424	29,691	14,236	15,333	84,228	3,960
2007 <sup>2</sup>	11,882	13,021	11,258	14,752	2,820	32,192	19,437	14,459	80,213	4,587
2008 <sup>2</sup>	13,750	16,531	12,553	14,517	2,552	26,185	14,194	14,205	72,720	3,630
2009 <sup>2</sup>	13,257	14,259	11,532	12,900	1,784	30,604	11,692	16,638	67,382	4,148
2010 <sup>2</sup>	9,094	13,053	10,157	13,394	2,617	24,760	13,595	16,521	66,982	3,326
2011 <sup>2</sup>	12,151	13,534	11,647	14,656	2,945	32,005	13,692	16,080	74,700	4,018
2012 <sup>2</sup>	11,081	12,739	13,553	13,626	3,328	31,380	13,892	14,797	74,727	3,412
2013 <sup>2</sup>	11,894	16,847	10,647	12,977	2,131	32,071	18,768	13,890	46,423	4,724
2014 <sup>2</sup>	12,977	17,684	17,522	12,021	5,363	37,275	17,287	15,614	86,253	3,464
2015 <sup>2</sup>	11,009	19,582	16,922	12,065	2,078	34,649	16,235	13,432	61,208	3,192
2016 <sup>2</sup>	10,323	14,000	12,279	12,344	4,169	33,495	19,411	10,634	79,902	3,106
2017 <sup>2</sup>	11,655	17,857	12,437	10,686	3,011	29,428	15,794	12,689	86,200	4,097
2018 <sup>2</sup>	11,881	18,065	14,645	11,723	3,284	33,750	20,039	15,554	74,279	3,692
2019 <sup>2</sup>	11,159	13,843	12,912	12,064	3,687	30,520	20,894	13,975	68,966	2,718
2020 <sup>2</sup>	11,328	19,993	17,713	11,927	3,330	31,214	23,435	11,266	80,337	3,659
2021 <sup>2</sup>	8,141	20,886	11,120	13,454	5,363	29,921	23,395	14,244	64,629	3,724
<b>AVERAGE:</b>										
1999-2021	12,242	15,827	13,040	14,555	3,292	32,680	16,259	15,904	80,512	3,840
<b>% CHANGE FROM:</b>										
Prev. Year	-28%	4%	-37%	13%	61%	-4%	0%	26%	-20%	2%
Average	-33%	32%	-15%	-8%	63%	-8%	44%	-10%	-20%	-3%

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

<sup>2</sup> Preliminary

### ESTIMATES OF TOTAL 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	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>3</sup> FLYWAY	U.S.
1999	79,500	126,800	70,500	152,200	14,100	224,000	107,500	151,100	508,900	30,100	1,464,700	1,145,900	4,361,600	1,451,900	8,424,100
2000	81,000	107,400	72,500	129,400	24,600	166,300	91,800	105,500	704,900	23,900	1,507,300	1,164,900	4,222,700	1,251,200	8,146,100
2001	114,178	100,989	72,935	145,880	29,882	188,020	67,697	150,044	720,993	26,570	1,617,188	1,187,400	4,265,100	1,188,200	8,257,888
2002	67,767	102,744	79,809	136,112	24,252	179,029	107,583	123,655	539,665	25,951	1,386,568	1,162,300	4,004,600	1,163,600	7,717,068
2003 <sup>2</sup>	86,000	107,600	70,600	135,000	30,900	197,700	103,500	119,400	379,200	23,000	1,252,900	1,106,900	4,033,400	1,118,500	7,511,700
2004 <sup>2</sup>	85,300	124,000	71,500	129,100	25,600	194,200	130,300	110,200	497,000	31,300	1,398,500	938,600	3,857,200	1,203,500	7,397,800
2005 <sup>2</sup>	66,700	87,700	64,300	110,900	16,700	186,700	107,700	86,200	488,500	19,700	1,235,100	1,067,300	3,075,500	1,165,600	6,543,500
2006 <sup>2</sup>	64,993	85,416	60,018	111,456	15,611	149,988	110,707	92,213	424,851	22,485	1,137,739	1,046,183	3,364,288	1,300,253	6,848,463
2007 <sup>2</sup>	66,072	82,149	57,960	121,493	18,665	157,619	154,609	84,346	418,536	23,876	1,185,324	1,076,255	3,479,080	1,295,713	7,036,372
2008 <sup>2</sup>	72,852	106,154	56,644	104,014	14,836	119,806	98,139	79,959	331,573	18,768	1,002,747	1,001,258	3,410,043	1,328,957	6,743,005
2009 <sup>2</sup>	79,367	92,081	50,491	94,087	17,027	165,853	87,395	84,731	410,219	22,253	1,103,504	1,104,107	3,455,486	1,159,302	6,822,398
2010 <sup>2</sup>	51,168	79,064	49,734	98,535	15,860	115,550	89,935	71,455	355,088	18,676	945,065	1,072,404	3,404,160	1,218,952	6,640,581
2011 <sup>2</sup>	64,567	96,138	60,584	124,751	16,669	162,591	107,778	85,907	480,070	19,611	1,218,667	1,091,364	3,637,170	1,187,091	7,134,292
2012 <sup>2</sup>	57,407	90,851	69,767	93,088	16,978	160,182	112,166	85,317	513,823	20,800	1,220,379	1,104,174	3,505,200	1,283,602	7,113,355
2013 <sup>2</sup>	77,094	105,344	63,643	101,187	13,511	161,165	127,799	83,699	360,610	26,643	1,120,695	1,036,149	3,107,196	996,539	6,260,579
2014 <sup>2</sup>	67,516	101,802	79,788	81,859	28,728	177,482	123,559	68,758	465,903	18,368	1,213,763	924,229	2,981,858	931,605	6,051,455
2015 <sup>2</sup>	67,860	98,266	87,122	87,798	9,696	179,141	103,738	78,058	309,547	15,877	1,037,103	950,910	2,702,691	892,644	5,583,348
2016 <sup>2</sup>	60,635	87,293	68,161	81,311	10,993	159,547	123,721	48,131	385,806	13,071	1,038,669	1,006,644	2,647,195	933,040	5,625,548
2017 <sup>2</sup>	60,228	66,103	57,483	84,930	17,662	143,533	82,606	52,825	391,751	21,760	978,881	912,253	2,544,565	1,068,673	5,504,372
2018 <sup>2</sup>	59,158	74,854	72,446	78,980	24,167	160,407	98,280	61,786	358,203	15,555	1,003,836	977,418	2,452,753	1,129,913	5,563,920
2019 <sup>2</sup>	55,013	65,984	48,371	87,340	16,790	135,109	106,225	74,902	332,568	11,142	933,444	841,937	2,348,153	939,995	5,063,529
2020 <sup>2</sup>	62,142	102,997	110,951	84,896	15,346	153,824	152,446	59,640	408,593	17,803	1,168,638	955,210	2,717,495	1,110,798	5,952,140
2021 <sup>2</sup>	32,943	105,627	49,661	91,086	24,079	142,262	129,061	64,084	295,546	19,383	953,733	859,362	2,392,971	937,689	5,143,755
<b>AVERAGE:</b>											1,179,324	1,031,876	3,303,061	1,141,620	6,655,881
<b>% CHANGE FROM:</b>											47%	3%	-55%	7%	-14%
Prev. Year	-47%	3%	-55%	7%	57%	-8%	-15%	7%	-28%	9%	-18%	-10%	-12%	-16%	-14%
Average	-52%	11%	-26%	-15%	25%	-13%	18%	-27%	-33%	-8%	-19%	-17%	-28%	-18%	-23%

<sup>1</sup> Estimates for NM, CO, WY, and MT are statewide. MT is summarized in the Pacific Flyway's total and WY, CO, and NM are summarized in the Central Flyway's total.

<sup>2</sup> Preliminary

<sup>3</sup> Pacific Flyway total includes Alaska

### 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

<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

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

<sup>2</sup> Preliminary

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**ESTIMATES OF ACTIVE GOOSE HUNTERS BY STATE OF HARVEST (Harvest Information Program)<sup>1</sup>**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY
1999	15,300	14,400	10,700	19,400	1,700	30,600	12,000	24,700	67,900	3,300
2000	18,400	17,300	12,300	19,500	2,700	26,000	7,300	21,600	67,000	4,600
2001	16,790	15,715	10,623	18,056	3,393	26,500	7,818	26,283	76,647	3,720
2002 <sup>2</sup>	16,276	15,248	13,848	15,290	3,367	23,626	7,335	22,398	66,583	4,034
2003 <sup>2</sup>	15,900	16,100	14,000	18,300	2,500	27,600	8,500	20,100	47,000	4,300
2004 <sup>2</sup>	14,700	15,500	12,800	15,100	2,300	24,700	10,000	19,200	47,400	3,600
2005 <sup>2</sup>	14,600	12,000	9,700	15,400	2,000	26,500	9,900	15,400	58,800	4,000
2006 <sup>2</sup>	12,993	12,038	11,194	13,673	1,816	23,982	9,007	17,527	56,512	3,903
2007 <sup>2</sup>	14,642	14,294	11,932	12,460	1,711	23,123	10,843	14,010	63,638	3,927
2008 <sup>2</sup>	16,009	14,692	10,206	14,522	1,488	21,322	7,315	15,760	49,354	3,692
2009 <sup>2</sup>	15,203	12,213	12,056	11,828	961	20,707	7,616	14,558	36,708	3,618
2010 <sup>2</sup>	10,651	10,700	10,689	13,778	1,722	21,609	6,526	14,174	45,974	3,845
2011 <sup>2</sup>	11,962	12,900	8,949	12,126	2,490	24,507	7,460	11,974	42,256	3,685
2012 <sup>2</sup>	13,912	11,207	14,097	14,340	2,863	25,165	7,715	14,726	31,251	3,768
2013 <sup>2</sup>	14,277	15,543	6,608	13,370	2,027	24,815	9,886	14,280	30,347	4,629
2014 <sup>2</sup>	14,568	13,716	12,533	13,186	2,974	26,690	9,402	12,101	47,485	3,729
2015 <sup>2</sup>	12,240	14,099	12,221	10,783	1,328	28,167	7,932	9,871	29,303	3,209
2016 <sup>2</sup>	15,209	15,079	8,118	13,113	1,816	24,953	7,685	12,823	45,732	3,870
2017 <sup>2</sup>	14,044	12,328	9,681	12,970	1,563	26,724	7,880	15,230	48,202	4,207
2018 <sup>2</sup>	12,539	13,652	9,538	11,087	3,178	23,284	8,995	14,294	43,644	3,741
2019 <sup>2</sup>	13,305	9,648	10,604	11,803	3,215	22,134	12,059	11,366	39,238	3,257
2020 <sup>2</sup>	10,544	14,963	12,404	12,839	2,330	24,659	13,627	11,992	35,833	3,653
2021 <sup>2</sup>	10,288	17,391	11,200	13,275	3,585	26,857	11,477	13,815	35,492	3,884
<b>AVERAGE:</b>										
1999-2020	14,102	13,945	11,130	14,183	2,306	24,966	9,055	16,008	48,361	3,833
<b>% CHANGE FROM:</b>										
Prev. Year	-2%	16%	-10%	3%	54%	9%	-16%	15%	-1%	6%
Average	-27%	25%	1%	-6%	55%	8%	27%	-14%	-27%	1%

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

<sup>2</sup> Preliminary

**ESTIMATES OF TOTAL 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	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>3</sup> FLYWAY	U.S.
1999	93,700	93,300	60,300	144,100	6,500	160,700	54,200	165,800	232,300	16,600	1,027,500	516,300	2,248,800	768,200	4,560,800
2000	111,800	112,200	80,800	152,000	16,400	123,500	37,000	126,400	285,500	26,400	1,072,000	519,800	2,229,200	716,300	4,537,300
2001	104,290	89,663	59,640	148,189	14,621	131,727	30,499	172,841	217,387	22,274	991,131	855,800	2,157,800	651,900	4,656,631
2002 <sup>2</sup>	91,827	79,771	66,526	128,990	19,605	118,447	36,672	148,618	192,924	22,180	905,560	852,900	2,415,900	625,000	4,799,360
2003 <sup>2</sup>	111,400	116,200	65,200	137,500	13,300	128,900	44,100	146,700	149,700	24,600	937,600	830,800	2,360,700	656,200	4,785,300
2004 <sup>2</sup>	92,200	98,000	61,900	117,500	11,400	123,100	44,500	122,600	140,600	24,800	836,600	672,100	2,086,900	668,300	4,263,900
2005 <sup>2</sup>	84,300	84,800	42,500	129,200	8,300	132,900	42,900	93,300	183,500	20,900	822,600	796,300	1,928,500	638,400	4,185,800
2006 <sup>2</sup>	76,791	60,994	48,671	99,211	5,778	110,170	49,321	106,573	193,737	20,099	771,346	691,505	1,950,358	642,559	4,055,768
2007 <sup>2</sup>	84,178	79,723	51,146	106,751	6,625	99,258	49,448	82,987	197,414	20,324	777,855	801,635	1,807,690	595,597	3,982,777
2008 <sup>2</sup>	105,484	83,525	39,564	114,958	5,612	94,457	41,584	86,638	170,690	20,327	762,841	797,235	1,733,803	597,100	3,890,979
2009 <sup>2</sup>	84,847	78,955	48,432	95,594	4,703	98,155	33,183	82,845	108,890	16,979	652,585	804,520	1,773,921	607,189	3,838,215
2010 <sup>2</sup>	60,298	56,936	42,167	116,776	5,630	90,410	29,129	69,216	152,364	20,027	642,952	688,930	1,579,897	583,750	3,495,528
2011 <sup>2</sup>	67,759	75,795	40,155	112,846	15,117	109,313	29,642	66,827	192,755	17,913	728,120	656,953	1,667,331	561,512	3,613,916
2012 <sup>2</sup>	84,907	73,084	70,698	104,267	13,749	113,170	37,363	82,889	83,923	19,203	683,252	695,494	1,520,908	629,048	3,528,702
2013 <sup>2</sup>	89,643	88,386	30,910	95,928	8,435	117,463	49,399	92,625	90,508	27,570	690,867	651,718	1,497,469	492,294	3,332,348
2014 <sup>2</sup>	73,885	80,287	56,009	107,979	9,518	123,097	50,175	55,769	155,536	17,446	729,701	611,930	1,419,846	581,571	3,343,048
2015 <sup>2</sup>	58,070	58,244	61,868	90,318	4,549	129,667	40,397	61,049	93,334	15,910	613,406	601,000	1,628,168	473,003	3,315,577
2016 <sup>2</sup>	85,686	95,005	36,324	96,896	6,116	125,165	50,373	57,608	143,514	16,809	713,496	736,220	1,734,737	473,171	3,657,624
2017 <sup>2</sup>	74,581	57,878	50,331	108,377	6,212	118,155	27,000	77,686	141,092	23,177	684,489	595,313	1,590,027	566,480	3,436,309
2018 <sup>2</sup>	70,136	48,522	40,434	98,046	9,538	104,422	26,000	69,066	166,610	14,775	647,549	513,548	1,334,291	575,798	3,071,186
2019 <sup>2</sup>	71,530	39,713	42,485	89,967	13,650	88,384	43,867	46,956	111,755	15,614	563,921	449,906	931,629	1,381,535	3,326,991
2020 <sup>2</sup>	63,679	75,054	71,207	88,240	9,410	113,213	74,732	65,053	104,234	19,514	684,335	549,449	1,087,523	1,636,972	3,958,279
2021 <sup>2</sup>	43,539	90,267	48,591	111,156	14,562	111,959	48,982	67,379	107,085	17,533	661,054	378,862	1,395,870	512,979	2,948,765
<b>AVERAGE:</b>											765,250	663,836	1,742,664	679,776	3,851,526
<b>% CHANGE FROM:</b>											Prev. Year	-32%	20%	-32%	-26%
											Average	-47%	14%	-8%	-23%

<sup>1</sup> Estimates for NM, CO, WY, and MT are statewide. MT is summarized in the Pacific Flyway's total and WY, CO, and NM are summarized in the Central Flyway's total.

<sup>2</sup> Preliminary

<sup>3</sup> Pacific Flyway total includes Alaska

**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

<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

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

<sup>2</sup> Preliminary

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Estimated active Mid-Continent sandhill crane hunters in the Central Flyway (CF) and Minnesota. Active hunters are those permittees reporting hunting cranes 1 or more times.

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	---	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	---	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

<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
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
1984	58						867	925	2,150	494	305	3,874
1985	60						5,080	5,140	2,021	436	275	2,732
1986	51						4,888	4,939	2,075	480	270	2,825
1987	106						5,014	5,120	1,924	404	395	2,723
1988	60	301					4,729	519	5,609	1,875	195	355
1989	117	865					4,446	517	5,945	1,925	262	400
1990	121	816	485				4,859	499	6,780	2,050	232	370
1991	131	1,565	850				4,849	488	7,883	1,950	181	185
1992	139	1,648	1,352				4,675	516	8,330	1,875	71	365
1993	119	1,603	1,350				4,802	334	8,208	2,025	135	380
1994	145	1,616	1,260				4,790	489	8,300	2,100	161	405
1995	175	1,638	900				4,776	495	7,984	2,172	287	340
1996	219	1,549	840				3,773	476	6,857	2,392	331	415
1997	262	1,671	872				3,892	503	7,200	2,392	328	395
1998	308	1,559	851				3,762	481	6,961	2,420	418	415
1999	282	1,675	690				3,836	445	6,928	2,338	435	390
2000	260	1,566	606				4,047	513	6,992	1,680	360	301
2001	233	1,553	827				3,997	510	7,120	1,560	240	340
2002	200	1,550	693				3,951	485	6,879	1,658	182	305
2003	199	1,436	587				4,257	520	6,999	1,740	221	250
2004	230	1,564	579				3,958	526	6,857	1,600	221	400
2005	240	1,715	539				4,180	527	7,201	1,618	270	380
2006	211	1,650	543				4,074	520	6,998	1,775	442	325
2007	213	1,672	700				4,126	509	7,220	1,800	501	400
2008	193	1,738	653				4,244	523	7,351	1,760	369	385
2009	193	1,804	752				4,322	492	7,563	1,780	283	405
2010	207	1,694	665				4,246	500	7,312	1,720	356	360
2011	192	1,760	740				4,200	454	7,346	1,740	401	390
2012	213	1,650	680				4,179	452	7,174	1,820	501	370
2013	202	1,671	722				4,308	442	7,345	1,540	268	375
2014	265	1,692	739				4,069	417	7,182	1,740	280	345
2015	346	1,672	1,129				4,309	545	8,001	1,740	60	407
2016	339	1,561	954				3,744	444	7,042	1,620	294	436
2017	128	1,755	625				5,309	522	8,339	1,640	405	200
2018	223	1,863	710				5,265	532	8,593	1,618	625	305
2019	201	1,755	1,038	70	5,124	565	8,753		2,226	411	247	48
2020	201	1,430	1,019	38	4,174	454	7,316	2,236		32	421	245
2021	221	1,386	1,023	55	4,044	482	7,211	2,077		30	292	292
<b>AVERAGES:</b>												
1962-69								1,145			1,145	1,145
1970-79								2,171		391	315	2,806
1980-89	75	583			4,171	518	3,964	2,062		402	345	76
1990-99	190	1,534	945		4,401	473	7,543	2,171		258	366	94
2000-09	217	1,625	648		4,116	513	7,118	1,697		309	349	102
2010-19	232	1,707	800		4,475	487	7,709	1,740		360	344	84
Start-2021	188	1,548	812	54	4,294	491	6,820	1,890		31	343	341
										91	2,546	7,132

AVERAGE SEASONAL TUNDRA SWAN BAG (RETRIEVED & UNRETRIEVED) PER ACTIVE HUNTER													
Year	EASTERN POPULATION						WESTERN POPULATION						
	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	0.55
1989	0.39	0.68				0.53	0.29	0.53	0.44	0.32	0.85	0.27	0.48
1990	0.51	0.70	0.84			0.64	0.29	0.63	0.50	0.31	0.80	0.35	0.52
1991	0.41	0.52	0.61			0.65	0.45	0.61	0.48	0.35	0.46	0.15	0.46
1992	0.27	0.59	0.71			0.62	0.40	0.61	0.26	0.44	0.62	0.29	0.54
1993	0.18	0.49	0.51			0.62	0.41	0.56	0.19	0.43	0.84	0.36	0.50
1994	0.44	0.48	0.47			0.82	0.41	0.67	0.42	0.60	0.86	0.35	0.63
1995	0.34	0.55	0.22			0.67	0.45	0.57	0.38	0.32	0.57	0.49	0.52
1996	0.30	0.48	0.30			0.61	0.42	0.52	0.84	0.41	0.78	0.65	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
1998	0.29	0.43	0.29			0.65	0.52	0.53	1.05	0.50	0.78	0.48	0.86
1999	0.34	0.57	0.36			0.61	0.30	0.55	0.83	0.53	0.61	0.65	0.71
2000	0.50	0.44	0.30			0.67	0.36	0.56	0.47	0.24	0.82	1.95	0.51
2001	0.42	0.40	0.46			0.63	0.30	0.53	0.21	0.27	0.94	0.77	0.36
2002	0.28	0.48	0.32			0.63	0.38	0.54	0.39	0.28	0.59	0.36	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
2004	0.48	0.50	0.25			0.46	0.32	0.44	0.48	0.41	0.67	0.60	0.51
2005	0.42	0.49	0.29			0.62	0.40	0.54	0.62	0.39	0.83	0.55	0.62
2006	0.30	0.40	0.33			0.59	0.33	0.50	0.58	0.36	0.53	0.88	0.54
2007	0.30	0.44	0.23			0.57	0.39	0.49	0.56	0.45	0.82	0.93	0.59
2008	0.29	0.56	0.42			0.61	0.49	0.56	0.47	0.37	0.55	0.62	0.48
2009	0.36	0.56	0.45			0.54	0.36	0.52	0.52	0.21	0.80	0.88	0.54
2010	0.22	0.47	0.33			0.62	0.49	0.54	0.47	0.35	0.63	0.54	0.48
2011	0.34	0.44	0.39			0.61	0.33	0.52	0.45	0.39	0.69	0.77	0.49
2012	0.38	0.40	0.26			0.62	0.39	0.52	0.56	0.44	0.83	0.48	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
2014	1.52	0.50	0.38			0.63	0.41	0.59	0.51	0.09	0.51	0.60	0.46
2015	0.32	0.39	0.20			0.62	0.32	0.48	0.57	0.18	0.71	0.72	0.50
2016	0.27	0.40	0.10			0.56	0.30	0.43	0.55	0.46	0.54	0.93	0.46
2017	0.38	0.49	0.38			0.62	0.49	0.56	0.55	0.34	0.59	0.76	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
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
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	0.53
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
<b>AVERAGES:</b>													
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					

# **Duck Harvests in the United States**

**ESTIMATED REGULAR SEASON MALLARD HARVESTS (Harvest Information Program)**

YR											CEN	ATL	MISS	PAC	U.S.
	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	FLYWAY	FLYWAY	FLYWAY	FLYWAY	
1999	38,337	114,167	29,678	91,025	7,851	254,256	114,589	145,196	182,755	17,675	995,529	444,068	3,136,859	1,318,473	5,894,929
2000	49,420	102,846	29,211	118,548	21,894	182,521	116,379	110,607	283,116	21,447	1,035,989	522,968	3,272,671	1,237,479	6,069,107
2001	80,906	97,739	27,151	133,947	22,872	242,147	92,830	154,993	300,903	24,870	1,178,355	472,682	2,796,047	1,031,568	5,476,655
2002	43,032	93,112	22,263	112,577	20,701	226,961	121,494	117,085	232,687	23,736	1,013,648	538,846	2,374,276	906,787	4,833,557
2003 <sup>1</sup>	59,600	95,711	38,205	127,992	25,141	231,338	110,031	124,593	130,070	19,430	962,110	427,301	2,482,378	1,058,281	4,930,070
2004 <sup>1</sup>	47,784	133,582	32,575	95,874	15,644	223,924	186,755	93,993	117,021	22,210	969,434	422,004	2,199,931	940,160	4,531,529
2005 <sup>1</sup>	31,089	84,193	26,871	89,415	8,124	233,142	125,375	81,701	171,208	17,025	868,145	444,305	2,049,383	1,105,095	4,466,928
2006 <sup>1</sup>	44,782	55,780	18,231	86,754	12,421	162,300	126,446	72,734	111,196	19,308	709,952	399,651	2,286,251	1,272,165	4,668,019
2007 <sup>1</sup>	39,393	61,041	19,229	91,047	9,276	171,224	219,572	83,640	86,931	25,345	806,698	429,917	2,514,119	1,127,524	4,878,258
2008 <sup>1</sup>	48,486	98,160	27,156	90,391	11,394	139,219	97,524	76,643	70,234	17,581	676,788	503,480	2,281,761	1,092,094	4,554,123
2009 <sup>1</sup>	42,670	80,574	25,348	84,027	13,241	169,224	104,072	106,581	74,524	19,214	721,475	419,279	2,075,916	917,944	4,134,614
2010 <sup>1</sup>	28,241	76,639	26,288	75,233	13,642	105,146	90,298	83,910	89,514	14,300	603,214	394,429	2,228,872	939,498	4,166,013
2011 <sup>1</sup>	27,372	85,163	17,263	104,793	15,455	187,683	101,595	102,254	113,557	20,075	773,210	315,897	2,240,248	1,079,618	4,408,973
2012 <sup>1</sup>	35,161	78,157	18,761	94,630	15,222	187,963	118,526	99,769	92,801	22,154	763,144	324,713	1,882,553	964,088	3,934,498
2013 <sup>1</sup>	34,122	94,432	26,289	82,415	11,563	178,721	134,470	81,498	68,282	26,693	740,085	328,024	1,836,788	732,483	3,637,385
2014 <sup>1</sup>	54,497	114,417	20,303	75,602	14,123	213,079	148,826	81,560	73,761	17,306	813,474	294,063	1,992,450	803,447	3,903,434
2015 <sup>1</sup>	40,510	112,358	26,732	72,381	12,300	189,295	118,530	63,712	65,403	13,226	714,447	250,114	1,695,598	773,155	3,433,314
2016 <sup>1</sup>	47,573	95,988	13,302	78,575	6,645	163,808	131,487	48,402	116,700	11,177	715,855	313,511	1,826,117	863,500	3,716,983
2017 <sup>1</sup>	44,130	65,323	16,087	62,861	15,710	171,745	79,361	44,934	96,236	14,589	610,976	266,376	1,643,472	884,735	3,425,559
2018 <sup>1</sup>	39,051	72,553	33,860	50,582	11,250	157,338	118,270	50,841	103,378	13,915	651,044	277,111	1,407,355	1,038,273	3,373,789
2019 <sup>1</sup>	38,079	67,012	17,554	54,844	16,397	104,946	113,463	60,185	47,491	8,790	528,765	222,254	1,454,937	690,115	2,896,072
2020 <sup>1</sup>	24,494	89,442	20,157	54,764	5,851	136,507	121,739	53,194	51,733	11,045	568,926	220,791	1,211,677	799,817	2,801,212
2021 <sup>1</sup>	27,737	121,261	12,735	53,240	4,431	86,387	114,046	40,388	36,731	11,627	508,582	179,879	1,184,068	668,951	2,541,481
<b>AVERAGE:</b>															
1999-2021	42,023	90,854	23,706	86,153	13,538	179,081	121,986	86,001	118,184	18,032	779,559	366,595	2,090,162	967,185	4,203,500
<b>% CHANGE FROM:</b>															
Prev. Year	13%	36%	-37%	-3%	-24%	-37%	-6%	-24%	-29%	5%	-11%	-19%	-2%	-16%	-9%
Average	-34%	33%	-46%	-38%	-67%	-52%	-7%	-53%	-69%	-36%	-35%	-51%	-43%	-31%	-40%

<sup>1</sup>Preliminary

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

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10/6/22

**ESTIMATED REGULAR SEASON GADWALL HARVESTS (Harvest Information Program)**

YR											CEN	ATL	MISS	PAC	U.S.	
	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	FLYWAY	FLYWAY	FLYWAY	FLYWAY		
1999	7,081	27,189	1,663	16,045	2,535	106,500	62,244	41,960	290,029	1,306	556,552	62,212	1,069,106	133,826	1,821,696	
2000	8,540	29,363	2,570	23,452	7,003	94,423	44,235	24,162	373,472	2,193	609,413	67,496	1,267,013	132,510	2,076,432	
2001	8,062	19,154	1,682	13,535	5,564	88,280	25,834	29,023	302,957	2,073	491,784	33,785	845,701	122,398	1,493,668	
2002	5,121	36,572	2,137	21,212	4,732	98,282	40,718	36,700	163,686	2,482	411,642	39,803	661,701	118,960	1,232,106	
2003 <sup>1</sup>	10,360	41,063	1,860	20,928	7,480	96,155	46,057	37,432	163,195	3,600	422,730	38,479	851,315	154,056	1,466,580	
2004 <sup>1</sup>	8,574	41,374	1,786	12,848	4,364	125,440	69,687	83,271	178,924	4,194	483,058	24,269	654,488	202,161	1,363,976	
2005 <sup>1</sup>	10,388	21,629	1,198	9,495	5,157	95,582	57,475	28,511	269,041	1,686	499,962	34,337	635,321	194,332	1,363,952	
2006 <sup>1</sup>	9,602	30,594	1,582	12,459	3,892	63,324	68,983	34,033	236,409	2,498	463,376	33,252	803,393	244,379	1,544,400	
2007 <sup>1</sup>	7,914	27,687	2,069	10,820	2,978	57,159	87,577	25,697	169,311	2,614	393,826	38,950	842,192	199,854	1,474,822	
2008 <sup>1</sup>	10,409	34,080	2,451	14,915	3,177	46,058	54,380	24,876	147,137	1,941	339,424	36,313	906,308	182,226	1,464,271	
2009 <sup>1</sup>	9,482	27,589	3,466	13,059	4,626	93,530	68,047	31,363	207,963	2,091	461,216	33,448	713,277	193,833	1,401,774	
2010 <sup>1</sup>	4,137	30,940	1,766	9,262	3,792	55,061	56,302	21,671	182,980	1,735	367,636	53,420	1,098,694	215,534	1,735,284	
2011 <sup>1</sup>	4,136	29,553	4,384	16,134	3,768	65,673	71,914	20,910	337,206	2,305	555,983	68,561	1,473,197	213,633	2,311,374	
2012 <sup>1</sup>	7,192	32,473	1,960	8,893	1,307	60,668	84,037	29,082	310,375	972	536,959	49,316	1,240,234	194,222	2,020,733	
2013 <sup>1</sup>	14,874	34,188	3,721	15,257	4,176	65,052	96,304	19,301	195,322	3,137	455,548	79,891	1,009,467	129,649	1,674,555	
2014 <sup>1</sup>	6,183	13,648	2,739	5,254	2,547	85,704	61,881	15,535	227,865	679	422,035	90,036	947,364	123,360	1,582,795	
2015 <sup>1</sup>	9,713	31,086	1,273	8,699	850	70,999	70,781	39,748	9,539	195,296	1,042	349,579	92,160	662,282	149,415	1,253,436
2016 <sup>1</sup>	8,395	13,981	1,282	8,446	1,069	70,781	39,748	9,539	195,296	1,042	349,579	92,160	662,282	149,415	1,253,436	
2017 <sup>1</sup>	12,443	19,380	1,676	14,425	3,783	29,766	39,612	19,639	160,607	3,973	333,804	64,618	623,532	198,234	1,220,188	
2018 <sup>1</sup>	5,912	14,722	4,283	5,850	3,457	75,234	42,655	24,185	147,034	2,207	320,539	62,214	421,296	138,329	947,378	
2019 <sup>1</sup>	10,407	17,826	4,072	7,803	3,985	70,395	54,908	22,303	144,861	2,666	339,226	42,126	537,060	129,688	1,048,100	
2020 <sup>1</sup>	11,171	30,623	6,896	12,660	3,909	76,674	94,930	32,843	236,739	3,246	509,692	42,779	549,477	148,556	1,250,504	
2021 <sup>1</sup>	5,482	20,151	2,607	9,382	846	42,436	59,110	25,077	87,783	785	253,659	46,539	414,525	112,832	827,555	
<b>AVERAGE:</b>																
1999-2021	6,535	8,940	2,209	8,813	4,213	20,215	17,531	9,161	85,098	2,477	164,9					

**ESTIMATED REGULAR SEASON NORTHERN PINTAIL HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
1999	895	5,410	998	5,245	1,091	26,716	6,259	12,984	69,435	871	129,904	25,101	153,304	230,405	538,714
2000	2,310	7,453	857	7,474	3,022	18,645	5,626	8,211	81,975	325	135,998	20,050	153,036	203,033	512,017
2001	1,839	7,339	641	6,845	2,422	21,272	3,752	12,474	79,077	386	136,051	20,619	125,148	159,798	441,616
2002	1,738	4,624	758	4,224	631	17,181	2,078	9,312	19,590	566	60,702	17,220	99,759	130,183	307,864
2003 <sup>1</sup>	2,174	4,157	653	2,974	2,063	17,806	1,132	6,149	18,383	148	55,639	18,134	119,005	144,020	336,798
2004 <sup>1</sup>	1,275	3,280	705	3,030	711	21,004	5,706	4,763	22,330	477	63,281	10,254	90,542	147,040	311,117
2005 <sup>1</sup>	764	3,666	685	3,052	1,113	20,670	5,614	5,141	37,834	381	78,920	17,339	107,276	208,495	412,030
2006 <sup>1</sup>	726	2,704	333	1,477	1,706	10,596	2,331	4,781	41,426	270	66,350	20,282	104,286	239,423	430,341
2007 <sup>1</sup>	1,778	2,591	345	4,328	973	11,585	5,447	5,794	54,840	547	88,228	19,076	162,416	259,447	529,167
2008 <sup>1</sup>	1,781	6,872	588	4,218	876	7,657	4,982	3,626	41,198	431	72,229	21,298	158,218	284,676	536,421
2009 <sup>1</sup>	2,649	5,664	1,083	3,093	968	18,840	6,599	8,492	42,868	747	91,003	15,056	106,727	285,976	498,762
2010 <sup>1</sup>	630	5,437	883	2,992	2,508	11,250	11,151	12,917	68,821	417	117,009	23,522	196,185	367,952	704,668
2011 <sup>1</sup>	2,311	5,243	959	5,985	1,927	28,635	16,736	14,752	106,893	546	187,587	17,831	212,499	391,533	809,450
2012 <sup>1</sup>	1,299	6,367	2,380	1,806	2,076	21,126	7,448	11,463	101,855	583	156,403	12,609	156,593	357,842	683,447
2013 <sup>1</sup>	3,281	12,115	1,200	3,652	2,248	24,136	9,320	6,434	277	130,690	21,367	155,104	231,175	538,336	
2014 <sup>1</sup>	1,294	4,847	1,772	2,530	2,161	25,263	7,433	7,326	54,595	388	107,609	17,685	115,368	230,528	471,190
2015 <sup>1</sup>	2,132	6,033	318	2,148	2,225	23,018	6,403	5,210	36,016	166	84,569	17,501	95,746	249,372	447,188
2016 <sup>1</sup>	777	5,169	321	2,111	1,176	20,461	11,740	2,601	64,127	288	108,771	25,407	101,514	231,775	467,467
2017 <sup>1</sup>	723	4,160	168	3,970	3,048	16,525	8,440	4,068	60,949	411	102,462	16,280	134,643	203,492	456,877
2018 <sup>1</sup>	467	3,335	937	2,970	402	19,658	3,701	3,972	27,765	184	63,389	17,539	68,949	270,082	419,959
2019 <sup>1</sup>	828	3,453	181	2,907	1,511	14,561	5,952	8,513	34,424	127	72,457	8,963	74,589	161,711	317,720
2020 <sup>1</sup>	1,738	8,667	1,061	3,435	818	21,234	15,382	6,522	44,809	262	103,927	18,986	100,111	185,109	408,134
2021 <sup>1</sup>	1,535	7,954	602	2,261	401	16,438	8,570	5,711	33,283	362	77,117	17,300	132,767	158,036	385,219
<b>AVERAGE:</b>															
1999-2021	1,519	5,502	801	3,753	1,569	18,921	7,035	7,603	52,472	398	99,574	18,236	127,121	231,787	476,717
<b>% CHANGE FROM:</b>															
Prev. Year	-12%	-8%	-43%	-34%	-51%	-23%	-44%	-12%	-26%	38%	-26%	-9%	33%	-15%	-6%
Average	1%	45%	-25%	-40%	-74%	-13%	22%	-25%	-37%	-9%	-23%	-5%	4%	-32%	-19%

<sup>1</sup>Preliminary

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

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**ESTIMATES OF REGULAR SEASON NORTHERN SHOVELER HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
1999	1,791	4,578	914	6,017	1,303	22,899	5,462	14,250	63,389	697	121,300	17,350	201,054	192,837	532,541
2000	2,030	1,789	771	3,221	1,548	11,339	3,530	5,630	71,761	569	102,188	17,950	196,306	131,756	448,200
2001	1,414	3,401	240	4,356	2,426	17,957	1,394	16,302	85,581	145	133,216	21,468	235,899	148,577	539,160
2002	2,067	3,783	551	4,499	1,538	19,464	3,873	9,449	41,357	1,045	87,626	14,688	126,468	140,152	368,934
2003 <sup>1</sup>	4,732	4,258	754	5,618	1,934	19,290	4,836	9,759	36,593	493	88,269	12,748	206,977	157,744	465,738
2004 <sup>1</sup>	2,781	5,298	188	2,424	1,972	22,404	7,781	9,331	51,444	858	104,481	9,865	158,905	206,157	479,408
2005 <sup>1</sup>	3,972	4,277	399	3,617	1,150	20,208	8,688	8,974	86,368	163	137,816	18,672	195,236	189,925	541,649
2006 <sup>1</sup>	3,389	6,254	749	5,353	2,985	16,080	6,720	7,285	55,443	135	104,393	12,496	225,100	301,358	643,347
2007 <sup>1</sup>	5,780	4,210	1,035	7,053	1,718	19,987	10,476	10,455	80,465	61	141,240	15,045	289,071	369,431	814,787
2008 <sup>1</sup>	3,561	2,400	392	4,068	1,278	12,061	7,632	4,834	28,839	144	65,214	11,415	251,531	259,185	587,345
2009 <sup>1</sup>	2,371	7,674	2,058	4,124	566	39,909	7,573	11,888	62,213	299	138,675	19,202	283,039	202,584	643,500
2010 <sup>1</sup>	1,889	9,321	785	5,842	1,237	21,743	8,472	11,957	78,354	555	140,155	29,651	475,080	289,755	934,641
2011 <sup>1</sup>	730	8,262	2,192	9,904	642	28,012	9,545	8,736	106,360	364	174,747	32,087	375,091	334,732	916,657
2012 <sup>1</sup>	3,396	2,706	1,120	3,057	846	27,626	10,363	10,189	95,065	583	154,951	33,027	390,664	373,731	952,373
2013 <sup>1</sup>	11,155	12,945	3,721	6,259	1,847	30,227	17,086	15,795	74,490	0	173,525	27,862	355,369	265,103	821,859
2014 <sup>1</sup>	1,150	4,592	2,417	1,751	2,392	29,866	6,568	8,032	85,570	194	142,532	39,505	294,147	228,570	704,754
2015 <sup>1</sup>	3,790	4,524	1,114	1,503	364	23,702	6,247	13,529	29,719	332	84,824	22,748	155,091	281,339	544,002
2016 <sup>1</sup>	311	3,290	1,923	2,262	1,283	26,290	6,373	5,203	59,755	144	106,834	30,290	193,823	172,988	503,935
2017 <sup>1</sup>	723	7,468	84	2,779	2,228	19,645	4,628	7,945	64,585	411	110,496	26,307	237,114	211,559	585,476
2018 <sup>1</sup>	467	4,744	2,008	3,420	1,930	29,485	2,644	4,873	34,750	307	87,958	20,642	127,149	198,581	434,330
2019 <sup>1</sup>	1,064	8,213	1,357	5,202	1,511	29,381	9,791	15,919	56,905	444	129,787	10,103	141,852	168,802	450,544
2020 <sup>1</sup>	1,407	13,867	2,254	5,594	1,149	30,230	15,822	9,193	77,503	366	157,386	17,356	169,584	224,066	568,393
2021 <sup>1</sup>	1,096	4,773	100	2,035	534	31,775	7,032	4,966	39,515	181	72,007	19,714	135,760	242,999	470,480
<b>AVERAGE:</b>															
1999-2021	2,655	5,755	1,179	4,346	1,495	23,025	7,502	9,917	63,740	369	119,983	20,878	235,666	230,084	606,611
<b>% CHANGE FROM:</b>															
Prev. Year	-22%	-66%	-96%	-64%	-54%	-61%	-56%	-46%	-49%	-51%	-54%	14%	-20%	8%	-17%
Average	-59%	-17%	-92%	-53%	-64%	-49%	-6%	-50%	-38%	-51%	-40%	-6%	-42%	6%	-22%

<sup>1</sup>Preliminary

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

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YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS<br
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**ESTIMATED REGULAR SEASON AMERICAN BLACK DUCK HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.	
1999	0	0	0	0	0	0	0	0	0	0	0	101,997	57,682	0	159,679	
2000	0	0	0	0	0	0	0	0	0	0	0	116,096	58,371	0	174,467	
2001	0	0	0	0	0	0	0	0	0	0	0	95,889	31,816	0	127,705	
2002	0	0	0	0	0	240	0	0	218	0	458	125,469	47,796	0	173,723	
2003 <sup>1</sup>	0	0	0	0	0	0	0	134	0	0	0	134	95,108	33,150	0	128,392
2004 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	74,920	35,692	0	110,612	
2005 <sup>1</sup>	0	0	0	0	0	115	0	0	0	0	0	115	93,406	36,365	0	129,886
2006 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	93,356	35,840	0	129,196	
2007 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	98,705	38,692	0	137,397	
2008 <sup>1</sup>	0	0	0	0	0	116	0	0	196	0	312	90,196	29,641	0	120,149	
2009 <sup>1</sup>	0	0	0	0	0	0	0	0	220	0	220	81,287	30,373	0	111,680	
2010 <sup>1</sup>	0	0	0	0	0	0	107	0	233	0	340	92,204	27,073	0	119,617	
2011 <sup>1</sup>	0	0	0	0	0	156	0	0	0	0	156	66,203	21,992	0	88,351	
2012 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	73,871	20,688	0	94,559	
2013 <sup>1</sup>	0	0	0	0	0	0	0	133	0	0	133	75,104	24,951	0	100,188	
2014 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	56,511	15,885	0	72,396	
2015 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	45,986	16,254	0	62,240	
2016 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	60,875	25,956	0	86,831	
2017 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	85,756	17,855	0	103,613	
2018 <sup>1</sup>	0	0	0	0	0	0	0	0	349	0	349	71,781	16,032	0	88,162	
2019 <sup>1</sup>	0	0	0	0	0	0	0	85	0	0	85	59,316	20,357	0	79,758	
2020 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	64,274	16,746	0	81,020	
2021 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	76,598	14,065	0	90,663	
<b>AVERAGE:</b>																
1999-2021	0	0	0	0	0	27	5	15	53	0	100	82,387	29,273	0	111,760	
<b>% CHANGE FROM:</b>																
Prev. Year																
Average						-100%	-100%	-100%	-100%		-100%	19%	-16%	12%		
												-7%	-52%	-19%		

<sup>1</sup>Preliminary

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

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**ESTIMATED REGULAR SEASON MOTTLED DUCK HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
1999	0	0	0	0	0	0	0	0	7,607	0	7,607	5,648	34,349	0	47,604
2000	0	0	0	0	0	0	0	0	12,047	0	12,047	9,074	27,897	0	49,018
2001	0	0	0	0	0	0	0	0	14,378	0	14,378	15,111	32,010	0	61,499
2002	0	0	0	0	0	0	0	0	7,401	0	7,401	13,041	23,469	0	43,911
2003 <sup>1</sup>	0	0	0	0	0	0	0	0	10,752	0	10,752	10,361	42,013	0	63,126
2004 <sup>1</sup>	0	0	0	0	0	0	0	0	14,133	0	14,133	15,292	34,835	0	64,260
2005 <sup>1</sup>	0	0	0	0	0	0	0	0	14,904	0	14,904	10,641	26,333	0	51,878
2006 <sup>1</sup>	0	0	0	0	0	0	0	0	9,967	0	9,967	13,800	42,706	0	66,473
2007 <sup>1</sup>	0	0	0	0	0	0	0	0	8,861	0	8,861	12,862	51,634	0	73,357
2008 <sup>1</sup>	0	0	0	0	0	0	0	0	12,163	0	12,163	14,990	67,785	0	94,938
2009 <sup>1</sup>	0	0	0	0	0	0	0	0	10,992	0	10,992	19,136	51,860	0	81,987
2010 <sup>1</sup>	0	0	0	0	0	0	0	0	10,463	0	10,463	14,591	55,060	0	80,114
2011 <sup>1</sup>	0	0	0	0	0	0	0	0	13,062	0	13,062	13,821	40,557	0	67,440
2012 <sup>1</sup>	0	0	0	0	0	0	0	0	12,732	0	12,732	7,939	40,733	0	61,404
2013 <sup>1</sup>	0	0	0	0	0	0	0	0	3,219	0	3,219	10,133	36,375	0	49,727
2014 <sup>1</sup>	0	0	0	0	0	0	0	0	5,034	0	5,034	7,569	29,300	0	41,903
2015 <sup>1</sup>	0	0	0	0	81	0	0	0	6,187	0	6,268	9,611	13,702	0	29,581
2016 <sup>1</sup>	0	0	0	0	0	0	0	0	4,372	0	4,372	8,476	10,899	0	23,747
2017 <sup>1</sup>	0	0	0	0	0	0	0	0	4,919	0	4,919	7,595	9,149	0	21,663
2018 <sup>1</sup>	0	0	0	0	0	0	0	0	1,921	0	1,921	11,160	11,259	0	24,340
2019 <sup>1</sup>	0	0	0	0	0	0	0	0	4,215	0	4,215	8,738	9,583	0	22,536
2020 <sup>1</sup>	0	0	0	0	0	0	0	0	8,270	0	8,270	9,594	11,619	0	29,482
2021 <sup>1</sup>	0	0	0	0	0	0	0	0	3,845	0	3,845	14,809	8,038	0	26,693
<b>AVERAGE:</b>															
1999-2021	0	0	0	0	4	0	0	0	8,758	0	8,762	11,478	30,920	0	51,160
<b>% CHANGE FROM:</b>															
Prev. Year												-54%	-54%	54%	-31%
Average									-100%			-56%	-56%	29%	-74%
															-48%

<sup>1</sup>Preliminary

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

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**ESTIMATED REGULAR SEASON MEXICAN DUCK HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
1999	0	0	0	0	211	0	0	0	4,876	0	5,087	0	0	485	5,572
2000	0	0	0	0	1,474	0	0	0	6,286	0	7,760	0	0	1,852	9,612
2001	0	0	0	0	809	0	0	0	6,504	0	7,313	0	0	752	8,065
2002	0	0	0	0	2,721	0	0	0	1,088	0	3,809	0	0	1,375	5,184
2003 <sup>1</sup>	0	0	0	0	2,450	0	0	0	3,469	0	5,919	0	0	895	6,814
2004 <sup>1</sup>	0	0	0	0	1,390	0	0	0	283	0	1,673	0	0	279	1,952
2005 <sup>1</sup>	0	0	0	0	297	0	0	0	764	0	1,061	0	0	878	1,939
2006 <sup>1</sup>	0	0	0	0	693	0	0	0	0	0	693	0	0	400	1,093
2007 <sup>1</sup>	0	0	0	0	286	0	0	0	718	0	1,004	0	0	853	1,857
2008 <sup>1</sup>	0	0	0	0	1,096	0	0	0	0	0	1,096	0	0	918	2,014
2009 <sup>1</sup>	139	0	0	0	566	0	0	0	660	0	1,365	0	0	472	1,837
2010 <sup>1</sup>	0	0	0	0	389	0	0	0	930	0	1,319	0	0	877	2,196
2011 <sup>1</sup>	0	0	0	0	557	0	0	0	267	0	824	0	0	261	1,085
2012 <sup>1</sup>	0	0	0	0	231	0	0	0	0	0	231	0	0	558	789
2013 <sup>1</sup>	0	0	0	0	562	0	0	0	0	0	562	0	0	1,187	1,749
2014 <sup>1</sup>	0	0	0	0	232	0	0	0	581	0	813	0	0	722	1,535
2015 <sup>1</sup>	0	0	0	0	40	0	0	0	110	0	150	0	0	85	235
2016 <sup>1</sup>	0	0	0	0	27	0	0	0	0	0	27	0	0	454</	

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

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
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	7,755
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
<b>AVERAGE:</b>															
1999-2021	0	0	0	0	0	0	0	0	3,357	0	3,357	3,806	3,426	19	10,607
<b>% CHANGE FROM:</b>															
Prev. Year									-16%		-16%	-2%	-50%		-33%
Average									-57%		-57%	8%	31%		-5%

<sup>1</sup> Preliminary

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

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

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
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
<b>AVERAGE:</b>															
1999-2021	0	0	0	0	0	0	0	0	274	0	274	916	886	0	2,076
<b>% CHANGE FROM:</b>															
Prev. Year									107%		107%	141%		322%	
Average									45%		45%	22%	41%		33%

<sup>1</sup> Preliminary

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

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**ESTIMATED BLUE-WINGED TEAL HARVEST DURING SPECIAL SEPTEMBER SEASONS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL <sup>2</sup> FLYWAY	MISS <sup>2</sup> FLYWAY	PAC <sup>3</sup> FLYWAY	U.S.
1999	2,360	28,022		0	1,690	7,852	130,094	170,018	24,787	437,537	632,342				
2000	1,610	27,724		10,308	3,244	9,597	196,688	249,171	21,376	430,937	701,484				
2001	1,132	10,741		10,423	1,617	10,183	218,060	252,156	19,600	265,628	537,384				
2002	470	8,723		4,775	1,065	2,645	62,035	79,713	13,123	112,946	205,782				
2003 <sup>1</sup>	3,581	21,393		13,108	1,891	13,792	99,894	153,659	10,920	296,755	461,334				
2004 <sup>1</sup>	4,287	19,173		6,060	517	2,767	63,033	95,837	6,688	106,309	208,834				
2005 <sup>1</sup>	3,896	10,387		5,087	260	7,485	89,044	116,159	15,357	100,272	231,788				
2006 <sup>1</sup>	2,340	23,664		11,167	2,079	10,971	133,622	183,843	17,845	265,213	466,901				
2007 <sup>1</sup>	6,047	25,582		27,010	3,321	22,209	144,405	228,574	21,982	303,920	554,476				
2008 <sup>1</sup>	4,657	15,120		20,037	256	8,586	59,247	107,903	5,370	195,150	308,423				
2009 <sup>1</sup>	2,092	15,165		11,513	755	8,006	130,142	167,673	17,409	244,657	429,739				
2010 <sup>1</sup>	2,518	16,829		12,112	565	7,507	113,926	153,457	27,003	291,509	471,969				
2011 <sup>1</sup>	5,718	22,562		17,892	2,141	5,753	159,406	213,472	41,521	378,119	633,112				
2012 <sup>1</sup>	4,595	19,420		14,868	769	14,087	195,222	248,961	25,071	554,675	828,707				
2013 <sup>1</sup>	4,156	28,213		11,606	2,891	12,426	119,781	179,073	20,368	408,069	607,510				
2014 <sup>1</sup>	7,621	36,736		31,039	4,013	6,568	162,623	248,600	19,807	321,890	590,297				
2015 <sup>1</sup>	1,895	28,504		30,928	566	21,082	141,744	224,719	33,374	233,160	491,253				
2016 <sup>1</sup>	2,798	22,910		11,311	0	8,386	196,916	242,321	17,581	53,179	313,081				
2017 <sup>1</sup>	1,447	13,329		12,969	234	2,586	169,161	199,726	11,503	143,447	354,676				
2018 <sup>1</sup>	933	33,918		20,071	2,251	1,410	180,388	238,971	18,516	166,004	423,491				
2019 <sup>1</sup>	173	18,666		32,511	824	6,335	104,396	163,205	25,301	155,167	343,673				
2020 <sup>1</sup>	2,979	36,054		34,448	1,150	16,041	228,277	318,950	18,758	308,687	646,395				
2021 <sup>1</sup>	658	26,868		17,068	423	10,108	151,830	206,956	18,500	249,382	474,838				
<b>AVERAGE:</b>															
1999-2021	2,955	22,161		15,927	1,414	9,408	141,301	193,179	19,642	261,853	474,673				
<b>% CHANGE FROM:</b>															
Prev. Year	-78%	-25%		-50%	-63%	-37%	-33%	-35%	-1%	-19%	-27%				
Average	-78%	21%		7%	-70%	7%	7%	7%	-6%	-5%	0%				

<sup>1</sup>Preliminary

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<sup>2</sup>Includes harvest from special Wood duck/teal seasons in FL, KY, and TN initiated in 1981, and from an additional 4 teal-only days beginning in 2014

<sup>3</sup>Pacific Flyway total includes Alaska

**ESTIMATED REGULAR SEASON BLUE-WINGED TEAL HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
1999	4,559	6,936	1,663	14,039	1,091	23,808	682	22,167	30,816	1,480	107,241	57,089	298,936	58,968	522,234
2000	6,580	2,385	1,371	8,247	3,612	23,006	1,545	13,254	64,952	1,300	126,252	56,819	279,651	38,436	501,158
2001	2,758	1,074	1,281	11,668	1,155	33,981	429	24,577	46,556	241	123,720	52,762	362,642	42,831	581,955
2002	4,275	3,468	827	11,937	788	42,413	473	21,226	45,928	2,221	133,556	49,212	326,812	45,703	554,283
2003 <sup>1</sup>	3,837	4,258	704	7,380	473	37,097	206	16,844	37,634	1,030	109,469	34,952	303,138	57,426	504,985
2004 <sup>1</sup>	7,532	6,812	658	4,606	33	25,205	518	14,289	71,231	1,716	132,600	66,356	259,179	71,981	530,116
2005 <sup>1</sup>	5,499	1,588	1,255	14,243	445	34,758	1,470	14,770	44,712	816	119,556	61,790	213,807	76,592	471,745
2006 <sup>1</sup>	5,971	1,183	1,582	9,045	906	18,199	275	11,838	50,459	1,080	100,538	52,745	248,663	72,118	474,064
2007 <sup>1</sup>	8,803	1,296	1,466	13,785	687	26,097	1,047	9,951	53,643	1,337	118,112	67,670	322,800	58,092	566,674
2008 <sup>1</sup>	4,383	3,840	588	9,039	255	12,414	3,604	12,992	44,534	1,258	92,907	67,139	322,787	52,664	535,497
2009 <sup>1</sup>	1,255	3,654	433	4,983	118	21,404	757	17,323	78,700	697	129,324	97,070	487,937	46,568	760,899
2010 <sup>1</sup>	3,418	3,366	883	10,259	142	25,205	107	14,839	47,664	1,735	107,618	92,345	341,939	58,794	600,696
2011 <sup>1</sup>	3,649	4,131	2,055	10,862	556	53,846	1,569	28,501	39,719	1,031	145,919	92,915	326,528	52,675	618,037
2012 <sup>1</sup>	3,696	1,910	3,220	1,390	77	30,695	324	14,010	41,874	0	97,196	83,497	377,421	40,628	598,742
2013 <sup>1</sup>	7,327	20,414	4,682	23,734	723	58,271	666	25,219	81,617	1,845	224,498	55,295	534,839	43,178	857,810
2014 <sup>1,3</sup>	1,726	11,225	1,934	9,438	540	36,831	1,383	19,242	79,181	1,600	163,100	42,811	326,915	32,366	565,192
2015 <sup>1,3</sup>	1,422	11,312	798	13,746	41	70,676	937	27,514	38,336	584	165,360	45,676	202,419	44,032	428,786
2016 <sup>1,3</sup>	1,400	4,699	1,923	2,866	107	38,067	1,174	17,422	67,851	1,150	136,659	73,044	365,488	71,981	738,950
2017 <sup>1,3</sup>	1,447	3,025	922	4,235	352	39,711	136	8,644	64,799	1,438	124,709	56,210	295,936	58,753	535,608
2018 <sup>1,3</sup>	5,913	4,636	3,346	9,090	724	37,051	0	8,827	118,570	1,900	190,057	52,126	233,988	50,532	526,703
2019 <sup>1,3</sup>	2,129	1,774	2,262	9,868	642	45,925	0	20,771	49,317	1,269	135,957	57,136	227,921	39,270	458,384
2020 <sup>1,3</sup>	2,069	9,014	1,591	4,711	536	45,921	1,319	22,865	52,310	1,047	141,381	37,522	239,133	43,581	461,617
2021 <sup>1,3</sup>	4,824	707	802	4,748	312	32,760	0	16,883	55,163	1,027	117,225	50,569	175,472	22,987	366,253
<b>AVERAGE:</b>															
1999-2021	4,107	4,900	1,576	9,301	622	35,363	810	17,564	56,764	1,209	132,215	60,188	303,566	49,421	545,394
<b>% CHANGE FROM:</b>															
Prev. Year	133%	-92%	-50%	1%	-42%	-29%	-100%	-26%	5%	-2%	-17%	35%	-27%	-47%	-21%
Average	17%	-86%	-49%	-49%	-50%	-7%	-100%	-4%	-3%	-15%	-11%	-16%	-42%	-53%	-33%

<sup>1</sup>Preliminary

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

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
1999	6,919	34,958	1,663	14,039	2,781	23,808	8,534	22,167	160,910	1,480	277,259	81,876	736,473	58,968	1,154,576
2000	8,190	30,109	1,371	18,555	6,856	23,006	11,142	13,254	261,640	1,300	375,423	78,195	710,588	38,436	1,202,642
2001	3,890	11,815	1,281	22,091	2,772	33,981	10,612	24,577	264,616	241	375,876	72,362	628,270	42,831	1,119,339
2002	4,745	12,191	827	16,712	1,853	42,413	3,118	21,226	107,963	2,221	213,269				

**ESTIMATED GREEN-WINGED TEAL HARVEST DURING SPECIAL SEPTEMBER SEASONS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL <sup>2</sup> FLYWAY	MISS <sup>2</sup> FLYWAY	PAC <sup>3</sup> FLYWAY	U.S.
1999	244	3,052		0	282	2,503	6,436		12,517	8,925	18,710	0	40,152		
2000	770	4,621		1,675	958	4,192	20,428		32,644	7,684	22,166	0	62,494		
2001	1,273	1,790		1,089	1,386	1,715	20,882		28,135	7,649	12,036	0	47,820		
2002	470	3,783		1,653	670	1,039	8,924		16,539	2,080	5,719	0	24,338		
2003 <sup>1</sup>	1,791	9,024		3,635	1,032	3,500	12,660		31,642	3,186	27,174	0	62,002		
2004 <sup>1</sup>	695	2,901		2,061	194	173	5,088		11,112	2,331	13,241	0	26,684		
2005 <sup>1</sup>	1,375	2,200		1,243	148	668	8,025		13,659	2,420	9,260	0	25,339		
2006 <sup>1</sup>	1,130	4,733		2,030	1,013	3,429	17,443		29,778	4,901	27,585	0	62,264		
2007 <sup>1</sup>	2,757	4,534		4,809	401	2,514	14,369		29,384	1,344	20,595	0	51,323		
2008 <sup>1</sup>	1,370	7,200		10,244	146	2,120	7,259		28,339	3,867	11,493	0	43,699		
2009 <sup>1</sup>	418	2,375		1,890	283	2,055	13,190		20,211	3,174	7,775	0	31,160		
2010 <sup>1</sup>	90	1,812		2,565	212	965	3,255		8,899	2,257	7,285	0	18,441		
2011 <sup>1</sup>	852	1,748		1,438	86	523	13,328		17,975	2,530	14,908	0	35,413		
2012 <sup>1</sup>	1,199	4,298		5,280	384	3,562	23,483		38,206	4,838	34,285	0	77,329		
2013 <sup>1</sup>	1,312	2,323		1,174	402	1,553	4,598		11,362	1,431	12,728	0	25,521		
2014 <sup>1</sup>	1,007	2,806		1,946	386	0	2,710		8,855	1,906	9,053	0	19,814		
2015 <sup>1</sup>	711	3,620		4,296	202	937	3,646		13,412	1,263	7,259	0	21,934		
2016 <sup>1</sup>	933	3,172		1,508	80	168	4,372		10,233	409	1,216	0	11,858		
2017 <sup>1</sup>	1,158	4,821		4,764	117	272	16,681		27,813	777	8,473	0	37,063		
2018 <sup>1</sup>	467	3,091		1,980	241	0	6,636		12,415	2,522	4,475	0	19,412		
2019 <sup>1</sup>	0	2,240		2,754	366	0	1,686		7,046	527	4,173	0	11,746		
2020 <sup>1</sup>	331	5,547		3,631	434	439	10,577		20,960	376	15,140	0	36,477		
2021 <sup>1</sup>	439	9,899		9,043	200	3,736	12,995		36,311	653	39,924	0	76,889		
<b>AVERAGE:</b>															
1999-2021	904	3,982		3,074	418	1,568	10,377		20,324	2,915	14,551	0	37,790		
<b>% CHANGE FROM:</b>															
Prev. Year	33%	78%		149%	-54%	751%	23%		73%	74%	164%		111%		
Average	-51%	149%		194%	-52%	138%	25%		79%	-78%	174%		103%		

<sup>1</sup>Preliminary

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<sup>2</sup>Includes harvest from special Wood duck/teal seasons in FL, KY, and TN initiated in 1981, and from an additional 4 teal-only days beginning in 2014

<sup>3</sup>Pacific Flyway total includes Alaska

**ESTIMATED REGULAR SEASON GREEN-WINGED TEAL HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
1999	6,919	21,918	2,743	29,776	3,908	19,992	34,252	24,067	193,873	1,567	339,015	232,627	889,529	529,706	1,990,877
2000	9,450	27,872	1,028	19,973	5,308	23,224	15,885	24,983	187,784	2,437	317,944	183,099	669,335	418,325	1,588,703
2001	8,062	20,049	1,442	18,689	5,680	13,399	12,863	22,477	195,467	3,374	301,462	141,445	576,040	334,806	1,353,753
2002	9,207	31,423	2,826	31,496	1,932	33,642	24,941	26,019	121,677	3,136	286,299	156,480	530,750	347,474	1,321,003
2003 <sup>1</sup>	16,114	24,535	1,106	22,140	4,127	26,116	18,630	24,063	113,248	3,649	253,729	133,969	671,389	368,625	1,427,712
2004 <sup>1</sup>	9,038	29,012	2,021	20,726	2,299	31,389	25,419	17,982	119,565	4,766	262,213	112,638	484,778	487,240	1,346,869
2005 <sup>1</sup>	6,416	13,197	1,654	16,165	5,526	21,594	29,139	14,396	233,501	1,741	343,332	118,252	504,590	508,967	1,475,141
2006 <sup>1</sup>	7,665	11,156	1,748	18,551	11,942	18,199	32,091	19,919	128,015	2,768	252,054	149,711	632,043	562,655	1,596,463
2007 <sup>1</sup>	9,159	22,182	2,328	26,448	5,840	18,077	53,427	14,234	187,990	1,823	341,508	155,693	771,587	631,083	1,899,871
2008 <sup>1</sup>	9,176	22,560	2,157	33,144	3,323	16,938	26,819	12,992	163,616	1,834	292,559	145,041	841,356	674,810	1,953,766
2009 <sup>1</sup>	5,578	23,569	4,225	16,153	1,983	26,023	24,558	12,568	132,120	2,539	243,916	132,460	747,458	539,080	1,662,914
2010 <sup>1</sup>	4,137	15,276	785	13,964	2,156	15,036	28,205	12,277	158,567	2,291	252,694	146,225	1,045,499	549,187	1,993,605
2011 <sup>1</sup>	8,029	18,113	959	25,719	1,198	19,453	39,487	17,186	177,800	1,698	309,642	109,572	986,994	507,811	1,914,019
2012 <sup>1</sup>	9,789	9,232	2,100	10,283	1,999	36,293	35,947	19,105	247,847	1,749	374,344	119,845	898,176	559,893	1,952,258
2013 <sup>1</sup>	9,953	32,861	2,281	26,863	3,212	26,320	32,175	15,928	168,521	2,399	320,513	111,662	835,629	417,964	1,685,788
2014 <sup>1</sup>	6,326	22,067	4,028	13,233	3,550	30,929	30,768	16,683	205,602	1,891	335,077	113,397	902,610	380,876	1,731,960
2015 <sup>1</sup>	12,555	17,193	1,273	20,081	1,700	29,520	24,050	19,470	80,097	1,493	207,432	88,079	522,158	452,018	1,269,687
2016 <sup>1</sup>	8,395	16,568	2,083	17,042	1,098	28,194	28,343	15,608	166,310	2,408	286,046	115,525	626,389	539,358	1,567,318
2017 <sup>1</sup>	4,196	15,126	1,843	15,563	3,986	30,437	33,487	21,990	209,794	4,041	340,781	100,470	709,152	538,791	1,689,194
2018 <sup>1</sup>	3,889	18,219	5,621	18,271	2,734	41,835	18,331	16,417	125,381	1,471	252,169	101,270	448,210	546,494	1,348,143
2019 <sup>1</sup>	5,322	15,960	1,357	20,118	4,031	23,350	32,445	13,620	920		240,627	58,366	431,117	428,247	1,158,357
2020 <sup>1</sup>	10,261	24,151	4,376	23,260	2,198	38,599	39,775	24,200	177,507	1,518	345,844	101,195	460,399	475,949	1,383,386
2021 <sup>1</sup>	4,714	22,626	2,106	15,260	1,425	47,682	45,486	24,415	122,525	1,450	287,689	107,102	523,403	451,520	1,369,713
<b>AVERAGE:</b>															
1999-2021	8,015	20,646	2,265	20,575	3,527	26,558	29,849	18,722	162,622	2,303	295,082	127,571	682,982	489,169	1,594,804
<b>% CHANGE FROM:</b>															
Prev. Year	-54%	-6%	-52%	-34%	-35%	24%	14%	1%	-31%	-4%	-17%	6%	14%	-5%	-1%
Average	-41%	10%	-7%	-26%	-60%	80%	52%	30%	-25%	-37%	-3%	-16%	-23%	-8%	-14%

<sup>1</sup>Preliminary

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YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
1999	7,163	24,970	2,743	29,776	4,190	19,992	36,755	24,067	200,309	1,567	351,532	241,552	908,239	529,706	2,031,029
2000	10,220	32,493	1,028	21,648	6,268	23,224	20,077	24,983	208,212	2,437	350,588	190,783	691,501	418,325	1,651,197
2001	9,335	21,839	1,442	19,758	7,046	13,399	14,578	22,477	216,349	3,374	329,597	149,094	588,076	334,806	1,401,573
2002	9,677	35,206	2,826	33,149	2,603	33,642	25,980	26,019	130,601	3,136	302,838	158,560	536,469	347,474	1,345,341
2003 <sup>1</sup>	17,905	33,													

**ESTIMATED REGULAR SEASON REDHEAD HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
1999	1,058	3,468	582	2,314	70	18,719	2,731	7,125	62,999	871	99,937	3,814	61,723	16,831	182,305
2000	840	2,832	600	2,448	516	9,922	3,530	4,926	60,237	894	86,745	7,457	48,608	14,982	157,792
2001	424	2,864	0	2,022	809	13,951	2,037	7,287	63,672	145	93,211	7,308	52,722	11,704	164,945
2002 <sup>1</sup>	611	2,838	207	1,837	118	5,767	2,551	959	14,148	523	29,559	2,324	27,564	10,917	70,364
2003 <sup>1</sup>	1,151	1,217	302	2,203	344	12,168	926	3,208	12,487	395	35,093	5,196	35,334	22,218	97,435
2004 <sup>1</sup>	463	2,018	658	970	97	7,935	2,244	2,236	18,373	95	35,093	5,196	35,334	22,218	97,841
2005 <sup>1</sup>	1,528	3,788	399	3,391	408	20,785	2,005	3,926	40,127	326	36,401	5,570	34,542	22,922	97,435
2006 <sup>1</sup>	2,017	4,226	1,082	3,784	426	20,069	4,468	9,675	35,508	68	79,324	1,984	69,500	26,349	177,157
2007 <sup>1</sup>	2,846	1,619	690	2,404	344	21,387	3,562	9,447	42,148	365	84,812	7,235	63,027	18,957	174,031
2008 <sup>1</sup>	2,191	6,784	294	1,205	73	9,629	2,438	4,230	24,523	72	51,439	7,359	43,108	17,776	119,682
2009 <sup>1</sup>	1,116	2,923	1,192	2,578	189	32,663	3,028	7,020	29,018	249	79,977	12,129	59,860	17,850	169,816
2010 <sup>1</sup>	450	4,013	1,373	2,137	565	25,854	5,148	5,872	44,176	208	89,796	24,127	109,003	21,146	244,072
2011 <sup>1</sup>	487	2,542	1,233	3,355	257	24,277	6,930	4,010	79,703	182	122,976	9,893	155,227	33,322	321,418
2012 <sup>1</sup>	1,398	2,706	2,240	1,667	231	23,834	6,315	5,307	93,367	291	137,356	19,394	99,179	29,834	285,763
2013 <sup>1</sup>	2,406	7,468	2,881	3,130	402	27,699	7,545	7,566	75,179	185	134,461	35,902	121,598	18,242	310,203
2014 <sup>1</sup>	1,726	4,975	2,095	2,043	232	39,783	7,951	7,679	97,767	242	164,493	27,319	122,872	16,879	331,563
2015 <sup>1</sup>	3,080	4,675	318	859	0	27,150	3,279	6,490	64,630	83	10,564	26,166	86,213	11,482	234,428
2016 <sup>1</sup>	622	2,115	321	1,357	160	18,558	2,180	2,050	59,917	180	87,460	19,741	60,324	13,257	180,782
2017 <sup>1</sup>	1,013	2,836	503	2,250	234	14,839	1,361	3,051	58,383	274	84,744	23,808	57,348	14,995	180,896
2018 <sup>1</sup>	1,556	2,603	803	1,080	643	25,310	1,058	7,150	25,670	184	66,057	25,917	60,193	16,746	168,913
2019 <sup>1</sup>	473	4,200	543	4,131	595	29,468	3,648	12,343	44,119	254	99,774	19,136	52,298	17,586	188,794
2020 <sup>1</sup>	910	6,933	1,591	2,846	332	28,557	4,175	6,443	69,233	419	121,440	18,757	70,649	23,458	234,304
2021 <sup>1</sup>	439	884	0	0	89	5,013	1,538	2,897	14,189	0	25,048	13,790	21,623	11,715	72,176

<sup>1</sup> Preliminary

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

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**ESTIMATES OF REGULAR SEASON CANVASBACK HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
1999	81	832	582	926	106	7,633	1,366	1,742	20,284	87	33,639	5,566	40,510	20,127	99,842
2000	140	149	171	0	74	4,906	1,544	1,642	18,333	0	26,959	16,474	49,183	20,029	112,645
2001	141	537	160	311	0	4,973	214	371	7,189	96	13,992	1,578	11,578	9,482	36,630
2002 <sup>1</sup>	0	0	0	0	0	0	0	0	1,088	0	1,208	0	574	1,187	2,969
2003 <sup>2</sup>	128	101	151	551	43	2,671	823	936	2,601	0	8,005	4,738	9,821	11,381	33,945
2004 <sup>2</sup>	0	252	0	65	47,784	346	583	2,827	0	8,857	9,772	10,824	15,026	44,479	
2005 <sup>2</sup>	229	489	114	452	37	7,621	1,470	561	6,497	0	17,470	4,433	32,786	9,729	64,418
2006 <sup>2</sup>	0	338	166	831	160	8,227	274	2,049	5,918	68	18,031	1,228	45,640	26,987	91,886
2007 <sup>2</sup>	267	324	0	240	229	6,111	1,467	630	5,987	0	15,255	6,998	56,432	46,533	125,208
2008 <sup>2,3</sup>	822	480	98	452	37	4,641	1,908	1,309	6,082	36	15,865	68	1,234	1,007	18,174
2009 <sup>2</sup>	279	731	217	0	71	8,361	1,947	679	4,617	348	17,250	7,389	27,831	17,923	70,393
2010 <sup>2</sup>	180	388	589	570	35	7,248	1,716	2,242	11,858	0	24,826	22,982	72,703	25,168	145,686
2011 <sup>2</sup>	730	2,860	822	1,597	214	8,092	4,315	21,592	243	42,040	5,349	68,358	25,113	140,860	
2012 <sup>2</sup>	300	637	980	973	77	8,306	2,429	637	12,449	0	26,788	3,903	52,081	34,479	117,251
2013 <sup>2</sup>	109	1,494	480	0	161	7,471	3,107	1,062	18,163	0	32,047	13,111	76,103	38,453	159,714
2014 <sup>2</sup>	288	1,148	967	389	309	9,798	2,247	1,854	18,005	0	35,005	5,630	43,558	24,071	108,264
2015 <sup>2</sup>	474	452	636	107	121	10,235	1,249	1,463	6,960	0	21,697	1,904	30,696	31,912	86,214
2016 <sup>2</sup>	155	705	160	452	107	7,851	1,845	1,419	11,983	0	24,677	4,507	45,348	26,501	101,033
2017 <sup>2</sup>	0	851	168	397	117	7,504	681	1,716	16,895	0	28,329	10,693	40,087	20,911	100,020
2018 <sup>2</sup>	778	569	268	90	161	7,828	705	1,501	4,540	0	16,440	20,733	30,592	23,643	91,408
2019 <sup>2</sup>	473	560	0	382	229	10,339	1,152	2,894	3,934	127	20,090	1,579	29,990	21,240	72,899
2020 <sup>2</sup>	331	1,271	265	589	77	9,519	3,955	943	7,308	52	24,310	7,374	32,132	33,499	97,316
2021 <sup>2</sup>	329	354	0	226	156	3,731	3,296	662	2,122	60	10,935	2,776	19,435	28,176	61,321

<sup>1</sup> Season was closed in the U.S. (except for AK)

<sup>2</sup> Preliminary

<sup>3</sup> Season was closed in the U.S. (except for AK and the Central Flyway)

<sup>4</sup> Pacific Flyway total includes Alaska

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**ESTIMATED REGULAR SEASON RING-NECKED DUCK HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
1999	733	4,717	0	2,006	669	6,724	12,176	7,442	58,708	871	94,046	147,511	264,504	47,040	553,101
2000	980	1,341	171	1,675	663	7,523	8,273	3,871	84,332	81	108,910	95,470	257,504	34,267	496,151
2001	849	2,685	721	2,334	693	6,769	3,323	4,199	57,853	48	79,474	89,486	230,667	38,507	438,134
2002	752	5,044	482	3,030	789	5,887	8,786	4,108	44,187	436	73,501	96,626	239,065	35,960	445,152
2003 <sup>1</sup>	1,023	4,765	101	2,533	860	3,413	7,617	2,139	39,715	197	62,363	112,808	230,202	36,326	441,697
2004 <sup>1</sup>	463	4,793	235	1,333	615	8,168	11,413	2,138	37,311	381	66,850	74,349	233,979	58,350	433,528
2005 <sup>1</sup>	611	2,688	513	2,487	631	10,277	14,168	2,057	42,802	109	76,343	109,021	240,090	49,729	475,183
2006 <sup>1</sup>	2,017	8,113	83	2,030	533	12,465	15,360	5,236	40,803	473	87,113	144,491	353,705	71,264	656,573
2007 <sup>1</sup>	1,423	4,048	517	1,202	401	4,965	12,361	3,401	47,417	61	75,796	120,756	241,239	65,642	503,433
2008 <sup>1</sup>	685	7,680	588	1,055	511	6,497	12,084	4,532	33,351	108	67,091	131,717	251,356	50,427	500,591
2009 <sup>1</sup>	1,255	6,122	325	1,031	378	5,685	8,978	3,397	41,329	348	68,939	116,445	186,243	38,024	409,651
2010 <sup>1</sup>	540	4,660	98												

**ESTIMATED REGULAR SEASON GREATER SCAUP HARVESTS (Harvest Information Program)**

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	0	139	0	0	0	182	569	158	1,755	0	2,803	8,305	9,272	19,358	39,738
2000	70	0	86	129	0	218	110	0	1,833	0	2,446	12,850	19,085	19,384	53,765
2001	0	179	0	0	116	138	0	0	1,369	0	1,802	8,505	8,603	15,736	34,646
2002	47	210	69	735	0	120	189	411	1,959	0	3,740	17,639	29,228	19,989	70,596
2003 <sup>1</sup>	0	0	0	110	43	0	103	134	867	0	1,257	17,344	13,032	16,122	47,755
2004 <sup>1</sup>	0	126	0	0	0	350	346	583	2,261	0	3,666	16,837	28,056	22,958	71,517
2005 <sup>1</sup>	0	0	0	113	0	462	134	280	1,529	0	2,518	18,237	24,812	12,447	58,014
2006 <sup>1</sup>	161	169	0	92	0	249	137	0	1,869	0	2,677	10,523	21,454	13,125	47,779
2007 <sup>1</sup>	89	0	0	0	115	0	1,676	126	958	0	2,964	13,154	21,964	32,752	70,834
2008 <sup>1</sup>	0	240	0	0	0	348	106	0	1,962	0	2,656	10,646	24,649	11,514	49,465
2009 <sup>1</sup>	0	183	0	0	0	223	0	0	1,099	0	1,505	12,794	24,567	16,273	55,139
2010 <sup>1</sup>	0	0	98	0	0	108	322	214	930	0	1,672	23,535	23,692	20,916	69,815
2011 <sup>1</sup>	0	0	0	0	0	523	0	2,932	0	3,455	6,265	33,680	16,024	59,424	
2012 <sup>1</sup>	0	0	0	0	0	181	0	212	1,415	0	1,808	19,231	40,968	35,894	97,901
2013 <sup>1</sup>	0	166	0	261	0	115	888	133	1,839	0	3,402	23,227	49,064	6,533	82,226
2014 <sup>1</sup>	0	0	0	97	0	0	346	88	3,098	0	3,629	9,700	37,927	10,838	62,094
2015 <sup>1</sup>	0	0	0	0	0	323	625	183	2,210	0	3,341	5,202	25,053	6,655	40,251
2016 <sup>1</sup>	0	0	0	0	0	238	168	79	648	0	1,133	10,507	34,574	18,648	64,862
2017 <sup>1</sup>	0	95	84	0	0	169	0	127	1,283	0	1,758	18,748	28,929	18,534	67,969
2018 <sup>1</sup>	0	163	0	90	0	87	353	88	1,572	0	2,353	28,972	35,375	15,801	82,501
2019 <sup>1</sup>	0	0	0	0	0	86	0	170	3,794	0	4,050	14,091	23,101	11,131	52,373
2020 <sup>1</sup>	83	116	0	0	0	314	220	79	1,923	0	2,734	14,048	19,366	14,972	51,119
2021 <sup>1</sup>	0	177	0	0	0	0	0	0	663	0	840	8,533	11,739	10,147	31,258
<b>AVERAGE:</b>											2,531	14,300	25,573	16,772	59,176
<b>% CHANGE FROM:</b>															
Prev. Year	-53%					-100%		-100%	-66%		-69%	-39%	-39%	-32%	-39%
Average	-100%	107%				-100%	-100%	-100%	-62%		-67%	-40%	-54%	-39%	-47%

<sup>1</sup>Preliminary

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

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**ESTIMATED REGULAR SEASON LESSER SCAUP HARVESTS (Harvest Information Program)**

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	163	277	582	1,389	0	18,174	455	3,483	12,873	348	37,744	64,263	80,808	29,261	212,076
2000	770	149	771	773	295	23,006	882	4,223	52,380	81	83,330	32,331	184,008	31,353	331,022
2001	424	895	80	933	231	23,483	429	3,582	41,764	96	71,917	111,237	170,824	30,221	384,199
2002	1,550	1,997	758	3,489	315	25,472	4,062	4,519	44,840	436	87,438	45,457	182,132	32,866	387,893
2003 <sup>1</sup>	895	913	201	2,644	129	17,065	1,647	3,208	17,863	444	45,009	60,939	145,607	39,032	290,587
2004 <sup>1</sup>	811	1,766	188	848	0	20,187	1,383	8,068	33,071	477	66,799	54,891	108,351	52,347	282,388
2005 <sup>1</sup>	382	244	114	339	37	21,709	2,406	4,207	24,840	163	54,441	63,690	111,357	29,471	258,967
2006 <sup>1</sup>	484	845	83	831	267	20,568	2,057	7,057	18,688	68	50,948	46,619	101,219	34,723	233,509
2007 <sup>1</sup>	178	648	345	561	286	16,168	2,514	4,157	15,806	0	40,663	46,594	84,791	52,006	224,054
2008 <sup>1</sup>	0	1,200	294	301	110	10,209	848	4,834	11,182	36	29,014	25,791	97,340	27,414	179,559
2009 <sup>1</sup>	279	731	325	344	71	26,197	433	4,189	11,212	249	44,030	35,908	111,522	30,608	222,068
2010 <sup>1</sup>	720	1,424	294	142	35	18,390	854	4,270	13,718	0	39,851	67,005	157,275	23,776	287,907
2011 <sup>1</sup>	122	1,271	822	639	0	12,294	1,700	3,437	23,191	61	43,537	46,195	114,903	22,791	227,426
2012 <sup>1</sup>	300	1,751	1,680	1,112	77	27,987	4,210	4,033	69,601	97	110,848	153,057	307,579	62,797	634,281
2013 <sup>1</sup>	437	996	2,281	1,174	0	13,677	3,994	1,725	22,071	277	46,632	60,416	97,873	41,363	246,284
2014 <sup>1</sup>	431	1,148	645	0	772	21,367	3,284	1,765	42,979	339	72,730	55,076	156,083	38,036	321,925
2015 <sup>1</sup>	1,421	151	0	215	0	19,501	781	4,662	14,915	41	41,687	37,438	118,419	28,553	226,097
2016 <sup>1</sup>	311	587	321	302	80	19,509	1,008	4,336	13,279	0	39,731	23,932	67,223	32,858	163,744
2017 <sup>1</sup>	723	1,229	168	132	234	21,415	1,084	2,669	44,910	137	72,706	50,424	185,503	22,226	330,859
2018 <sup>1</sup>	467	732	669	270	80	25,136	881	3,884	12,398	61	44,578	45,084	86,568	27,576	203,806
2019 <sup>1</sup>	355	933	181	382	229	29,209	1,536	5,533	26,977	95	65,430	15,647	75,001	24,395	180,473
2020 <sup>1</sup>	248	1,387	265	1276	128	10,461	1,538	3,536	27,309	157	43,769	31,117	102,147	30,092	207,125
2021 <sup>1</sup>	219	1,768	0	113	22	4,080	1,978	1,986	15,382	60	25,609	29,780	66,518	41,675	163,580
<b>AVERAGE:</b>											50,547	72,568	90,080	48,619	251,814
<b>% CHANGE FROM:</b>															
Prev. Year	-12%	15%	-100%	-91%	-83%	-60%	50%	-43%	-42%	-62%	-43%	-32%	-46%	5%	-36%
Average	-57%	60%	-100%	-86%	-85%	-79%	-2%	-53%	-45%	-63%	-55%	-60%	-57%	-6%	-51%

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**ESTIMATED REGULAR SEASON TOTAL (LESSER & GREATER) SCAUP HARVESTS (Harvest Information Program)**

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	163	416	582	1,389	0	18,356	1,024	3,641	14,628	348	40,547	72,568	90,080	48,619	251,814
2000	840	149	857	902	295	23,224	992	4,223	54,213	81	85,776	45,181	203,093	50,737	384,787
2001	424	1,074	80	933	347	23,621	429	3,582	43,133	96	73,719	119,742	179,427	45,957	418,845
2002	1,597</														

**ESTIMATED REGULAR SEASON COMMON GOLDENEYE HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.										
	1999	163	694	166	154	211	545	0	158	780	87	2,958	9,690	22,587	15,413	50,648									
2000	2,310	2,236	685	644	74	0	0	352	1,048	731	8,080	11,481	18,055	19,102	56,718										
2001	990	895	881	156	0	691	214	247	1,369	675	6,118	6,014	23,406	13,081	48,619										
2002	1,644	525	207	826	315	601	472	137	1,306	2,308	8,341	12,156	35,656	32,778	88,933										
2003 <sup>1</sup>	3,581	913	503	1,101	129	890	721	1,471	694	1,677	11,680	13,439	28,299	41,931	95,349										
2004 <sup>1</sup>	1,506	1,514	376	364	226	467	1,902	583	283	667	7,888	13,036	30,299	25,143	76,357										
2005 <sup>1</sup>	535	122	399	226	0	115	535	467	382	544	3,325	18,760	23,420	25,941	71,446										
2006 <sup>1</sup>	1,452	507	583	369	586	748	1,097	569	934	945	7,790	12,542	19,622	36,466	76,420										
2007 <sup>1</sup>	445	486	690	1,362	115	255	1,467	630	1,916	729	8,095	14,739	26,478	29,099	78,411										
2008 <sup>1</sup>	274	480	392	904	0	0	742	101	1,373	719	4,985	15,762	29,540	26,776	77,063										
2009 <sup>1</sup>	279	1,096	433	172	24	780	1,082	226	0	1,344	5,436	12,747	30,017	36,141	84,341										
2010 <sup>1</sup>	90	3,884	294	0	35	325	1,180	320	3,235	625	9,078	14,424	33,578	20,636	77,716										
2011 <sup>1</sup>	1,217	318	1,096	1,438	214	311	654	143	1,233	1,698	9,222	12,463	39,306	30,741	91,732										
2012 <sup>1</sup>	899	955	280	973	0	2,167	1,781	849	849	3,401	12,154	12,687	26,058	25,908	76,804										
2013 <sup>1</sup>	656	664	480	782	0	805	222	664	230	3,875	8,378	14,689	29,593	29,316	81,976										
2014 <sup>1</sup>	288	638	2,578	292	77	708	1,383	177	387	97	6,625	7,730	32,910	30,307	77,572										
2015 <sup>1</sup>	948	905	318	215	81	754	1,562	274	994	290	6,341	6,784	25,123	19,990	58,238										
2016 <sup>1</sup>	777	352	481	754	0	357	335	158	1,619	431	5,264	10,606	33,269	23,364	72,503										
2017 <sup>1</sup>	289	1,891	587	662	0	590	136	127	1,925	479	6,686	9,422	31,870	26,966	74,944										
2018 <sup>1</sup>	1,711	2,521	937	270	884	1,392	353	353	524	307	9,252	9,135	44,721	27,373	90,481										
2019 <sup>1</sup>	473	1,493	724	688	92	1,034	192	426	1,124	381	6,627	10,390	27,855	30,789	75,661										
2020 <sup>1</sup>	662	13,405	398	2,846	77	837	439	864	1,154	419	21,101	7,140	27,892	40,297	96,430										
2021 <sup>1</sup>	329	16,793	301	791	223	350	439	248	2,122	91	21,686	6,621	21,212	21,709	71,229										
<b>AVERAGE:</b>											8,570	11,411	28,729	27,359	76,069										
<b>% CHANGE FROM:</b>											Prev. Year -50%	25%	-24%	-72%	190%	-58%	0%	-71%	84%	-78%	3%	-7%	-24%	-46%	-26%
Prev. Year -65%											625%	14%	53%	-45%	-40%	-40%	92%	-91%	153%	-42%	-26%	-21%	-6%	-21%	-6%

<sup>1</sup>Preliminary

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

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**ESTIMATED REGULAR SEASON RUDDY DUCK HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.						
	1999	163	277	0	309	0	1,272	228	1,583	3,316	261	7,409	29,188	16,403	11,607	64,607					
2000	210	447	0	258	0	545	221	821	3,405	0	5,907	11,029	6,418	2,863	26,217						
2001	71	0	0	311	0	1,243	214	865	1,369	0	4,073	7,206	4,609	5,452	21,340						
2002	282	0	69	184	0	601	94	137	653	0	2,020	7,288	4,479	2,879	16,666						
2003 <sup>1</sup>	0	406	0	110	0	742	0	267	173	49	1,747	2,474	10,943	5,632	20,796						
2004 <sup>1</sup>	0	126	0	121	129	117	173	778	565	0	2,009	4,307	5,227	6,428	17,971						
2005 <sup>1</sup>	153	122	0	0	0	115	267	467	1,146	218	2,488	11,709	4,235	5,742	24,174						
2006 <sup>1</sup>	81	0	0	369	426	997	0	797	2,180	68	4,918	7,026	20,250	7,415	39,609						
2007 <sup>1</sup>	0	0	0	172	160	0	1,528	629	630	718	0	3,837	8,679	10,891	6,130	29,537					
2008 <sup>1</sup>	0	0	0	151	37	348	106	1,611	196	36	2,485	11,860	10,970	4,880	30,195						
2009 <sup>1</sup>	279	0	0	0	0	3,233	108	453	2,638	0	6,711	9,275	12,243	6,536	34,765						
2010 <sup>1</sup>	450	0	392	0	0	3,137	0	961	3,488	0	8,428	21,427	8,196	17,048	55,099						
2011 <sup>1</sup>	487	1,589	0	160	86	2,179	0	3,151	2,399	0	10,051	5,531	21,717	9,449	46,748						
2012 <sup>1</sup>	200	159	0	0	0	2,167	0	1,274	1,415	97	5,312	14,397	20,443	10,734	50,886						
2013 <sup>1</sup>	219	498	0	130	241	2,184	444	398	3,219	0	7,333	14,353	8,933	15,666	46,285						
2014 <sup>1</sup>	0	128	0	0	463	5,194	519	530	3,291	0	10,125	17,401	20,930	12,615	61,071						
2015 <sup>1</sup>	237	452	0	0	0	2,801	0	366	2,099	0	5,955	6,713	4,805	8,254	25,727						
2016 <sup>1</sup>	466	117	160	0	27	1,428	0	236	2,267	0	4,701	9,057	15,500	5,820	35,078						
2017 <sup>1</sup>	0	189	0	0	117	1,265	0	127	1,711	137	3,546	10,983	7,142	4,933	26,604						
2018 <sup>1</sup>	0	569	402	0	0	1,740	176	883	1,222	0	4,992	12,754	6,721	6,804	31,271						
2019 <sup>1</sup>	0	373	181	688	183	4,653	0	2,639	1,827	32	10,576	4,240	15,420	8,237	38,559						
2020 <sup>1</sup>	0	1,271	0	589	0	5,753	0	1,257	1,923	0	10,793	8,895	9,392	6,688	35,768						
2021 <sup>1</sup>	0	0	0	0	134	350	0	248	1,061	0	1,792	2,791	2,180	5,489	12,252						
<b>AVERAGE:</b>											5,531	10,373	10,788	7,709	34,401						
<b>% CHANGE FROM:</b>											Prev. Year -100%	-100%	-100%	-94%	-80%	-45%	-83%	-69%	-77%	-18%	-66%
Prev. Year -100%											67%	-82%	-100%	-72%	-42%	-100%	-68%	-73%	-80%	-29%	-64%

<sup>1</sup>Preliminary

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

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**ESTIMATED REGULAR SEASON HOODED MERGANSER HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
	1999	0	694	0	154	0	727	1,934	317	8,972	0	12,798	29,269	46,577	4,807
2000	140	447	0	129	0	436	1,103	532	5,762	81	8,450	35,960	44,927	4,984	94,321
2001	141	716	160	778	116	276	858	247	6,162	0	9,454	28,108	43,506	4,602	85,670
2002	188	1,261	0	459	39	601	1,039	0	6,312	87	9,986	31,791	58,936	2,832	103,545
2003 <sup>1</sup>	0	913	0	330	86	1,039	618	802	3,295	49	7,132	29,181	51,706	5,488	93,507
2004 <sup>1</sup>	116	1,388	94	485	33	817	865	194	1,979	95	6,066	25,692	47,469	3,998	83,225
2005 <sup>1</sup>	76	367	0	0	0	693	1,069	654	5,732	0	8,591	34,037	30,454	4,235	77,317
2006 <sup>1</sup>	161	338	0	92	53	249	1,509	114	2,803	0	5,319	37,182	37,241	2,857	8

**ESTIMATED REGULAR SEASON ALL-DUCK HARVESTS (Harvest Information Program)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S.
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

**AVERAGE:**

1999-2021 79,606 180,601 38,283 156,540 31,775 447,081 272,523 200,236 957,547 29,515 2,393,705 1,587,980 5,782,339 2,794,598 12,558,623

**% CHANGE FROM:**

Prev. Year	-15%	2%	-46%	-21%	-42%	-35%	-20%	-21%	-45%	-11%	-31%	-7%	-10%	-12%	-15%
Average	-34%	24%	-40%	-36%	-63%	-35%	8%	-26%	-45%	-35%	-29%	-22%	-36%	-18%	-29%

<sup>1</sup>Preliminary

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<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 FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
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

<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

<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.
1999	0.61	0.74	0.70	0.83	0.72
2000	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

<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	0.67	0.74
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

<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	1.09	1.09
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

<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	2.03	1.37
2019 <sup>1</sup>	1.81	1.41	1.45	1.53	1.46
2020 <sup>1</sup>	1.81	0.93	1.01	1.82	1.00
2021 <sup>1</sup>	1.08	1.25	0.96	1.17	1.06

<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	1.05	1.21	1.24
2020 <sup>1</sup>	1.00	0.70	1.06	1.10	1.16
2021 <sup>1</sup>	1.50	1.62	2.29	1.19	1.39

<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

<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
2000			0.75	1.54	1.27
2001			1.46	2.27	0.48
2002		3.31	1.65	2.87	0.94
2003 <sup>1</sup>			0.98	1.37	0.72
2004 <sup>1</sup>		8.65	2.06	3.05	1.71
2005 <sup>1</sup>			0.87	2.58	1.06
2006 <sup>1</sup>			1.81	1.80	0.56
2007 <sup>1</sup>			0.78	1.26	1.23
2008 <sup>1</sup>			0.37	0.79	1.22
2009 <sup>1</sup>			0.63	1.24	1.19
2010 <sup>1</sup>			0.57	1.15	0.64
2011 <sup>1</sup>			0.86	2.01	0.48
2012 <sup>1</sup>			0.79	0.98	1.06
2013 <sup>1</sup>			1.85	1.09	1.52
2014 <sup>1</sup>			1.15	1.53	1.21
2015 <sup>1</sup>		1.28	1.69	2.21	1.31
2016 <sup>1</sup>			2.71	3.31	0.92
2017 <sup>1</sup>			1.21	2.31	1.19
2018 <sup>1</sup>			0.37	1.44	1.41
2019 <sup>1</sup>			0.70	0.96	2.39
2020 <sup>1</sup>				0.75	1.27
2021 <sup>1</sup>				0.83	1.61
					0.70
					1.01

<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

<sup>1</sup> Preliminary

**BLUE-WINGED TEAL 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	1.82	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

<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

YR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
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

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

# **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 FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
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

<sup>1</sup> Preliminary

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

YR	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC FLYWAY	U.S.
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

<sup>1</sup> Preliminary

# **Duck Harvests in Canada**

### ESTIMATES OF MALLARD HARVESTS IN CANADA<sup>3</sup>

YR	NF	PE	NS	NB	PQ	ON	MB	SK	AB	BC	NT	YT	NUN <sup>2</sup>	TOTAL
1969 <sup>1</sup>	215	217	738	571	26,117	194,954	253,620	336,342	403,587	109,084	N/A	N/A	1,325,445	
1970 <sup>1</sup>	0	58	508	681	28,511	172,516	272,411	505,542	502,804	107,062	N/A	N/A	1,590,093	
1971 <sup>1</sup>	0	326	475	602	34,776	178,310	184,727	465,149	451,912	93,375	N/A	N/A	1,409,652	
1972	285	131	975	642	60,829	250,848	210,706	480,045	567,097	116,215	N/A	N/A	1,687,773	
1973	71	306	787	1,090	59,294	243,853	148,687	352,289	541,772	103,525	N/A	N/A	1,451,674	
1974	333	231	625	1,156	66,175	253,090	145,168	490,951	690,092	107,971	N/A	N/A	1,755,792	
1975	774	405	972	583	57,791	296,173	159,143	567,985	521,935	122,725	1,698	797	1,730,981	
1976	770	256	1,444	795	71,851	322,047	204,600	606,239	609,576	114,198	3,229	898	1,935,903	
1977	836	196	2,371	700	81,803	268,893	165,258	391,986	510,395	131,035	3,073	584	1,557,130	
1978	850	259	1,133	1,557	61,507	322,006	239,299	395,276	382,319	115,038	2,098	1,290	1,522,632	
1979	555	465	744	1,570	70,597	266,117	245,016	419,509	485,014	117,176	1,182	1,673	1,609,618	
1980	0	948	3,057	1,437	82,027	290,941	210,153	355,042	480,188	104,768	2,551	2,473	1,533,585	
1981	2,947	1,461	2,537	2,491	91,950	279,541	175,215	231,117	392,274	114,672	1,703	1,033	1,296,941	
1982	464	410	1,407	1,792	93,289	335,813	148,864	241,734	296,124	92,492	1,552	0	1,213,941	
1983	1,069	937	4,046	2,558	87,352	297,944	160,522	284,403	364,000	121,758	2,417	603	1,327,609	
1984	1,100	738	2,122	1,668	67,433	284,128	117,208	183,300	306,234	89,453	4,501	1,366	1,059,251	
1985	797	1,149	3,312	3,268	97,274	293,349	87,173	157,833	180,046	81,965	4,153	757	911,076	
1986	2,923	755	3,137	2,526	84,304	265,478	112,363	151,384	182,748	72,263	811	433	879,125	
1987	1,022	728	3,693	3,142	116,452	315,101	136,678	154,961	211,929	75,591	1,120	192	1,020,609	
1988	0	921	2,304	1,611	83,727	233,686	64,325	75,810	139,558	63,657	2,543	412	668,554	
1989	1,319	930	4,324	2,232	79,327	262,933	70,133	75,680	188,562	57,357	437	773	744,007	
1990	1,085	1,000	3,556	3,179	87,045	261,036	60,853	79,379	175,884	60,443	865	288	734,613	
1991	949	1,106	3,712	4,582	84,483	229,026	60,933	70,050	122,105	51,458	94	641	629,139	
1992	863	199	6,407	5,243	87,824	196,647	65,992	68,765	94,795	52,172	605	298	579,810	
1993	1,025	1,178	5,029	3,755	100,032	202,647	42,969	50,351	83,094	45,181	1,178	560	536,999	
1994	795	864	3,305	2,894	107,222	197,833	57,924	88,848	113,068	50,412	2,042	205	625,412	
1995	532	751	4,822	5,131	83,307	176,680	74,206	104,296	111,048	40,782	1,509	278	603,342	
1996	351	1,024	4,286	4,044	82,201	176,869	91,266	121,608	115,668	42,447	1,326	0	641,090	
1997	1,461	417	8,047	5,371	77,594	178,169	107,379	133,017	151,164	55,513	437	126	718,695	
1998	1,628	1,011	5,440	7,512	76,320	164,431	104,470	129,461	119,826	52,663	881	276	663,919	
1999	1,188	667	6,305	4,866	69,568	131,901	82,639	182,714	105,126	48,002	0	220	633,196	
2000	1,511	1,915	5,481	5,999	81,655	162,352	65,130	195,276	107,203	49,272	510	72	0	676,376
2001	601	1,192	5,721	7,047	79,896	166,629	92,115	107,413	94,699	35,575	643	229	0	591,760
2002	300	2,176	6,498	6,002	66,553	147,847	77,992	118,857	80,707	37,371	1,702	609	0	546,594
2003	696	804	4,711	6,511	58,873	138,099	66,403	126,397	73,088	35,384	410	110	0	511,486
2004	1,985	1,100	5,245	5,228	65,284	132,188	75,970	129,630	78,270	28,516	275	37	0	523,728
2005	754	1,681	4,544	4,732	72,231	115,284	87,315	144,393	78,798	33,586	688	0	0	544,006
2006	753	1,122	5,490	6,389	72,245	124,751	111,026	174,174	88,533	28,928	215	0	0	613,626
2007	1,837	1,289	5,711	7,030	65,187	119,403	68,121	163,912	82,133	30,167	897	265	0	545,952
2008	48	1,725	4,748	5,662	69,991	119,971	60,690	150,906	97,567	35,924	0	488	0	547,720
2009	80	651	4,079	3,377	65,216	106,537	61,460	135,546	62,778	32,736	0	67	0	472,527
2010	1,319	2,197	4,057	4,683	57,138	105,904	48,076	127,207	67,681	28,057	0	0	0	446,319
2011	670	3,434	5,296	5,501	62,037	105,529	59,170	143,258	91,670	32,990	334	0	0	509,889
2012	767	1,475	3,060	5,682	55,862	79,180	67,173	188,383	89,249	36,160	415	928	0	528,334
2013	0	758	7,500	9,689	47,579	107,319	42,549	193,591	106,935	29,986	923	0	0	546,829
2014	1,397	1,602	3,000	5,647	56,092	116,812	30,927	163,468	93,733	26,996	0	440	0	500,114
2015	650	1,779	7,082	6,647	54,653	114,114	56,624	179,718	88,206	28,664	0	0	0	538,137
2016	1,420	1,358	6,564	6,712	47,530	77,234	64,567	159,158	83,694	23,686	0	0	0	471,923
2017	334	1,292	4,829	5,456	50,497	83,591	36,119	133,725	89,114	25,962	658	0	0	431,577
2018	329	1,019	3,487	6,282	42,549	82,967	37,245	168,068	83,522	25,204	0	168	0	450,840
2019	108	1,021	2,947	5,852	40,507	76,966	21,589	136,993	101,475	22,946	370	222	0	410,996
2020	82	1,289	2,889	3,540	34,388	65,093	12,579	33,441	60,521	27,211	374	148	0	241,555
2021	115	1,202	2,453	3,344	36,887	55,758	24,494	70,233	63,840	23,439	269	163	0	282,197

#### AVERAGES

1972-79	559	281	1,131	1,012	66,231	277,878	189,735	463,035	538,525	115,985	2,256	1,048	1,656,438
1980-89	1,164	898	2,994	2,273	88,314	285,891	128,263	191,126	274,166	87,398	2,179	804	1,065,470
1990-99	988	822	5,091	4,658	85,560	191,524	74,863	102,849	119,178	49,907	894	289	636,622
2000-09	857	1,366	5,223	5,798	69,711	133,306	76,622	144,650	84,378	34,746	534	188	0 557,378
2010-19	699	1,594	4,782	6,215	51,444	94,962	46,404	159,357	89,528	28,065	270	176	0 483,496
1972-2021	835	1,030	3,906	4,088	71,028	188,014	96,330	195,756	202,101	59,594	1,078	428	0 824,098

<sup>1</sup> Estimates for 1968-71 are useful only for distribution of harvest among provinces. They are not comparable with estimates in subsequent years because different survey procedures were used.

01/20/23

<sup>2</sup> Nunavut separated from the Northwest Territories on April 1, 1999.

<sup>3</sup> 2019 and thereafter, harvest estimates are from a Bayesian analysis

### ESTIMATES OF PINTAIL HARVESTS IN CANADA<sup>3</sup>

YR	NF	PE	NS	NB	PQ	ON	MB	SK	AB	BC	NT	YT	NUN <sup>2</sup>	TOTAL
1969 <sup>1</sup>	522	797	413	916	13,766	9,793	20,391	27,221	43,576	20,892	N/A	N/A		138,287
1970 <sup>1</sup>	379	1,123	872	1,566	18,831	12,960	30,729	48,583	66,169	30,063	N/A	N/A		211,275
1971 <sup>1</sup>	307	646	446	1,037	19,816	8,548	18,001	37,164	61,676	24,555	N/A	N/A		172,196
1972	443	417	646	522	18,018	9,322	17,835	28,066	71,523	48,793	N/A	N/A		195,585
1973	601	482	560	934	17,090	10,579	18,613	29,876	91,457	48,669	N/A	N/A		218,861
1974	875	1,371	1,099	1,166	18,556	10,867	10,365	50,512	101,753	23,704	N/A	N/A		220,268
1975	1,092	431	612	787	21,999	9,644	20,611	55,909	81,637	23,758	72	417		216,969
1976	1,507	651	911	1,772	27,578	17,112	17,545	34,693	59,532	38,626	385	277		200,589
1977	2,438	1,653	1,302	1,127	39,531	14,333	11,245	20,469	69,906	29,467	137	313		191,921
1978	824	829	730	1,571	21,298	13,077	21,072	14,051	38,039	22,830	698	216		135,235
1979	1,693	579	474	1,036	14,958	9,331	19,745	30,588	48,505	17,735	691	287		145,622
1980	905	510	757	1,385	16,722	13,248	12,872	16,868	44,003	21,392	0	108		128,770
1981	1,536	747	952	1,144	17,440	11,977	16,127	2,430	39,745	18,658	91	148		110,995
1982	0	1,531	1,011	1,480	20,791	10,946	13,290	12,598	29,130	14,021	0	0		104,798
1983	2,809	523	696	303	15,868	10,767	11,195	17,056	27,154	13,385	1,864	175		101,795
1984	1,702	1,047	718	908	9,253	10,133	13,131	12,343	34,016	19,661	168	337		103,417
1985	1,468	748	1,461	1,820	16,525	15,340	9,790	8,148	24,056	11,252	0	502		91,110
1986	632	565	847	1,842	13,163	9,061	6,988	9,077	8,632	8,885	0	296		59,988
1987	792	2,218	633	1,018	11,865	6,020	5,479	8,386	19,668	10,945	0	158		67,182
1988	1,959	1,466	489	655	12,115	8,016	13,815	5,326	14,644	10,872	0	0		69,357
1989	1,433	661	341	1,421	15,427	11,506	7,559	4,368	11,743	8,457	44	0		62,960
1990	4,062	510	647	1,711	19,645	8,208	5,262	9,998	13,480	7,792	281	41		71,637
1991	351	542	901	844	9,357	4,742	4,407	4,023	5,689	4,179	112	73		35,220
1992	0	910	79	464	6,221	4,861	5,236	2,126	6,914	6,393	136	77		33,417
1993	1,090	1,336	852	706	11,401	5,156	5,172	3,253	4,025	4,701	61	0		37,753
1994	934	765	1,163	1,136	11,307	4,649	4,866	7,302	7,518	4,738	0	64		44,442
1995	1,727	454	965	1,240	7,831	4,552	8,974	6,521	7,573	4,476	0	0		44,313
1996	1,246	478	897	1,234	5,043	4,011	10,323	14,477	9,621	5,367	0	0		52,697
1997	785	139	116	493	7,423	5,560	13,248	13,656	13,882	5,422	37	0		60,761
1998	1,026	0	653	757	7,735	6,361	14,347	11,099	11,119	6,462	19	276		59,854
1999	390	1,137	755	1,790	8,956	6,457	9,830	10,610	10,304	5,464	0	0		55,693
2000	470	509	499	581	6,480	5,397	6,849	16,168	13,603	5,825	50	0	0	56,431
2001	137	0	401	611	4,911	3,709	9,216	7,051	8,732	4,807	19	60	0	39,654
2002	1,153	78	543	702	5,527	9,910	13,879	13,055	7,640	4,551	0	0	0	57,038
2003	572	598	228	1,270	6,795	10,422	8,999	8,688	8,205	1,948	234	0	0	47,959
2004	30	317	129	702	6,394	5,208	12,624	23,803	8,380	2,363	0	0	0	59,950
2005	256	313	308	536	4,677	3,178	6,653	13,450	10,769	3,675	0	0	0	43,815
2006	176	939	90	382	5,067	4,861	8,579	11,853	12,527	2,004	39	0	0	46,517
2007	228	584	660	634	5,533	5,059	13,329	18,054	10,085	2,410	224	0	0	56,800
2008	427	252	393	427	4,867	5,745	7,911	15,076	12,833	2,989	0	0	0	50,920
2009	0	190	104	504	4,039	4,684	4,582	17,226	6,138	2,837	0	22	0	40,326
2010	321	943	824	609	6,266	6,480	4,862	13,530	6,728	2,228	0	0	0	42,791
2011	302	0	578	263	3,287	1,670	6,188	20,217	14,053	2,755	0	0	0	49,313
2012	0	435	62	0	2,216	2,364	2,519	15,474	14,307	4,464	0	0	0	41,841
2013	612	671	696	721	7,060	4,850	3,796	19,243	15,786	2,357	0	0	0	55,792
2014	88	0	532	109	2,729	3,350	3,903	30,717	20,996	3,603	0	440	0	66,467
2015	0	333	355	303	2,435	3,171	7,928	11,790	10,678	2,528	0	0	0	39,521
2016	430	0	287	162	2,780	2,861	7,469	11,869	7,920	2,492	0	0	0	36,270
2017	437	0	0	209	1,437	4,224	3,428	28,390	13,135	2,092	0	0	0	53,352
2018	349	0	442	302	2,482	2,993	2,648	15,714	9,429	1,986	0	168	0	36,513
2019	204	27	98	197	2,117	2,333	3,528	12,410	11,502	2,162	34	129	0	34,741
2020	219	28	88	219	3,456	2,670	2,054	4,920	11,671	2,424	46	67	0	27,862
2021	101	27	125	164	2,684	2,852	4,567	9,516	11,890	3,002	39	93	0	35,060

AVERAGES

1972-79	1,184	802	792	1,114	22,379	11,783	17,129	33,021	70,294	31,698	397	302		190,631
1980-89	1,324	1,002	791	1,198	14,917	10,701	11,025	9,660	25,279	13,753	217	172		90,037
1990-99	1,161	627	703	1,038	9,492	5,456	8,167	8,307	9,013	5,499	65	53		49,579
2000-2009	345	378	336	635	5,429	5,817	9,262	14,442	9,891	3,341	57	8	0	49,941
2010-2019	274	241	387	288	3,281	3,430	4,627	17,935	12,453	2,667	3	74	0	45,660
1972-2021	817	579	574	817	10,327	7,077	9,489	15,641	23,046	10,232	117	101	0	78,803

<sup>1</sup> Estimates for 1968-71 are useful only for distribution of harvest among provinces. They are not comparable with estimates in subsequent years because different survey procedures were used.

01/20/23

<sup>2</sup> Nunavut separated from the Northwest Territories on April 1, 1999.

<sup>3</sup> 2019 and thereafter, harvest estimates are from a Bayesian analysis

ESTIMATES OF ALL-DUCK HARVESTS IN CANADA<sup>3</sup>

YR	NF	PE	NS	NB	PQ	ON	MB	SK	AB	BC	NT	YT	NUN <sup>2</sup>	TOTAL
1969 <sup>1</sup>	71,772	22,842	56,103	55,553	379,547	748,796	423,138	478,762	624,473	229,398	N/A	N/A		3,090,384
1970 <sup>1</sup>	76,387	25,144	70,159	52,714	389,891	728,404	471,608	684,287	737,527	237,532	N/A	N/A		3,473,653
1971 <sup>1</sup>	59,232	27,914	78,223	50,130	402,675	609,481	317,300	605,568	696,844	195,189	N/A	N/A		3,042,556
1972	88,638	20,360	77,385	55,035	436,665	853,308	354,561	617,262	821,582	266,630	N/A	N/A		3,591,426
1973	70,434	15,936	80,655	45,941	451,148	735,487	264,676	481,425	822,528	248,879	N/A	N/A		3,217,109
1974	101,000	31,255	102,301	58,124	556,556	803,378	252,503	704,767	1,001,454	205,291	2,994	896		3,820,519
1975	102,344	28,448	117,968	58,048	461,878	950,370	305,809	802,629	839,225	235,448	3,509	3,396		3,909,072
1976	98,322	37,504	118,038	68,027	601,074	978,182	351,783	807,735	881,807	231,421	6,573	3,319		4,183,785
1977	132,957	30,180	134,485	53,803	630,044	913,830	259,408	509,728	778,679	259,488	5,656	2,417		3,710,675
1978	142,686	30,048	109,547	65,862	527,989	942,980	360,877	527,398	580,351	210,763	5,857	2,825		3,507,183
1979	121,861	20,936	88,401	49,271	469,363	844,916	383,250	582,384	679,022	204,606	4,075	3,018		3,451,103
1980	106,066	31,826	124,761	59,783	500,434	912,988	335,577	443,919	687,370	185,832	5,885	2,969		3,397,410
1981	113,877	26,243	113,582	59,082	507,706	849,216	293,992	273,357	526,197	186,699	3,622	1,328		2,954,901
1982	111,122	38,504	87,941	61,318	514,402	859,526	269,613	324,541	458,663	163,191	1,552	1,060		2,891,433
1983	119,512	36,370	117,295	72,849	453,807	888,678	285,594	380,169	515,356	193,600	6,749	3,173		3,073,152
1984	115,454	34,922	95,739	68,816	439,202	832,646	214,678	258,466	439,086	174,322	6,280	2,580		2,682,191
1985	110,041	31,139	92,473	69,523	494,433	871,818	174,453	210,541	283,491	145,849	8,307	2,172		2,494,240
1986	124,331	29,582	99,882	70,855	433,562	821,763	207,559	226,165	273,044	125,037	3,627	1,415		2,416,822
1987	74,331	28,901	78,359	59,426	467,042	759,035	208,576	200,833	297,081	126,703	2,504	902		2,303,693
1988	83,838	34,145	85,406	63,403	445,555	663,940	125,905	104,509	182,437	115,666	2,967	1,052		1,908,823
1989	92,687	21,622	120,726	64,448	433,785	682,797	121,028	104,122	254,798	102,900	1,205	773		2,000,891
1990	91,543	20,110	104,040	70,539	456,331	684,440	111,839	115,659	231,916	96,165	2,142	453		1,985,177
1991	55,430	28,054	76,588	47,276	356,978	620,344	106,827	102,879	166,312	80,404	737	1,100		1,642,929
1992	62,769	15,055	95,708	52,280	342,974	541,553	118,701	92,556	129,133	82,283	1,230	828		1,535,070
1993	66,613	22,756	95,149	51,089	396,462	582,033	93,665	76,729	123,711	72,835	1,780	1,339		1,584,161
1994	81,991	18,313	91,725	53,883	355,414	517,677	116,975	130,479	169,519	78,692	2,043	901		1,617,612
1995	67,360	27,892	93,198	74,273	299,000	512,933	135,147	149,321	152,794	62,223	2,156	1,393		1,577,690
1996	56,531	19,257	79,991	56,202	255,648	460,414	168,502	190,133	183,079	72,241	1,988	597		1,544,583
1997	57,710	21,371	74,204	50,634	261,923	461,371	183,466	204,210	229,747	81,179	1,667	392		1,627,874
1998	61,368	15,361	82,094	59,803	256,382	425,275	175,742	205,544	170,070	87,429	1,985	1,102		1,542,155
1999	51,465	19,923	86,556	56,642	270,264	385,576	162,354	233,178	157,614	70,934	1,431	307		1,496,244
2000	63,617	13,540	69,188	52,475	244,487	367,334	148,147	242,275	160,685	73,411	1,055	460	114	1,436,788
2001	50,207	17,815	58,476	41,656	215,779	364,497	168,274	153,504	135,352	55,594	1,021	408	0	1,262,583
2002	50,457	15,651	62,118	43,050	189,473	351,889	155,538	173,087	125,533	58,735	3,344	1,131	0	1,230,006
2003	41,648	14,637	55,789	44,613	177,880	313,729	128,550	185,458	124,368	51,992	1,815	548	710	1,141,737
2004	44,271	9,944	47,771	32,306	171,619	289,676	146,093	195,060	136,063	43,430	1,927	184	0	1,118,344
2005	42,897	12,410	44,881	34,812	182,650	273,663	161,893	225,849	152,717	52,577	2,063	2,294	0	1,188,706
2006	48,136	12,680	44,650	37,115	186,035	303,980	173,738	243,086	153,470	41,051	525	167	0	1,244,633
2007	63,557	12,286	57,350	39,324	172,585	273,692	143,710	242,542	159,478	44,312	1,571	1,855	0	1,212,262
2008	59,079	11,164	51,031	37,005	184,236	279,513	129,988	222,761	173,401	53,351	334	976	0	1,202,839
2009	47,660	10,116	40,471	28,484	169,740	252,949	124,369	187,239	110,861	46,557	2,659	156	0	1,021,261
2010	45,322	14,643	41,556	40,383	163,862	264,369	114,050	206,663	121,504	45,173	834	0	0	1,058,359
2011	46,878	13,593	41,666	32,896	165,466	268,673	124,776	268,148	147,934	49,614	835	582	0	1,161,061
2012	55,136	19,835	41,236	33,877	158,372	242,972	121,538	266,797	144,925	54,242	2,130	928	0	1,141,988
2013	53,286	13,126	45,969	38,397	146,552	268,754	128,694	306,159	177,523	43,657	1,384	2,362	0	1,225,863
2014	25,854	14,420	24,818	31,417	142,214	280,685	113,921	293,970	164,465	50,513	3,757	881	0	1,146,915
2015	30,969	8,219	35,833	27,911	135,485	314,335	121,329	276,219	156,242	44,718	791	969	0	1,153,020
2016	23,907	8,853	29,864	27,235	127,142	224,240	128,267	276,503	162,169	40,161	1,144	535	0	1,050,020
2017	33,873	4,960	28,049	22,326	129,508	230,362	87,222	220,926	170,896	37,228	658	875	0	966,883
2018	25,320	4,776	31,550	28,741	98,822	229,442	94,369	259,443	174,253	41,408	372	1,344	0	989,840
2019	20,856	4,630	24,696	24,182	109,344	207,153	72,146	212,851	155,457	34,915	1,116	763	0	868,109
2020	20,250	4,863	23,846	22,863	108,350	186,716	35,069	49,079	113,969	39,277	1,233	777	0	606,292
2021	16,754	5,178	23,674	22,405	102,823	177,469	53,845	104,692	121,186	38,679	973	806	0	668,484

AVERAGES:

1972-79	107,280	26,833	103,598	56,764	516,840	877,806	316,608	629,166	800,581	232,816	4,777	2,645		3,673,859
1980-89	105,126	31,325	101,616	64,950	468,993	814,241	223,698	252,662	391,752	151,980	4,270	1,742		2,612,356
1990-99	65,278	20,809	87,925	57,262	325,138	519,162	137,322	150,069	171,390	78,439	1,716	841		1,615,350
2000-2009	51,153	13,024	53,173	39,084	189,448	307,092	148,030	207,086	143,193	52,101	1,631	818	82	1,205,916
2010-2019	36,140	10,706	34,524	30,737	137,677	253,099	110,631	258,768	157,537	44,163	1,302	924	0	1,076,206
1972-2021	69,444	19,667	72,974	48,394	311,169	526,451	176,372	277,459	305,570	104,146	2,501	1,265	37	1,915,278

<sup>1</sup> Estimates for 1968-71 are useful only for distribution of harvest among provinces. They are not comparable with estimates in subsequent years because different survey procedures were used.

20-Jan-23

<sup>2</sup> Nunavut separated from the Northwest Territories on April 1, 1999.

<sup>3</sup> 2019 and thereafter, harvest estimates are from a Bayesian analysis

# **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		
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	1003857	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
<b>AVERAGE:</b>						1999-2018:						
1999-2020	366,635	2,090,294	779,619	946,303	20,882	4,203,733	181,787	288,912	31,598	559	502,856	4,706,589
<b>% CHANGE FROM:</b>												
Prev. Year	-19%	-2%	-11%	-16%	-31%	-9%	-7%	49%	-14%	-17%	17%	-7%
Average	-51%	-43%	-35%	-30%	-48%	-40%	-45%	-45%	-26%	-23%	-44%	-40%

<sup>1</sup>Preliminary

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

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# **Goose Harvests in North America**

**ESTIMATED REGULAR SEASON SNOW/BLUE GOOSE HARVESTS (Harvest Information Survey)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S. TOTAL	CANADA TOTAL	U.S. + CANADA
	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S. TOTAL	CANADA TOTAL	U.S. + CANADA
1999	7,620	10,405	63	22,114	3,081	62,014	4,697	13,959	293,635	0	417,588	54,711	302,278	51,813	826,190	192,517	1,018,707
2000	6,990	8,164	0	2,745	3,811	31,119	7,843	2,500	285,993	114	349,279	72,257	160,752	38,439	620,727	227,228	847,955
2001	7,951	4,091	106	5,240	7,465	41,125	4,434	16,489	213,685	0	300,586	77,802	226,716	44,572	649,675	241,069	890,744
2002	9,778	14,751	291	11,347	4,377	20,146	2,834	23,234	144,056	0	230,814	39,295	110,766	45,527	427,402	177,343	604,745
2003 <sup>1</sup>	14,664	16,570	453	4,778	2,327	24,803	1,406	27,920	123,247	325	216,493	36,105	186,862	42,607	482,067	238,545	720,612
2004 <sup>1</sup>	7,988	14,439	113	771	1,017	17,647	2,529	28,802	110,504	0	183,810	31,548	168,358	40,611	424,327	175,279	599,606
2005 <sup>1</sup>	5,554	3,495	54	3,815	1,723	19,163	7,273	21,125	191,235	0	253,437	36,102	219,699	63,779	573,017	172,259	745,276
2006 <sup>1</sup>	8,742	11,446	0	888	2,067	31,261	7,554	25,317	107,290	0	194,565	33,256	140,300	71,479	439,600	239,831	679,431
2007 <sup>1</sup>	9,962	9,630	83	856	1,609	28,120	4,501	10,581	112,830	0	178,172	50,742	140,802	87,738	457,454	169,175	626,629
2008 <sup>1</sup>	3,038	8,991	0	1,199	124	31,321	2,416	25,420	100,084	0	172,593	58,752	145,962	87,274	464,581	278,977	743,558
2009 <sup>1</sup>	3,096	4,001	494	3,040	621	31,075	1,767	17,517	49,905	66	111,582	29,426	65,625	53,840	260,273	155,299	415,572
2010 <sup>1</sup>	2,081	3,296	0	0	276	34,554	7,542	17,535	88,476	0	153,760	18,293	82,934	65,034	320,021	162,548	482,569
2011 <sup>1</sup>	8,026	17,944	0	6,964	1,551	28,448	1,881	11,846	92,236	248	169,144	37,592	122,573	64,115	393,424	213,747	607,171
2012 <sup>1</sup>	1,568	9,607	0	788	789	27,861	3,464	33,348	70,989	330	148,744	41,251	61,448	70,214	321,657	185,689	507,346
2013 <sup>1,3</sup>	3,543	21,236	0	19,021	0	28,534	17,432	16,714	61,891	0	168,373	30,482	133,355	48,365	380,575	224,919	605,494
2014 <sup>1</sup>	917	26,690	0	350	3,639	19,735	6,620	12,081	143,324	0	209,356	21,684	86,602	75,573	393,215	275,466	668,681
2015 <sup>1</sup>	1,188	18,333	151	1,290	888	28,416	501	7,009	45,789	0	103,565	20,983	69,657	65,116	259,321	144,145	403,466
2016 <sup>1</sup>	12,482	12,684	258	11,134	228	45,674	1,492	13,221	97,615	62	194,850	25,560	120,440	79,867	420,717	125,685	546,402
2017 <sup>1</sup>	19,180	12,754	141	2,960	43	36,611	590	32,227	123,659	218	228,383	16,611	134,344	116,102	495,440	152,020	647,460
2018 <sup>1</sup>	1,754	11,548	437	214	0	24,878	2,291	9,466	33,688	0	84,250	6,965	54,342	99,570	245,127	114,884	360,011
2019 <sup>1</sup>	2,388	12,639	220	1,002	126	26,605	3,441	15,377	65,620	295	127,707	17,091	49,180	94,120	288,098	137,622	425,720
2020 <sup>1</sup>	3,721	15,807	104	1,203	316	28,320	2,565	34,954	70,274	0	157,263	11,965	71,724	149,380	390,331	68,121	458,452
2021 <sup>1</sup>	2,489	16,238	0	6,599	67	50,255	3,004	14,590	35,091	139	128,473	8,531	89,522	123,693	350,219	127,236	477,455
<b>AVERAGE:</b> 1999-2021											194,904	33,783	128,010	73,019	429,716	182,591	612,307
<b>% CHANGE FROM:</b> Prev. Year -33% 3% -100% 44% -79% 77% 17% -58% -50% -18% -29% 25% -17% -10% Average -60% 31% -100% 40% -96% 62% -30% -22% -70% 78% -34% -75% 30% 69% -18%																	

<sup>1</sup>Preliminary

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

<sup>3</sup>Includes Conservation Order harvest.

**ESTIMATED REGULAR SEASON ROSS'S GOOSE HARVESTS (Harvest Information Survey)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S. TOTAL	CANADA TOTAL	U.S. + CANADA
	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S. TOTAL	CANADA TOTAL	U.S. + CANADA
1999	1,499	1,643	0	3,797	1,761	360	361	787	47,491	0	57,699	0	9,343	28,318	95,360	22,749	118,109
2000	760	0	191	732	1,755	336	941	0	31,269	0	35,986	0	6,542	6,850	49,378	17,895	67,273
2001	1,817	314	0	629	10,451	2,896	1,162	1,725	40,729	0	59,723	0	18,780	14,834	93,337	20,985	114,322
2002	1,029	3,471	94	331	1,908	528	1,417	664	27,617	0	37,059	0	8,496	16,248	61,803	33,956	95,759
2003 <sup>1</sup>	2,122	2,693	0	735	1,138	105	703	603	22,244	0	30,347	0	17,332	16,904	64,583	30,269	94,852
2004 <sup>1</sup>	1,332	2,042	0	193	2,288	213	1,167	983	23,527	0	31,745	0	4,625	11,070	47,440	22,092	69,532
2005 <sup>1</sup>	444	194	0	544	1,000	913	2,273	315	37,416	0	43,099	0	3,970	8,026	55,095	14,749	69,844
2006 <sup>1</sup>	4,687	1,402	0	381	910	912	3,110	463	12,070	0	23,935	82	10,102	6,627	40,746	26,712	67,458
2007 <sup>1</sup>	1,566	1,313	0	143	724	528	1,637	0	12,895	43	18,849	1,500	8,836	8,782	37,967	18,037	56,004
2008 <sup>1</sup>	1,953	3,549	0	239	247	1,524	966	1,141	22,192	0	31,811	170	12,383	15,613	59,977	48,165	108,142
2009 <sup>1</sup>	310	266	0	2,134	113	2,093	530	824	3,899	0	10,169	145	1,950	9,928	22,192	24,036	46,228
2010 <sup>1</sup>	347	1,163	0	0	221	1,547	794	1,077	18,363	90	23,602	0	4,608	16,875	45,085	34,798	79,883
2011 <sup>1</sup>	819	1,932	0	398	258	2,785	1,410	671	23,854	83	32,210	0	4,821	15,915	52,946	39,952	92,898
2012 <sup>1</sup>	0	3,409	0	263	1,052	6,024	742	2,182	14,503	0	28,175	0	7,163	16,073	51,411	24,722	76,133
2013 <sup>1,3</sup>	1,492	6,017	111	2,875	0	951	3,486	356	15,201	0	30,489	0	6,258	16,022	52,769	34,955	87,724
2014 <sup>1</sup>	0	5,719	0	350	1,747	1,663	2,452	653	42,549	0	55,133	53	16,694	19,576	91,456	41,285	132,741
2015 <sup>1</sup>	0	3,595	151	0	3,016	501	701	4,923	0	12,887	0	3,142	14,331	30,360	21,361	51,721	
2016 <sup>1</sup>	2,539	1,538	0	1,204	137	3,498	895	853	19,663	0	30,327	0	14,531	8,625	53,483	23,712	77,195
2017 <sup>1</sup>	3,607	1,501	0	455	0	3,481	0	3,480	34,317	0	46,841	254	25,147	28,263	100,505	41,498	142,003
2018 <sup>1</sup>	390	1,316	0	0	464	1,478	509	186	10,893	0	15,236	0	3,812	12,952	32,000	11,930	43,930
2019 <sup>1</sup>	149	2,943	0	0	0	4,887	1,966	2,853	12,004	148	24,950	0	9,783	16,222	50,955	36,165	87,120
2020 <sup>1</sup>	620	3,763	104	0	105	2,968	1,026	2,724	18,244	62	29,617	403	5,477	25,998	61,496	8,083	69,579
2021 <sup>1</sup>	533	5,731	0	287	134	7,852	2,629	1,824	12,063	0	31,053	86	12,376	32,250	75,764	17,521	93,285
<b>AVERAGE:</b> 1999-2021											32,215	117	9,399	15,926	57,657	26,766	84,423
<b>% CHANGE FROM:</b> Prev. Year -14% 52% -100% 28% 165% 156% -33% -34% -100% 5% -79% 126% 24% 23% Average -56% 137% -100% -58% -88% 257% 97% 67% -45% -100% -4% -27% 32% 102% 31%																	

**ESTIMATED REGULAR SEASON LIGHT (SNOW, BLUE, AND ROSS**

**ESTIMATED HARVESTS OF WHITE-FRONTED GEESE (Harvest Information Survey)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S. TOTAL	CANADA TOTAL	U.S. + CANADA
1999	0	5,476	316	223	0	899	2,168	983	103,670	0	113,735	0	108,649	32,123	254,507	62,349	316,856
2000	0	11,303	573	549	60	2,481	3,451	2,166	163,970	0	184,553	0	103,913	26,658	315,124	106,738	421,862
2001	227	4,721	212	629	0	1,854	422	1,150	82,015	0	91,230	0	110,802	29,348	231,380	93,194	324,574
2002	86	8,966	187	663	112	264	1,090	830	73,147	0	85,345	0	107,151	28,003	220,499	51,615	272,114
2003 <sup>1</sup>	1,158	9,735	0	2,205	0	435	2,953	1,607	61,924	0	80,017	0	110,611	26,153	216,781	65,268	282,049
2004 <sup>1</sup>	121	5,688	0	1,543	0	1,914	4,280	1,545	37,072	0	52,163	0	86,266	44,078	182,507	64,613	247,120
2005 <sup>1</sup>	0	970	269	1,998	0	183	1,477	946	108,089	0	113,932	87	92,956	45,451	252,426	75,564	327,990
2006 <sup>1</sup>	127	2,336	84	888	25	1,172	2,000	309	76,444	0	83,385	0	142,493	56,610	282,488	55,183	337,671
2007 <sup>1</sup>	142	13,788	249	1,142	0	528	7,366	1,076	87,040	0	111,331	0	176,444	64,586	352,361	69,958	422,319
2008 <sup>1</sup>	868	16,325	0	479	0	1,524	1,691	326	40,033	0	61,246	0	138,097	119,988	319,331	93,862	413,193
2009 <sup>1</sup>	0	12,267	247	434	56	1,932	2,120	1,237	52,244	0	70,537	2,510	71,451	60,746	205,244	54,213	259,457
2010 <sup>1</sup>	173	4,847	99	0	0	5,157	1,588	615	75,121	0	87,600	0	105,249	75,909	268,758	56,199	324,957
2011 <sup>1</sup>	164	19,877	0	1,791	0	2,188	1,567	671	74,744	0	101,002	788	70,836	62,183	234,809	81,042	315,851
2012 <sup>1</sup>	448	7,127	0	526	0	3,765	2,474	4,363	63,356	0	82,059	0	83,245	45,196	210,500	59,470	269,970
2013 <sup>1</sup>	559	15,927	222	664	0	1,585	3,218	1,422	34,745	0	58,342	124	122,469	75,432	256,367	75,113	331,480
2014 <sup>1</sup>	0	19,064	166	0	0	1,407	2,452	653	120,930	0	144,672	94	110,410	84,075	339,251	87,594	426,845
2015 <sup>1</sup>	0	15,817	1,057	322	0	3,248	1,504	701	28,064	0	50,713	0	108,720	68,228	227,653	71,457	299,110
2016 <sup>1</sup>	635	16,913	0	903	0	1,440	1,790	2,772	50,563	62	75,078	0	196,416	42,795	314,289	66,525	380,814
2017 <sup>1</sup>	492	4,752	141	911	0	2,920	3,541	4,085	43,192	0	60,034	726	181,084	70,372	312,216	76,884	389,100
2018 <sup>1</sup>	0	2,339	0	855	0	3,078	509	3,341	33,668	0	43,790	37	110,739	67,435	222,001	79,364	301,365
2019 <sup>1</sup>	0	5,194	110	668	0	4,344	983	2,378	38,412	0	52,089	152	153,583	54,931	260,755	56,228	316,983
2020 <sup>1</sup>	124	8,781	0	962	0	3,957	4,617	2,951	21,623	0	43,015	485	119,507	108,732	271,740	30,359	302,099
2021 <sup>1</sup>	178	6,050	3,226	287	0	5,104	2,629	4,863	10,966	0	33,303	0	133,643	67,709	234,655	48,415	283,070
<b>AVERAGE:</b>																	
1999-2021	239	9,490	311	811	11	2,234	2,430	1,782	64,393	3	81,703	218	119,336	58,988	260,245	68,748	328,993
<b>% CHANGE FROM:</b>																	
Prev. Year	44%	-31%	-70%	29%	-43%	65%	-49%	-23%	-100%	12%	-38%	-14%					
Average	-26%	-36%	937%	-65%	-100%	128%	8%	173%	-83%	-100%	-59%	-100%	12%	15%	-10%		

<sup>1</sup>Preliminary

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

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**ESTIMATED REGULAR SEASON HARVESTS OF CANADA GEESE (Harvest Information Survey)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S. TOTAL	CANADA TOTAL	U.S. + CANADA	
1999	49,715	66,255	19,028	64,775	2,201	110,727	35,773	109,271	72,395	9,194	539,335	137,900	590,100	314,554	1,581,889	565,242	2,147,131	
2000	86,921	98,005	34,764	113,441	1,996	105,643	49,566	123,303	125,837	25,499	69,217	150,300	74,500	338,847	1,926,326	612,056	2,538,382	
2001	55,052	72,707	19,221	83,833	1,792	64,721	13,458	126,736	123,859	13,486	574,866	482,337	576,572	267,207	1,900,982	637,016	2,537,998	
2002	62,101	80,982	30,314	56,322	1,010	75,862	26,606	91,574	96,286	15,471	536,530	476,787	569,464	243,793	1,826,575	645,664	2,472,239	
2003 <sup>1</sup>	92,037	123,866	37,264	104,141	2,723	82,252	35,398	109,067	62,525	23,083	672,355	476,710	476,710	130,800	2,284,776	671,654	2,956,430	
2004 <sup>1</sup>	60,401	80,118	27,277	62,672	1,271	76,927	41,630	74,363	43,489	20,421	487,770	410,800	631,320	298,764	1,828,654	626,801	2,455,455	
2005 <sup>1</sup>	67,991	99,178	17,887	97,578	1,444	85,243	27,345	57,822	83,145	18,217	555,852	520,600	586,257	34,000	1,976,714	712,042	2,688,756	
2006 <sup>1</sup>	64,236	59,566	25,399	56,688	910	82,455	41,736	97,985	62,362	21,163	512,500	437,000	747,050	305,365	2,001,915	678,011	2,679,926	
2007 <sup>1</sup>	62,192	59,968	23,876	61,794	4,023	74,622	47,496	60,042	47,066	11,834	452,913	601,243	675,477	287,861	2,017,493	703,857	2,721,350	
2008 <sup>1</sup>	85,716	87,067	16,154	83,358	2,350	64,167	31,887	68,441	43,950	22,529	505,618	662,042	739,354	316,303	2,223,317	735,005	2,958,322	
2009 <sup>1</sup>	68,098	92,267	25,925	79,026	2,032	101,598	28,084	98,716	54,583	17,052	493,297	612,263	731,196	297,884	2,134,639	711,213	2,455,852	
2010 <sup>1</sup>	49,062	66,494	18,162	107,108	1,489	88,966	21,831	77,830	70,113	20,434	521,489	796,229	938,413	279,138	2,040,374	691,162	2,731,536	
2011 <sup>1</sup>	31,450	51,900	21,785	68,644	6,719	114,189	27,113	97,211	93,210	14,533	45,127	67,910	1,103,880	332,130	2,855,576	671,654	3,527,230	
2012 <sup>1</sup>	83,356	72,204	26,431	93,777	3,420	147,215	40,827	100,670	56,486	28,198	552,470	643,800	952,120	305,464	2,453,854	626,801	3,080,655	
2005 <sup>1</sup>	64,235	59,566	25,399	56,688	910	120,355	42,436	129,985	62,362	21,163	583,400	662,500	1,078,650	321,165	2,645,715	678,011	3,243,540	
2007 <sup>1</sup>	62,192	59,968	23,876	63,794	4,023	108,922	48,896	87,342	47,066	11,834	517,713	860,743	996,677	301,061	2,676,193	703,857	3,380,050	
2008 <sup>1,3</sup>	85,716	87,067	16,154	85,274	2,350	99,091	35,027	94,513	43,950	22,529	571,671	91,976	1,021,696	331,497	2,844,840	735,005	3,579,845	
2009 <sup>1,3</sup>	68,098	92,267	25,925	79,026	2,032	101,598	28,084	98,716	54,583	17,052	567,383	854,268	975,895	308,125	2,705,671	711,213	3,416,884	
2010 <sup>1,4</sup>	49,062	66,494	18,162	107,108	1,489	88,966	21,831	77,830	70,113	20,434	521,489	796,229	938,413	279,138	2,053,269	691,162	2,726,431	
2011 <sup>1,4</sup>	31,450	51,900	21,785	68,644	6,719	114,189	27,113	97,211	93,210	14,533	45,127	474,904	530,630	833,440	296,080	2,185,054	730,316	2,915,370
2012 <sup>1,4</sup>	83,356	72,204	26,431	93,777	3,420	147,215	40,827	100,670	56,486	28,198	676,466	695,699	285,546	312,343	2,510,054	740,882	3,250,936	
2014 <sup>1,4</sup>	101,543	166,812	46,156	110,933	2,911	167,177	49,281	77,062	33,592	15,791	774,588	630,777	781,274	292,695	2,479,334	757,547	3,236,881	
2015 <sup>1,5</sup>	67,723	71,175	40,469	69,315	1,396	127,698	39,613	64,719	13,786	15,086	530,980	488,582	731,564	258,053	2,009,179	776,462	2,785,641	
2016 <sup>1,6</sup>	93,085	96,863	24,509	115,248	1,734	129,009	45,060	70,156	28,793	24,401	628,849	714,089	846,784	265,098	2,454,820	764,088	3,218,908</	

**ESTIMATED TOTAL GOOSE HARVESTS (Harvest Information Survey)**

YR	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S. TOTAL	CANADA TOTAL	U.S. + CANADA
	CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	CEN FLYWAY	ATL FLYWAY	MISS FLYWAY	PAC <sup>2</sup> FLYWAY	U.S. TOTAL	CANADA TOTAL	U.S. + 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

**AVERAGES:**

1999-2020 80,271 110,735 31,293 100,748 5,444 157,674 51,619 122,555 282,548 20,093 958,092 670,815 1,185,314 442,222 3,255,103 968,539 4,223,643

**% CHANGE FROM:**

Prev. Year	36%	23%	-20%	41%	-12%	14%	-18%	-30%	-35%	70%	-15%	-23%	-5%	-26%	-14%
Average	-1%	18%	26%	7%	-36%	3%	46%	-21%	-64%	35%	-26%	-54%	-15%	-7%	-25%

<sup>1</sup> Preliminary

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

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

<b>YR</b>	<b>CO</b>	<b>KS</b>	<b>MT</b>	<b>NE</b>	<b>NM</b>	<b>ND</b>	<b>OK</b>	<b>SD</b>	<b>TX</b>	<b>WY</b>	<b>CEN FLYWAY</b>
1999	15,864	11,500	1,391	9,158	1,233	47,095	11,563	15,924	64,287	1,391	179,405
2000	19,603	19,153	1,910	14,272	484	31,232	12,862	6,832	99,144	2,732	208,224
2001	14,918	15,108	1,381	14,461	597	36,839	6,335	18,022	102,658	1,583	211,901
2002	14,839	15,329	2,239	5,964	224	18,738	9,266	16,928	76,133	1,521	161,180
2003 <sup>1</sup>	29,714	29,620	2,523	11,027	1,683	22,845	16,872	17,475	37,876	2,709	172,345
2004 <sup>1</sup>	19,972	11,668	1,754	9,642	170	21,262	19,842	7,587	27,804	1,388	121,089
2005 <sup>1</sup>	27,552	19,020	754	26,336		18,433	12,955	5,991	78,988	2,215	192,244
2006 <sup>1</sup>	19,131	12,380	1,003	7,615	74	15,761	17,774	10,806	39,563	1,287	125,394
2007 <sup>1</sup>	18,927	24,512	663	9,419	402	12,278	23,325	5,201	38,684	907	134,319
2008 <sup>1</sup>	12,586	32,650	554	10,300	186	12,889	8,938	5,214	25,238	2,453	111,008
2009 <sup>1</sup>	23,524	16,800	123	8,684	508	15,457	10,951	9,686	47,565	790	134,088
2010 <sup>1</sup>	22,364	12,213	197	14,523	110	17,535	4,962	4,307	58,428	2,509	137,149
2011 <sup>1</sup>	15,725	9,938	456	8,954		17,506	15,045	5,365	34,191	1,407	108,588
2012 <sup>1</sup>	31,370	25,411	348	12,616	526	20,331	20,537	8,415	45,036	6,843	171,435
2013 <sup>1</sup>	39,531	39,994	111	10,838	134	18,548	49,880	3,201	29,316	1,476	193,029
2014 <sup>1</sup>	40,113	65,295	0	21,729	582	25,420	31,628	2,449	20,155	902	208,273
2015 <sup>1</sup>	29,109	18,692	1,963	9,028	0	11,830	8,524	1,636	6,893	1,683	89,358
2016 <sup>1</sup>	27,079	15,760	903	11,735	183	15,842	21,486	2,132	9,129	2,409	106,658
2017 <sup>1</sup>	34,262	22,258	1,980	22,771	171	18,642	18,296	8,927	25,442	4,909	157,658
2018 <sup>1</sup>	32,554	15,641	2,297	14,528	2,321	10,343	15,272	1,299	57,433	1,990	153,678
2019 <sup>1,2</sup>	27,321	17,314	2,088	12,527	0	7,963	22,611	1,585	36,811	2,659	130,879

<sup>1</sup>Preliminary

<sup>2</sup>New thresholds used starting in 2018, this table discontinued

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

<b>YR</b>	<b>CO</b>	<b>KS</b>	<b>MT</b>	<b>NE</b>	<b>NM</b>	<b>ND</b>	<b>OK</b>	<b>SD</b>	<b>TX</b>	<b>WY</b>	<b>CEN FLYWAY</b>
1999	32,103	52,570	15,109	54,500	968	57,700	22,765	128,967	2,896	7,440	375,018
2000	63,823	71,902	31,708	94,961	1,452	69,342	34,508	113,138	9,152	21,401	511,387
2001	29,836	52,248	15,717	65,180	1,194	69,855	8,657	141,110	9,485	11,147	404,430
2002	32,251	56,109	22,386	41,165	673	83,486	11,337	107,376	4,478	11,835	371,097
2003 <sup>1</sup>	53,447	88,653	29,953	82,333	792	92,034	11,248	129,960	19,840	16,906	525,166
2004 <sup>1</sup>	36,918	64,904	19,807	44,546	1,102	83,877	11,088	83,878	5,703	18,637	370,460
2005 <sup>1</sup>	38,884	75,111	8,351	70,835	1,444	92,345	11,705	68,260	3,118	16,003	386,056
2006 <sup>1</sup>	22,425	41,813	10,611	43,915	369	85,707	15,552	106,366	4,694	13,637	345,090
2007 <sup>1</sup>	36,858	30,422	6,715	50,091	1,689	83,965	22,507	76,399	3,224	9,500	321,369
2008 <sup>1</sup>	27,993	36,672	4,431	63,477	557	68,047	20,775	74,958	6,092	14,460	317,462
2009 <sup>1</sup>	43,025	73,332	2,839	64,697	1,524	69,234	15,014	78,929	5,458	12,310	366,361
2010 <sup>1</sup>	20,457	47,884	2,073	78,969	1,324	33,523	12,503	68,755	8,347	16,222	290,057
2011 <sup>1</sup>	13,268	34,784	2,053	55,910	4,652	71,219	11,754	79,798	10,337	11,342	295,117
2012 <sup>1</sup>	49,744	42,765	1,219	75,699	2,893	104,293	17,320	87,580	10,687	20,942	413,142
2013 <sup>1</sup>	43,446	67,601	1,000	90,463	2,204	139,827	20,918	130,155	2,172	19,288	517,073
2014 <sup>1</sup>	50,428	85,789	332	88,669	2,183	126,942	12,749	66,287	13,437	14,167	460,983
2015 <sup>1</sup>	27,030	44,215	38,053	76,417	1,015	105,429	22,063	56,074	6,893	13,029	390,218
2016 <sup>1</sup>	39,350	66,113	21,671	94,485	1,369	100,608	19,098	61,413	6,320	19,953	430,380
2017 <sup>1</sup>	32,623	54,270	30,400	108,619	897	141,502	26,559	70,656	3,550	27,161	496,237
2018 <sup>1</sup>	34,699	34,060	35,225	83,106	5,571	98,009	18,072	59,953	10,893	16,964	396,552
2019 <sup>1,2</sup>	34,488	32,031	43,954	91,031	1,445	114,382	33,916	46,447	19,206	15,954	432,854

<sup>1</sup>Preliminary

<sup>2</sup>New thresholds used starting in 2018, this table discontinued

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

<b>YR</b>	<b>CO</b>	<b>KS</b>	<b>MT</b>	<b>NE</b>	<b>NM</b>	<b>ND</b>	<b>OK</b>	<b>SD</b>	<b>TX</b>	<b>WY</b>	<b>CEN FLYWAY</b>
1999	1,749	3,286	2,529	1,117		5,932	1,445	1,180	5,212	363	22,812
2000	3,495	7,850	1,146	4,208	60	5,074	2,196	3,333	17,541	1,366	46,269
2001	10,299	5,351	2,124	4,192		9,615	1,056	4,793	11,716	757	49,902
2002	15,011	9,544	5,690	9,194	112	7,038	7,304	6,970	15,674	2,116	78,653
2003 <sup>1</sup>	8,876	5,593	4,787	10,782	248	9,573	8,577	7,432	4,810	3,468	64,144
2004 <sup>1</sup>	3,510	3,646	5,716	8,485		13,289	10,699	5,198	9,981	397	60,921
2005 <sup>1</sup>	1,555	5,046	8,782	2,906		22,265	4,886	4,572	1,039		51,052
2006 <sup>1</sup>	22,679	5,373	13,785	5,458	468	18,887	9,109	12,813	18,105	6,240	112,916
2007 <sup>1</sup>	6,404	5,034	16,497	4,281	1,931	12,674	2,864	5,739	5,158	1,425	62,007
2008 <sup>1</sup>	45,136	17,745	11,169	11,498	1,608	18,155	5,314	14,340	12,619	5,616	143,201
2009 <sup>1</sup>	1,548	2,133	22,962	5,645		16,746	2,120	10,098	1,560	3,950	66,760
2010 <sup>1</sup>	6,241	6,397	15,892	13,615	55	37,907	4,366	4,768	3,339	1,703	94,284
2011 <sup>1</sup>	2,457	7,178	19,276	3,780	2,067	25,464	313	8,047	795	1,821	71,199
2012 <sup>1</sup>	2,241	4,029	44,746	9,462		22,591	2,969	4,675	763	412	91,888
2013 <sup>1</sup>	8,577	1,062	27,326	9,732	67	10,146	4,827	2,134	5,429	5,902	75,202
2014 <sup>1</sup>	11,002	15,728	46,183	3,505	146	14,815	4,904	8,327	0	722	105,331
2015 <sup>1</sup>	11,584	8,268	453	3,869	381	10,438	9,026	7,009	0	374	51,402
2016 <sup>1</sup>	26,656	14,991	1,935	9,027	183	12,550	4,476	6,610	13,343	2,039	91,810
2017 <sup>1</sup>	28,525	19,257	3,959	7,515	21	16,396	11,804	5,598	1,775	2,782	97,632
2018 <sup>1</sup>	1,365	877	109	1,495	0	739	2,545	557	2,971	181	10,839
2019 <sup>1,2</sup>	149	693	330	501	0	1,448	1,966	6,182	1,600	295	13,164

<sup>1</sup>Preliminary

<sup>2</sup>New thresholds used starting in 2018, this table discontinued

### 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

<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

<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

<sup>1</sup> Preliminary

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

**CANADA 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	0.55	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

<sup>1</sup>Preliminary

27-Oct-22

**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>	0.61		0.49	1.42	0.72
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

<sup>1</sup>Preliminary

\*Years without an age ratio estimate had <50 tails in the sample

27-Oct-22

**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
2000	0.34		1.77	0.41	0.39
2001	0.53		1.48	0.72	0.31
2002	0.32		0.27	0.27	0.31
2003 <sup>1</sup>	0.46		1.14	0.78	0.87
2004 <sup>1</sup>	0.19		1.02	0.22	0.51
2005 <sup>1</sup>	0.45		0.73	0.42	1.39
2006 <sup>1</sup>	0.50		0.54	0.70	0.60
2007 <sup>1</sup>	0.24		0.56	0.34	0.64
2008 <sup>1</sup>	0.56		1.48	0.27	0.18
2009 <sup>1</sup>	0.16		0.26	0.29	0.67
2010 <sup>1</sup>	0.46		0.45	0.40	0.59
2011 <sup>1</sup>	0.41		0.77	0.63	0.85
2012 <sup>1</sup>	0.39		0.42	0.27	0.73
2013 <sup>1</sup>	0.28		0.53	0.85	0.36
2014 <sup>1</sup>	0.50		1.03	0.43	0.50
2015 <sup>1</sup>	0.29		0.79	0.27	0.78
2016 <sup>1</sup>	0.57		0.55	0.38	0.58
2017 <sup>1</sup>	0.56		1.41	0.77	0.81
2018 <sup>1</sup>	0.08		0.05	0.19	0.39
2019 <sup>1</sup>	0.36		0.50	0.46	0.87
2020 <sup>1</sup>	0.23		0.55	0.17	0.54
2021 <sup>1</sup>	0.27		0.30	0.55	0.61

<sup>1</sup>Preliminary

27-Oct-22

**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

<sup>1</sup>Preliminary

\*Years without an age ratio estimate had <50 tails in the sample

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

ESTIMATED CMU MOURNING DOVE HARVEST (Harvest Information Program)

YR	AR	CO	IA <sup>2</sup>	KS	MN	MO	MT	NE	NM	ND	OK	SD	TX	WY	CMU	EMU	WMU	U.S.
2003 <sup>1</sup>	595,600	262,000		853,600	-	732,900	19,100	354,900	154,400	77,800	515,600	199,900	3,909,000	39,600	7,714,400	8,078,500	2,420,100	18,213,200
2004 <sup>1</sup>	740,600	299,900		689,400	107,000	775,900	20,900	365,900	150,200	57,500	555,300	184,100	5,664,600	43,700	9,807,600	7,712,000	2,470,600	19,990,200
2005 <sup>1</sup>	861,621	263,359		680,370	48,822	641,795	17,792	371,075	250,090	55,473	828,528	127,700	5,710,707	34,074	9,891,405	9,793,000	2,465,486	22,149,889
2006 <sup>1</sup>	621,500	270,300		711,800	50,000	709,500	14,800	249,700	226,900	56,400	704,400	103,300	5,138,700	29,500	8,886,800	8,155,400	2,202,900	19,272,400
2007 <sup>1</sup>	791,700	315,000		725,100	67,400	603,300	20,900	319,600	198,700	48,700	480,000	104,000	5,463,300	42,600	9,180,300	8,908,400	2,461,500	20,550,000
2008 <sup>1</sup>	422,041	288,438		443,742	83,454	467,833	18,381	238,647	138,069	26,386	361,204	152,099	4,849,583	30,080	7,519,957	7,671,758	2,210,705	17,402,421
2009 <sup>1</sup>	353,534	242,354		572,613	61,491	294,712	12,709	277,563	170,246	39,970	378,417	105,368	4,945,103	20,560	7,474,642	7,639,194	2,241,012	17,354,848
2010 <sup>1</sup>	446,350	171,979		98,943	426,005	17,421	276,411	128,022	54,166	268,700	64,330	4,699,316	32,099	7,194,939	7,473,535	2,561,966	17,230,440	
2011 <sup>1</sup>	519,314	178,713	56,778	534,804	57,348	359,582	14,444	265,498	76,850	41,762	379,365	87,210	5,061,083	24,965	7,657,716	6,666,900	2,256,289	16,580,904
2012 <sup>1</sup>	494,190	204,327		244,779	65,442	296,600	2,622	223,413	160,144	78,875	349,693	65,495	4,150,771	25,253	6,361,603	6,279,871	1,849,379	14,490,853
2013 <sup>1</sup>	155,860	176,894	214,313	504,393	53,519	587,568	11,980	239,845	123,027	58,156	421,170	118,304	3,506,733	34,204	6,235,968	6,350,562	1,943,271	14,529,801
2014 <sup>1</sup>	347,942	173,116	129,961	485,304	54,805	374,154	8,518	172,897	115,164	47,639	417,925	106,758	5,199,449	21,058	7,654,691	4,889,812	1,264,964	13,809,468
2015 <sup>1</sup>	252,414	204,471	111,462	558,176	96,710	307,390	18,039	160,621	111,881	73,527	293,998	84,506	4,892,144	14,914	7,180,250	4,644,890	1,332,165	13,157,309
2016 <sup>1</sup>	258,221	141,248	128,109	427,608	96,718	321,634	16,040	131,979	47,877	76,924	400,365	112,415	5,155,315	20,114	7,334,567	4,606,029	1,561,436	13,502,032
2017 <sup>1</sup>	287,122	117,645	134,876	290,649	39,133	367,227	8,890	177,912	73,893	59,443	315,569	111,605	3,469,459	9,392	5,462,816	4,783,344	1,314,973	11,561,133
2018 <sup>1</sup>	170,574	121,489	107,842	337,648	55,273	309,406	9,831	189,087	126,909	65,247	181,323	69,398	2,990,357	14,764	4,749,149	4,167,631	1,457,697	10,374,478
2019 <sup>1</sup>	328,117	106,269	29,907	389,772	40,158	268,023	16,564	137,686	125,404	75,034	247,914	103,331	3,385,042	13,198	5,266,419	3,656,849	1,060,225	9,983,494
2020 <sup>1</sup>	320,326	124,646	104,579	365,986	63,127	318,393	32,924	159,946	147,401	75,427	339,635	92,768	3,729,307	11,269	5,885,731	4,648,333	1,170,053	11,704,118
2021 <sup>1</sup>	181,303	122,920	61,363	400,247	22,555	259,654	18,380	148,015	151,840	91,494	212,865	88,220	2,467,739	10,001	4,236,596	3,822,119	1,143,338	9,202,052

<sup>1</sup>Preliminary

<sup>2</sup>No estimates available for 2012.

ESTIMATES OF TOTAL CMU MOURNING DOVE HUNTER DAYS AFIELD BY STATE OF HARVEST (Harvest Information Program)

YR	AR	CO	IA <sup>2</sup>	KS	MN	MO	MT	NE	NM	ND	OK	SD	TX	WY	CMU	EMU	WMU	U.S.
2003 <sup>1</sup>	89,000	51,200		135,100	-	124,800	4,900	62,900	32,900	17,300	73,800	40,400	802,800	7,400	1,442,500	1,456,900	459,700	3,359,100
2004 <sup>1</sup>	114,000	54,800		119,300	61,100	128,800	11,300	71,400	42,000	13,000	94,000	36,700	1,089,200	8,700	1,844,300	1,373,400	476,200	3,693,800
2005 <sup>1</sup>	147,258	48,729		109,500	14,721	113,362	4,822	64,319	41,974	11,808	111,498	25,206	1,029,986	6,626	1,729,809	1,669,760	446,158	3,845,727
2006 <sup>1</sup>	77,500	45,700		116,400	24,200	129,800	3,900	43,000	33,900	10,800	108,300	24,700	986,200	6,500	1,610,900	1,336,000	458,800	3,405,800
2007 <sup>1</sup>	115,900	57,800		119,100	27,600	124,400	4,000	55,300	40,100	9,900	73,100	18,200	1,149,600	8,000	1,803,800	1,481,697	487,200	3,772,697
2008 <sup>1</sup>	76,601	60,422		78,530	34,873	93,370	3,670	48,787	26,224	9,184	57,753	27,468	974,121	5,931	1,496,935	1,269,462	426,220	3,192,617
2009 <sup>1</sup>	53,815	45,407		96,958	24,071	58,681	6,410	51,760	35,652	10,826	55,519	21,671	846,164	5,782	1,312,715	1,245,684	429,042	2,987,441
2010 <sup>1</sup>	63,302	38,375		93,894	55,334	75,178	4,662	49,692	20,992	11,830	51,337	14,150	876,512	7,067	1,362,326	1,167,111	494,752	3,024,189
2011 <sup>1</sup>	63,784	44,495	19,043	95,802	25,076	74,580	5,863	46,905	24,609	10,370	54,206	16,344	958,563	5,135	1,444,771	1,095,217	465,663	3,005,651
2012 <sup>1</sup>	57,614	43,751	-	49,077	21,616	51,415	495	39,031	37,959	17,363	49,166	14,687	720,168	6,332	1,108,672	1,015,640	413,674	2,537,986
2013 <sup>1</sup>	30,134	36,949	49,372	93,040	16,959	104,521	2,867	39,297	23,710	16,445	69,365	17,508	677,911	7,232	1,185,311	987,860	399,763	2,572,934
2014 <sup>1</sup>	47,940	27,812	27,133	70,747	20,160	62,196	2,860	26,708	24,084	11,883	56,873	17,483	934,258	3,450	1,333,587	791,292	261,799	2,386,678
2015 <sup>1</sup>	37,556	38,937	24,598	86,361	28,193	54,320	5,076	25,540	23,075	12,801	45,304	16,009	833,971	3,289	1,235,030	780,445	226,458	2,241,933
2016 <sup>1</sup>	36,233	29,719	25,271	77,169	18,028	65,140	3,462	24,534	12,823	15,825	58,509	17,146	956,788	3,733	1,344,379	789,569	295,873	2,429,820
2017 <sup>1</sup>	35,537	24,093	28,331	58,299	16,227	65,740	2,181	30,952	16,519	11,435	45,608	18,445	703,284	2,180	1,058,833	758,454	235,078	2,052,364
2018 <sup>1</sup>	24,515	20,247	23,516	44,273	16,889	48,276	3,501	33,725	28,222	11,815	29,216	11,529	553,168	3,192	852,084	634,838	259,770	1,746,691
2019 <sup>1</sup>	37,521	22,768	11,028	64,819	9,404	47,079	3,639	24,511	28,814	11,949	37,981	15,495	668,988	2,775	986,771	643,488	207,186	1,837,446
2020 <sup>1</sup>	47,420	27,206	25,005	62,829	23,800	63,596	6,624	33,610	37,027	13,853	58,248	14,544	754,776	2,286	1,171,024	792,725	226,051	2,189,801
2021 <sup>1</sup>	31,247	25,685	20,943	64,577	9,679	51,261	4,677	27,043	33,731	20,053	38,051	12,345	532,491	2,876	874,660	624,302	211,035	1,709,997

<sup>1</sup>Preliminary

<sup>2</sup>No estimates available for 2012.

AVG SEASONAL CMU MOURNING DOVE BAG PER HUNTER BY STATE OF HARVEST IN THE CENTRAL MANAGEMENT UNIT (Harvest Information Program)

YR	AR	CO	IA <sup>2</sup>	KS	MN	MO	MT	NE	NM	ND	OK	SD	TX	WY
2003 <sup>1</sup>	18.2	13.7		22.4		18.1	11.7	18.7	21.9	13.6	25.7	18.3	18.0	13.1
2004 <sup>1</sup>	19.5	15.4		19.3	7.8	18.6	7.9	19.2	30.7	12.9	20.5	18.4	19.7	13.7
2005 <sup>1</sup>	19.8	14.3		21.0	8.2	16.0	8.7	20.8	26.7	18.1	24.0	17.9	22.2	13.6
2006 <sup>1</sup>	19.8	13.6		20.1	6.3	15.9	8.5	16.7	31.8	14.3	19.5	16.2	19.8	12.9
2007 <sup>1</sup>	21.4	14.5		20	8.7	14.2	12.3	18.8	23.1	15.4	19.5	17.2	19.9	10.6
2008 <sup>1</sup>	18.1	12.4		16.6	7.4	13.7	8.8	17.6	22.0	9.6	18.7	20.9	17.9	11.9
2009 <sup>1</sup>	15.8	11.9		19.5	9.1	13.7	5.1	1						

**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

<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	393,283	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	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

<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	2,894	133,209
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	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

<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	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

<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

<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

<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

<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

<sup>1</sup>Preliminary

## ESTIMATED CMR AMERICAN WOODCOCK HARVEST (Harvest Information Program)

YR	AL	AR	IL	IN	IA	KS	KY	LA	MI	MN	MS	MO	NE	OH	OK	TN	TX	WI	CMR	EMR	U.S.
2003 <sup>1</sup>	4,200	600	2,200	1,800	900	200	2,600	10,400	121,500	29,900	400	2,100	100	2,500	2,800	1,000	0	30,300	213,500	89,200	302,700
2004 <sup>1</sup>	2,200	2,800	1,900	7,900	1,700	100	1,900	20,200	102,500	38,500	900	900	<50	4,600	200	400	800	47,300	234,800	135,400	370,200
2005 <sup>1</sup>	100	1,500	3,900	4,400	1,000	0	800	18,100	106,800	42,200	0	1,300	0	6,900	0	400	0	37,600	225,000	72,200	297,200
2006 <sup>1</sup>	300	2,900	2,200	2,400	1,500	100	300	19,000	116,200	38,700	600	400	100	4,100	<50	700	0	43,000	232,600	79,300	311,900
2007 <sup>1</sup>	700	10,500	3,800	1,200	100	<50	300	21,700	86,800	34,400	600	900	200	2,600	0	800	1,500	48,000	214,200	75,900	290,000
2008 <sup>1</sup>	2,292	3,100	4,252	832	1,597	1,983	1,504	13,309	78,900	19,871	382	2,623	0	2,307	21	615	4,675	35,999	174,262	104,701	278,963
2009 <sup>1</sup>	5,946	6,616	5,345	1,658	673	27	0	24,693	80,934	15,998	1,281	873	90	1,160	162	424	0	29,240	175,121	63,274	238,395
2010 <sup>1</sup>	599	248	878	3,023	1,660	0	6,790	32,989	93,229	34,835	1,373	3,031	61	1,715	3,108	5,071	2,249	42,282	233,140	99,792	332,938
2011 <sup>1</sup>	1,593	615	3,718	1,763	209	0	181	24,359	106,885	44,242	446	895	0	2,306	17	578	1,295	42,570	231,673	77,049	308,722
2012 <sup>1</sup>	3,505	4,165	1,898	580	0	1,345	213	20,009	74,051	30,958	218	894	1,282	1,470	592	1,548	9,935	40,361	193,024	86,433	279,457
2013 <sup>1</sup>	1,425	70	1,045	1,396	4,196	15	2,848	7,408	79,348	18,569	2,579	7,670	0	8,565	321	1,255	5,475	38,375	180,558	62,537	243,095
2014 <sup>1</sup>	769	195	286	660	142	8	62	9,364	53,528	23,925	760	600	1,433	279	74	52	46	49,313	141,496	58,589	200,085
2015 <sup>1</sup>	6,127	7,273	174	572	319	345	579	3,519	63,187	25,622	3,576	382	0	2,132	0	907	30,960	145,673	54,486	200,159	
2016 <sup>1</sup>	92	2,980	1,633	897	2,886	0	2,410	1,860	64,863	25,936	12	3,408	574	3,248	0	0	12,142	35,077	157,973	44,352	202,325
2017 <sup>1</sup>	628	611	357	1,524	1,862	79	942	9,895	66,109	26,653	367	179	0	445	0	89	0	31,142	140,883	62,653	203,536
2018 <sup>1</sup>	226	10,090	0	162	0	80	253	10,593	59,632	22,500	447	156	0	588	86	306	0	25,498	130,615	49,580	180,195
2019 <sup>1</sup>	981	6,755	3,410	370	1,625	0	67	1,495	64,492	20,822	82	290	0	720	283	5,013	2,834	26,769	136,007	35,271	171,278
2020 <sup>1</sup>	265	0	80	988	196	45	239	4,659	37,418	25,035	1,811	181	0	2,933	164	35	360	49,295	123,705	51,112	174,816
2021 <sup>1</sup>	3,354	3,119	241	1,719	4,056	35	270	4,874	47,483	26,287	352	4,064	0	1,350	66	124	1,558	42,381	141,333	73,481	214,814

<sup>1</sup>Preliminary

## ESTIMATES OF TOTAL CMR AMERICAN WOODCOCK HUNTER DAYS AFIELD BY STATE OF HARVEST (Harvest Information Program)

YR	AL	AR	IL	IN	IA	KS	KY	LA	MI	MN	MS	MO	NE	OH	OK	TN	TX	WI	CMR	EMR	U.S.
2003 <sup>1</sup>	14,300	4,600	12,200	6,000	4,200	600	2,000	7,400	159,000	48,700	3,400	8,000	900	10,300	15,400	1,200	6,000	65,600	369,800	152,300	522,100
2004 <sup>1</sup>	1,000	20,100	3,500	5,300	8,800	200	1,300	14,100	147,000	67,000	3,600	3,700	100	18,200	2,800	1,700	6,600	61,100	366,100	135,400	501,500
2005 <sup>1</sup>	200	9,200	5,300	7,400	2,200	0	2,900	16,700	151,200	60,200	0	5,000	300	15,800	0	500	6,300	73,100	356,300	164,200	520,500
2006 <sup>1</sup>	400	6,800	8,900	4,400	4,300	300	900	10,900	155,300	60,200	3,900	3,800	700	9,800	600	800	0	72,400	344,400	144,200	488,600
2007 <sup>1</sup>	700	9,300	7,600	3,300	4,600	3,100	3,400	17,200	138,900	62,800	1,800	900	13,800	9,300	0	400	2,100	79,100	358,500	145,000	503,500
2008 <sup>1</sup>	3,098	24,179	6,098	2,377	4,332	2,833	9,369	16,222	156,012	37,899	1,818	7,306	4,408	10,310	8,352	397	9,350	65,433	369,792	169,012	538,804
2009 <sup>1</sup>	6,539	8,077	6,208	3,984	1,781	31	29	20,772	146,177	38,267	3,722	1,179	72	7,249	81	1,025	0	77,118	322,310	177,982	500,292
2010 <sup>1</sup>	1,539	207	1,220	3,941	7,431	692	6,732	28,224	159,240	55,423	2,960	6,039	762	4,306	17,613	4,895	25,473	65,744	392,441	146,705	539,146
2011 <sup>1</sup>	7,473	1,025	8,624	4,139	1,560	29	181	18,430	143,986	76,937	531	1,123	0	10,243	170	5,446	1,413	69,039	350,548	155,961	506,509
2012 <sup>1</sup>	4,860	3,181	3,482	1,492	4,356	5,135	324	11,028	121,418	40,366	196	2,010	4,486	2,585	3,422	739	9,795	58,035	276,909	137,796	414,705
2013 <sup>1</sup>	1,518	349	3,442	1,581	8,308	1,082	1,917	2,540	123,682	74,665	2,552	8,490	644	8,569	206	1,303	5,187	60,041	306,076	136,680	442,757
2014 <sup>1</sup>	436	390	2,644	903	957	992	49	5,844	87,522	47,527	5,446	2,237	1,074	4,544	100	364	182	66,433	227,643	119,717	347,360
2015 <sup>1</sup>	5,072	4,832	1,257	1,106	2,509	2,762	2,607	12,277	124,717	47,607	2,271	644	0	7,547	1,831	0	593	66,554	284,184	115,494	399,677
2016 <sup>1</sup>	1,446	13,415	13,158	1,302	1,770	418	1,517	4,551	107,126	45,990	1,279	6,249	574	8,230	0	9,757	28,352	55,073	300,206	96,115	396,322
2017 <sup>1</sup>	2,184	4,747	317	2,852	2,434	73	829	14,472	122,793	45,667	2,422	1,331	96	4,995	0	2,632	12,107	52,420	272,373	115,355	387,728
2018 <sup>1</sup>	501	7,734	82	209	0	159	279	11,149	135,774	41,521	368	234	0	823	572	612	0	45,941	245,958	99,176	345,134
2019 <sup>1</sup>	348	14,351	11,338	1,059	4,467	0	227	6,041	86,066	29,259	326	752	0	2,357	433	11,307	1,329	46,955	216,618	101,163	317,781
2020 <sup>1</sup>	177	8,256	5,362	3,226	411	106	1,458	7,418	82,931	49,742	2,592	2,619	0	5,249	2,934	141	5,727	82,291	260,640	142,834	403,474
2021 <sup>1</sup>	7,850	1,782	1,537	2,148	4,141	47	420	12,682	93,724	47,830	3,482	12,878	0	9,260	165	373	2,052	72,700	273,072	153,580	426,652

<sup>1</sup>Preliminary

## AVERAGE SEASONAL CMR AMERICAN WOODCOCK BAG PER HUNTER BY STATE OF HARVEST IN THE CENTRAL REGION (Harvest Information Program)

YR	AL	AR	IL	IN	IA	KS	KY	LA	MI	MN	MS	MO	NE	OH	OK	TN	TX	WI
2003 <sup>1</sup>	1.1	0.3	0.9	2.6	0.6	3.0	1.8	6.6	3.5	2.1	0.2	1.2	0.2	0.7	2.1	7.5	0.0	1.9
2004 <sup>1</sup>	3.5	0.8	1.6	7.1	1.0	2.6	2.2	5.6	3.3	2.7	0.8	0.4	1.8	1.8	0.4	1.7	0.1	3.0
2005 <sup>1</sup>	4.0	0.4	1.8	2.1	1.3	0.0	0.9	3.3	3.8	3.5	0.0	1.1	0.0	1.5	0.0	2.5	0.0	2.4
2006 <sup>1</sup>	2.0	1.0	1.1	2.4	0.7	0.2	2.6	4.8	3.9	2.6	0.5	0.3	0.1	1.8	<0.05	5.3	0.0	2.2
2007 <sup>1</sup>	7.0	4.0	1.2	0.7	0.1	<0.1	0.3	4.6	3.1	2.2	1.0	4.5	0.3	1.0	0.0	6.0	2.5	2.8
2008 <sup>1</sup>	2.3	0.6	2.0	0.9	1.0	3.5	0.6	2.2	2.3	2.3	0.7	1.0	0.0	0.8	0.0	6.3	1.0	2.5
2009 <sup>1</sup>	2.9	2.2	2.9	1.5	0.8	3.0	0.0	5.7	3.1	1.6	1.2	4.9	2.5	0.7	9.3	1.7	0.0	1.5
2010 <sup>1</sup>	0.5	2.0	1.0	2.9	0													

# **Waterfowl Population Surveys**

**BREEDING POPULATION ESTIMATES FOR 10 SPECIES OF DUCKS (Thousands) FROM THE TRADITIONAL SURVEY AREA (strata 1-18, 20-50, 75-77)  
AND POND ESTIMATES FROM NORTH CENTRAL U.S. AND PRAIRIE CANADA**

YEAR	MAL	GAD	WIG	GWT	BWT	SHO	PIN	RED	CAN	SCP	TOTAL	U.S. PONDS	CANADA PONDS	TOTAL
1955	8,777	652	3,217	1,807	5,305	1,643	9,775	540	589	5,620	37,925			
1956	10,453	773	3,145	1,525	4,998	1,781	10,373	757	699	5,994	40,498			
1957	9,297	667	2,920	1,103	4,300	1,476	6,607	509	626	5,767	33,272			
1958	11,234	502	2,552	1,347	5,457	1,384	6,038	457	747	5,350	35,068			
1959	9,024	590	3,788	2,653	5,099	1,578	5,873	499	489	7,038	36,631			
1960	7,372	784	2,988	1,427	4,293	1,825	5,722	498	606	4,869	30,384			
1961	7,330	655	3,048	1,729	3,655	1,383	4,218	323	435	5,380	28,156			
1962	5,536	905	1,959	723	3,011	1,269	3,624	508	360	5,286	23,181			
1963	6,749	1,055	1,831	1,242	3,724	1,398	3,846	413	506	5,438	26,202			
1964	6,064	873	2,590	1,561	4,021	1,718	3,291	528	644	5,132	26,422			
1965	5,132	1,260	2,301	1,282	3,595	1,424	3,592	599	522	4,640	24,347			
1966	6,732	1,680	2,318	1,617	3,733	2,147	4,812	713	663	4,439	28,854			
1967	7,510	1,385	2,326	1,594	4,492	2,315	5,278	736	503	4,928	31,067			
1968	7,089	1,949	2,299	1,431	3,463	1,685	3,489	499	564	4,413	26,881			
1969	7,532	1,573	2,941	1,491	4,139	2,157	5,904	633	504	5,140	32,014			
1970	9,986	1,608	3,470	2,183	4,862	2,230	6,392	622	580	5,663	37,596			
1971	9,416	1,606	3,273	1,889	4,610	2,011	5,847	534	451	5,134	34,771			
1972	9,266	1,623	3,200	1,948	4,279	2,467	6,979	551	426	7,997	38,736			
1973	8,079	1,246	2,878	1,949	3,333	1,619	4,356	501	621	6,257	30,839			
1974	6,880	1,592	2,672	1,865	4,976	2,011	6,598	626	513	5,781	33,514	1,841	6,390	8,231
1975	7,727	1,644	2,778	1,665	5,885	1,981	5,900	832	595	6,460	35,467	1,911	5,320	7,231
1976	7,934	1,245	2,505	1,548	4,745	1,748	5,476	666	614	5,819	32,300	1,392	4,599	5,990
1977	7,397	1,299	2,575	1,286	4,463	1,452	3,226	634	664	6,260	29,256	771	2,278	3,049
1978	7,425	1,558	3,282	2,174	4,499	1,975	5,108	725	373	5,984	33,103	1,590	3,622	5,213
1979	7,883	1,758	3,107	2,072	4,876	2,407	5,376	698	582	7,658	36,417	1,522	4,859	6,381
1980	7,707	1,393	3,596	2,050	4,895	1,908	4,508	728	735	6,382	33,902	761	2,141	2,902
1981	6,410	1,395	2,946	1,911	3,721	2,334	3,480	595	621	5,991	29,404	683	1,443	2,126
1982	6,409	1,634	2,459	1,536	3,658	2,148	3,709	617	513	5,532	28,215	1,458	3,185	4,643
1983	6,456	1,519	2,636	1,875	3,367	1,876	3,511	712	527	7,174	29,653	1,259	3,906	5,165
1984	5,415	1,515	3,002	1,408	3,979	1,618	2,965	671	530	7,024	28,127	1,766	2,473	4,239
1985	4,961	1,303	2,051	1,475	3,502	1,702	2,516	578	376	5,098	23,562	1,327	4,283	5,610
1986	6,124	1,547	1,737	1,675	4,479	2,128	2,740	560	438	5,235	26,663	1,735	4,025	5,760
1987	5,790	1,306	2,013	2,006	3,529	1,950	2,628	502	450	4,863	25,037	1,348	2,524	3,872
1988	6,369	1,350	2,211	2,061	4,011	1,681	2,006	442	435	4,671	25,237	791	2,110	2,901
1989	5,645	1,415	1,973	1,842	3,125	1,538	2,112	511	477	4,342	22,980	1,290	1,693	2,983
1990	5,452	1,672	1,860	1,790	2,776	1,759	2,257	481	539	4,293	22,879	691	2,817	3,509
1991	5,445	1,584	2,254	1,558	3,764	1,716	1,803	446	491	5,255	24,316	706	2,494	3,200
1992	5,976	2,033	2,208	1,773	4,333	1,954	2,098	596	482	4,639	26,092	825	2,784	3,609
1993	5,708	1,755	2,053	1,695	3,193	2,047	2,053	485	472	4,080	23,541	1,351	2,261	3,612
1994	6,980	2,318	2,382	2,108	4,616	2,912	2,972	654	526	4,529	29,997	2,216	3,769	5,985
1995	8,269	2,836	2,615	2,301	5,140	2,855	2,758	889	771	4,446	32,880	2,443	3,893	6,335
1996	7,941	2,984	2,273	2,459	6,416	3,449	2,736	834	849	4,217	34,158	2,480	5,003	7,482
1997	9,940	3,897	3,118	2,507	6,124	4,120	3,558	918	689	4,112	38,983	2,397	5,061	7,458
1998	9,640	3,742	2,858	2,087	6,399	3,183	2,521	1,005	686	3,472	35,593	2,065	2,522	4,587
1999	10,806	3,236	2,920	2,631	7,150	3,890	3,058	973	716	4,412	39,792	2,842	3,862	6,704
2000	9,470	3,158	2,733	3,194	7,431	3,521	2,908	926	707	4,026	38,074	1,525	2,423	3,947
2001	7,904	2,679	2,494	2,509	5,757	3,314	3,296	712	580	3,694	32,939	1,893	2,747	4,640
2002	7,504	2,235	2,334	2,334	4,207	2,318	1,790	565	487	3,524	27,298	1,281	1,439	2,720
2003	7,950	2,549	2,551	2,679	5,518	3,620	2,558	637	558	3,734	32,353	1,668	3,522	5,190
2004	7,425	2,590	1,981	2,461	4,073	2,810	2,185	605	617	3,807	28,554	1,407	2,513	3,920
2005	6,755	2,179	2,225	2,157	4,586	3,592	2,561	592	521	3,387	28,555	1,461	3,921	5,381
2006	7,277	2,825	2,171	2,587	5,860	3,680	3,386	916	691	3,247	32,639	1,644	4,450	6,094
2007	8,307	3,356	2,807	2,890	6,708	4,553	3,335	1,009	865	3,452	37,282	1,963	5,040	7,003
2008	7,724	2,728	2,487	2,980	6,640	3,508	2,613	1,056	489	3,738	33,962	1,377	3,055	4,431
2009	8,512	3,054	2,469	3,444	7,384	4,376	3,225	1,044	662	4,172	38,342	2,866	3,568	6,434
2010	8,430	2,977	2,425	3,476	6,329	4,057	3,509	1,064	585	4,244	37,096	2,936	3,729	6,665
2011	9,183	3,257	2,084	2,900	8,949	4,641	4,429	1,356	692	4,319	41,810	3,240	4,893	8,132
2012	10,602	3,586	2,145	3,471	9,242	5,018	3,473	1,270	760	5,239	44,806	1,659	3,885	5,544
2013	10,372	3,351	2,644	3,053	7,731	4,751	3,335	1,202	787	4,166	41,392	2,341	4,551	6,892
2014	10,900	3,811	3,117	3,440	8,542	5,279	3,220	1,279	685	4,611	44,884	2,551	4,630	7,181
2015	11,643	3,834	3,037	4,081	8,547	4,391	3,043	1,196	757	4,395	44,924	2,157	4,151	6,308
2016	11,793	3,712	3,411	4,275	6,689	3,967	2,618	1,289	736	4,992	43,482	1,518	3,494	5,012
2017	10,488	4,180	2,777	3,605	7,889	4,353	2,889	1,115	733	4,372	42,401	1,766	4,330	6,096
2018	9,255	2,886	2,820	3,043	6,450	4,208	2,365	999	686	3,989	36,701	1,567	3,660	5,227
2019	9,423	3,259	2,832	3,178	5,428	3,649	2,269	732	652	3,591	35,013	2,135	2,856	4,991
2020 <sup>3</sup>														
2021 <sup>2</sup>														
2022	7,223	2,665	2,127	2,170	6,485	3,041	1,783	991	585	3,599	30,668	1,983	3,466	5,449
<b>AVERAGES:</b>														
1955-69	7,722	1,020	2,682	1,502	4,219	1,679	5,496	547	564	5,296	30,727		3,262	
1970-79	8,199	1,518	2,974	1,858	4,653	1,990	5,526	639	542	6,301	34,200	1,504	4,296	6,016
1980-89	6,129	1,438	2,462	1,784	3,827	1,888	3,018	592	510	5,631	27,278	1,242	2,778	4,020
1990-99	7,616	2,606	2,454	2,091	4,991	2,789	2,581	728	622	4,346	30,823	1,802	3,447	5,248
2000-09	7,883	2,735	2,425	2,723	5,816	3,529	2,786	806	618	3,678	33,000	1,708	3,268	4,976
2010-2019	10,209	3,485	2,729	3,452	7,580	4,431	3,115	1,150	707	4,392	41,251	2,187	4,018	6,205
1955-2019	7,930	2,057	2,618	2,179	5,128	2,644								

# **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	
1962								320					320
1963								392					392
1964								335					335
1965								336					336
1966								491					491
1967								246					246
1968								520					520
1969								1,377	87				1,464
1970								1,078	208	179			1,465
1971								1,109	102	91			1,302
1972								1,028	124	150			1,302
1973								1,191	109	101			1,401
1974								1,377	190	259			1,826
1975								1,383	188	266			1,837
1976								1,109	206	139			1,454
1977								1,575	84	214			1,873
1978								1,152	90	146			1,388
1979								1,293	214	275			1,782
1980								1,156	103	250			1,509
1981								1,619	301	177			2,097
1982								1,244	161	139			1,544
1983	34						34	1,168	169	218			1,555
1984	22						313	335	1,194	229	221		1,644
1985	19						2,523	2,542	673	145	185		1,003
1986	41						2,302	2,343	947	196	200		1,343
1987	27						2,684	117	2,828	600	94	280	974
1988	25	191					2,488	117	2,821	854	78	260	16
1989	41	511					2,128	133	2,813	694	81	302	17
1990	59	474	339				2,855	128	3,855	874	67	275	16
1991	52	704	444				2,940	205	4,345	774	62	79	8
1992	37	833	814				2,609	187	4,480	450	29	221	17
1993	18	712	545				2,773	130	4,178	337	55	290	26
1994	62	690	483				3,750	194	5,179	768	89	326	40
1995	56	805	172				2,833	217	4,083	682	72	182	57
1996	61	663	233				2,177	195	3,329	1,578	119	302	50
1997	101	870	403				2,325	217	3,916	1,371	131	300	58
1998	81	618	233				2,363	248	3,543	2,040	185	276	51
1999	93	867	223				2,290	128	3,601	1,564	212	226	91
2000	115	633	151				2,515	179	3,593	666	78	217	112
2001	93	561	337				2,322	144	3,457	271	62	289	113
2002	51	688	193				2,363	177	3,472	548	45	167	51
2003	56	235	41				2,355	174	2,861	795	78	119	77
2004	105	719	134				1,745	159	2,862	657	83	255	51
2005	93	772	137				2,436	195	3,633	899	100	284	41
2006	64	611	163				2,291	163	3,292	904	155	169	71
2007	64	652	144				2,313	193	3,366	884	217	306	64
2008	53	886	220				2,501	243	3,903	731	136	199	67
2009	70	956	297				2,239	165	3,727	812	56	292	80
2010	44	745	191				2,535	229	3,744	725	118	209	60
2011	65	704	261				2,494	145	3,669	695	144	247	95
2012	77	611	157				2,538	172	3,555	929	203	294	55
2013	67	769	306				2,509	170	3,821	376	26	239	62
2014	401	795	280				2,509	165	4,150	768	25	167	47
2015	105	635	229				2,611	173	3,753	903	8	264	70
2016	86	562	82				2,045	131	2,906	812	127	222	36
2017	47	772	232				3,206	252	4,509	833	127	112	28
2018	58	857	179				2,812	204	4,110	947	233	121	38
2019	50	702	214	40	2,942	197	4,145	1,188		228	148	66	1,630
2020	76	543	189	22	2,473	132	3,435	1,350	18	266	157	38	1,829
2021	87	316	86	35	2,389	133	3,046	1,072	18	126	238	90	1,544
AVERAGES:								502	87			513	513
1962-69								1,230	152	182		1,563	1,563
1970-79								1,015	156	223	17	1,397	2,769
1980-89	30	351			2,073	122	1,959	1,044	102	248	41	1,435	5,486
1990-99	62	724	389		2,692	185	4,051	717	101	230	73	1,120	4,537
2000-09	59	671	182		2,308	179	3,417	818	124	203	56	1,200	5,036
2010-19	100	715	213	40	2,620	184	3,836	1,211	18	196	197	64	1,686
2020-29	82	430	138	29	2,431	133	3,241	880	18	119	227	55	1,276
Start-2021	71	667	254	32	2,460	175	3,416						4,692

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

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

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

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

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

1-Nov-22

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

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
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### EAST TIER STATES - ND, SD, NE, KS, OK, & Eastern Goose Zone of TX

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

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

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

2-Nov-22

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**U.S. Federal Frameworks for the Hunting of Light Geese 1961-2022**

YEAR	PACIFIC FLYWAY <sup>1</sup>			CENTRAL FLYWAY <sup>2</sup>								MISSISSIPPI FLYWAY				ATLANTIC FLYWAY					
	OPEN	CLOSE	DAYS	BAG/POSS	WEST TIER STATES			EAST TIER STATES			BAG/POSS	OPEN	CLOSE	DAYS	BAG/POSS	OPEN	CLOSE	DAYS	BAG/POSS		
1961	Oct 7	Jan 7	75	6/6	Closed <sup>3</sup>	Oct 01	Jan 08	60	5/5	3.4	6	Oct 01	Jan 08	60	5/5	3.6	Oct 01	Jan 08	60	5/5	18
1962	Oct 6	Jan 6	75	6/6	Closed <sup>3</sup>	Oct 06	Jan 06	75	5/5	3.6	6	Oct 01	Jan 13	75	5/5	3.6	Oct 01	Jan 13	60	5/5	18
1963	Oct 5	Jan 5	90	6/6	1/1	Oct 05	Jan 05	90	5/5	5.6	6	Oct 01	Jan 15	75	5/5	5.6	Oct 01	Jan 15	70	5/5	18
1964	Oct 10	Jan 10	90	6/6	1/1	Oct 10	Jan 10	90	5/5	5.6	6	Oct 01	Jan 15	75	5/5	5.6	Oct 01	Jan 15	70	5/5	18
1965	Oct 9	Jan 9	90	6/6	1/1	Oct 01	Jan 15	75	5/5	5.6	6	Oct 01	Jan 15	75	5/5	5.6	Oct 01	Jan 15	70	5/5	18
1966	Oct 8	Jan 8	90	6/6	1/1	Oct 01	Jan 15	75	5/5	5.6	6	Oct 01	Jan 15	75	5/5	5.6	Oct 01	Jan 15	70	5/5	18
1967	Oct 7	Jan 14	90	6/6	1/1	Sep 30	Jan 14	75	5/5	5.6	6	Sep 30	Jan 14	75	5/5	5.6	Sep 30	Jan 14	70	5/5	18
1968	Oct 5	Jan 12	93	6/6	1/1	Oct 01	Jan 15	75	2/2	5.6	6	Oct 01	Jan 15	75	5/5	5.6	Sep 28	Jan 12	70	5/5	18
1969	Oct 4	Jan 11	93	6/6	1/1	Oct 01	Jan 15	86	2/4	5.6	6	Oct 01	Jan 15	86	5/5	5.6	Sep 27	Jan 11	21	5/5	18
1970	Oct 3	Jan 17	93	6/6	1/1	Oct 01	Jan 17	90	2/4	5.6	6	Oct 01	Jan 17	75	5/5	5.6	Oct 01	Jan 24	21	5/5	18
1971	Oct 2	Jan 16	93	6/6	1/1	Oct 01	Jan 16	90	2/4	5.6	6	Oct 01	Jan 16	75	5/5	5.6	Oct 01	Jan 23	23	5/5	18
1972	Oct 1	Jan 20	93	6/6	1/1	Oct 01	Jan 24	93	2/4	5.6	6	Oct 01	Jan 24	72	4/4	5.6	Oct 01	Jan 20	23	5/5	18
1973	Sep 29	Jan 20	93	6/6	1/1	Sep 29	Jan 20	93	2/4	5.6	6	Sep 29	Jan 20	72	5/5	5.6	Oct 01	Jan 20	23	5/5	18
1974	Sep 28	Jan 19	93	6/6	1/1	Sep 28	Jan 19	93	2/4	5.6	6	Sep 28	Jan 19	72	5/5	5.6	Oct 01	Jan 20	23	5/5	18
1975	Oct 4	Jan 18	93	3/6	1/1	Oct 04	Jan 18	93	2/4	5.6	6	Oct 04	Jan 18	72	5/5	5.6	Oct 01	Jan 20	23	5/5	18
1976	Oct 2	Jan 23	93	3/6	1/1	Oct 02	Jan 23	93	2/4	5.6,9	6	Oct 02	Jan 23	72	5/5	5	Oct 01	Jan 20	23	5/5	18
1977	Oct 1	Jan 22	93	3/6	1/1	Oct 01	Jan 22	93	2/4	5.6,9	6	Oct 01	Jan 22	86	5/5	5	Oct 01	Jan 20	23	5/5	18
1978	Sep 30	Jan 21	93	3/6	1/1	Sep 30	Jan 21	93	2/4	5.6,9	6	Sep 30	Jan 21	86	5/5	5	Oct 01	Jan 20	23	5/5	18
1979	Sep 29	Jan 20	93	3/6	3/6	Sep 29	Jan 20	93	2/4	6,9	6	Sep 29	Jan 20	86	5/5	5	Sep 29	Jan 20	23	5/5	18
1980	Oct 4	Jan 18	93	3/6	3/6	Oct 04	Jan 18	89	2/4	6,10	6	Oct 04	Jan 18	86	5/10	6	Oct 04	Jan 20	23	5/10	18
1981	Oct 3	Jan 17	93	3/6	3/6	Oct 03	Jan 17	89	2/4	6,10	6	Oct 03	Jan 17	86	5/10	6	Oct 03	Jan 20	23	5/10	18
1982	Oct 2	Jan 23	93	3/6	3/6	Oct 02	Jan 23	89	2/4	6,10	6	Oct 02	Jan 23	86	5/10	6	Oct 02	Jan 20	23	5/10	18
1983	Oct 1	Jan 22	93	3/6	3/6	Sep 30	Jan 22	89	2/4	6,10	6	Sep 30	Jan 22	86	5/10	6	Sep 30	Jan 22	23	5/10	18
1984	Sep 29	Jan 20	93	3/6	3/6	Sep 29	Feb 12	89	2/4	6,10	6	Sep 29	Feb 12	86	5/10	6	Sep 29	Jan 20	23	5/10	18
1985	Sep 28	Jan 19	93	3/6	3/6	Sep 28	Feb 16	11	93	5/10	6	Sep 28	Feb 16	86	5/10	6	Sep 28	Jan 20	23	5/10	18
1986	Oct 4	Jan 18	93	3/6	3/6	Oct 04	Feb 15	11	93	5/10	6	Oct 04	Feb 15	86	5/10	6	Oct 04	Jan 20	19,22	5/10	18
1987	Oct 3	Jan 17	93	3/6	3/6	Sep 30	Feb 14	11	93	5/10	6	Sep 30	Feb 14	86	5/10	6	Sep 30	Jan 17	19,22	5/10	18
1988	Oct 1	Jan 22	93	3/6	3/6	Sep 30	Feb 14	11	95	5/10	6	Sep 30	Feb 14	86	5/10	6	Sep 30	Jan 22	23,24	5/10	18
1989	Sep 30	Jan 21	93	3/6	3/6	Sep 30	Feb 18	11	95	5/10	6	Sep 30	Feb 18	100	5/10	6	Sep 30	Jan 21	23,24	80	7/14
1990	Sep 29	Jan 20	93	3/6	3/6	Sep 29	Feb 17	11	100	5/10	6	Sep 29	Feb 17	86;100	5/10;7/14	6	Sep 29	Jan 20	23	24	80
1991	Sep 28	Jan 19	93	3/6	3/6	Sep 28	Feb 16	11	107	5/10	6	Sep 28	Feb 16	86;100	5/10;7/14	6	Sep 28	Jan 21	23	80	7/14
1992	Oct 3	Jan 17	93	3/6	3/6	Sep 30	Feb 13	11	107	5/10	6	Sep 30	Feb 13	107	20/20	6	Sep 30	Jan 21	23	80	7/14
1993	Sep 27	Jan 23	100	3/6	3/6	Sep 27	Feb 13	11	107	5/10	6	Sep 27	Feb 13	107	20/20	6	Sep 27	Feb 14	80	7/14	18
1994	Sep 27	Jan 20	100	3/6	3/6	Sep 27	Feb 18	12	107	5/10	6	Sep 27	Feb 18	7	107	20/20	Sep 27	Feb 14	107	7/14	18
1995	Sep 27	Jan 21	100	3/6	3/6	Sep 30	Mar 10	17	107	5/10	6	Sep 30	Mar 10	13	107	20/20	Sep 27	Feb 14	25	107	20/20
1996	Sep 29	Jan 19	100	3/6	3/6	Sep 29	Mar 10	17	107	10/40	6	Sep 28	Mar 10	14	107	10/40	Sep 28	Mar 10	107	10/30	8/24
1997	Oct 4	Jan 18	100	3/6	3/6	Sep 30	Oct 04	Mar 10	17	10/40	6	Sep 30	Oct 04	107	10/40	6	Sep 30	Oct 04	107	10/30	8/24
1998	Sep 03	Jan 17	100	3/6	3/6	Sep 03	Oct 03	Mar 10	17	20/none	6	Sep 03	Oct 03	105	107	20/none	Sep 03	Oct 03	107	20/none	15/none
1999	Sep 02	Jan 23	100	3/6	3/6	Sep 02	Oct 02	Mar 10	17	20/none	6	Sep 02	Oct 02	105	107	20/none	Sep 02	Oct 02	107	20/none	15/none
2000	Sep 30	Jan 21	100	3/6	3/6	Sep 30	Sep 30	Mar 10	17	20/none	6	Sep 30	Sep 30	105	107	20/none	Sep 30	Mar 10	107	20/none	15/none
2001	Sep 29	Jan 20	100	3/6	3/6	Sep 29	Sep 29	Mar 10	17	20/none	6	Sep 29	Sep 29	105	107	20/none	Sep 29	Mar 10	107	20/none	15/none
2002	Sep 21	Jan 19	100	3/6	3/6	Sep 21	Sep 21	Mar 10	17	20/none	6	Sep 21	Sep 21	107	20/none	6	Sep 21	Mar 10	107	20/none	15/none
2003	Sep 24	Jan 25	100	3/6	3/6	Sep 27	Sep 27	Mar 10	17	20/none	6	Sep 27	Sep 27	105	20/none	6	Sep 27	Mar 10	107	20/none	15/none
2004	Sep 25	Jan 30	100	3/6	3/6	Sep 25	Sep 25	Mar 10	17	20/none	6	Sep 25	Sep 25	105	20/none	6	Sep 25	Mar 10	107	20/none	15/none
2005	Sep 01	Jan 29	100	4/8	4/8	Sep 24	Sep 24	Mar 10	17	20/none	6	Sep 24	Sep 24	105	20/none	6	Sep 24	Mar 10	107	20/none	15/none
2006	Sep 30	Jan 28	100	4/8	4/8	Sep 23	Sep 23	Mar 10	17	20/none	6	Sep 23	Sep 23	105	20/none	6	Sep 23	Mar 10	107	20/none	15/none
2007	Sep 29	Jan 27	100	4/8	4/8	Sep 22	Sep 22	Mar 10	17	20/none	6	Sep 22	Sep 22	105	20/none	6	Sep 22	Mar 10	107	20/none	15/none
2008	Sep 29	Jan 27	100	6/12	6/12	Sep 27	Sep 27	Mar 10	17	20/none	6	Sep 27	Sep 27	105	20/none	6	Sep 27	Mar 10	107	20/none	15/none
2009	Sep 03	Mar 10	100	6/12	6/12	Sep 26	Sep 26	Mar 10	17	20/none	6	Sep 26	Sep 26	105	20/none	6	Sep 26	Mar 10	107	20/none	15/none
2010	Sep 02	Mar 28	107	6/12	6/12	Sep 25	Sep 25	Mar 10	17	20/none	6	Sep 25	Sep 25	105	20/none	6	Sep 25	Mar 10	107	25/none	25/none
2011	Sep 01	Mar 10	107	6/12	6/12	Sep 24	Sep 24	Mar 10	17	20/none	6	Sep 24	Sep 24	107	20/none	6	Sep 24	Mar 10	107	25/none	25/none
2012	Sep 29	Mar 10	107	6/12	6/12	Sep 22	Sep 22	Mar 10	17	20/none	6	Sep 22	Sep 22	105	20/none	6	Sep 22	Mar 10	107	25/none	25/none
2013	Sep 28	Mar 10	107	6/18	6/18	Sep 21	Sep 21	Mar 10	17	50/none	6	Sep 21	Sep 21	105	50/none	6	Sep 21	Mar 10	107	20/none	25/none
2014	Sep 27	Mar 10	107	20/60	20/60	Sep 27	Sep 27	Mar 10	17	50/none	6	Sep 27	Sep 27	105	50/none	6	Sep 27	Mar 10	107	20/none	25/none
2015	Sep 26	Mar 10	107	20/60	20/60	Sep 26	Sep 26	Mar 10	17	50/none	6	Sep 26	Sep 26	105	50/none	6	Sep 26	Mar 10	107	20/none	25/none
2016	Sep 24	Mar 10	107	20/60	20/60	Sep 24	Sep 24	Mar 10	17	50/none	6	Sep 24	Sep 24	105	50/none	6	Sep 24	Mar 10	107	20/none	25/none
2017	Sep 23	Mar 10	107	20/60	20/60	Sep 23	Sep 23	Mar 1													

# SUMMARY OF CENTRAL FLYWAY FRAMEWORKS FOR SANDHILL CRANE HUNTING, 2015-2024

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>									
Ending Shooting Time	Sunset									
Opening Date	Sep 01									
Closing Date	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									

<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									
Ending Shooting Time	Sunset									
Opening Date	Sep 01									
Closing Date	Jan 31									
Season Length	30	30	30	60 <sup>1</sup>						
Daily Bag/ Possession	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							
Ending Shooting Time	Sunset	Sunset	Sunset							
Opening Date	Sep 26	Sep 24	Sep 23	Sep 22	Sep 21	Sep 26	Sep 25	Sep 24		
Closing Date	Jan 31	Jan 29	Jan 28	Jan 27	Jan 31	Jan 31	Jan 31	Jan 31		
Season Length	74 +23 HP <sup>1</sup>									
Daily Bag/ Possession <sup>3</sup>	6 18									
<b>Species/Sex Restrictions</b>										
Mallard (M)	5	5	5	5	5	5	5	5		
Mallard (F)	2	2	2	2	2	2	2	2		
Pintail	2	2	1	2	1	1	1	1		
H. Merganser <sup>2</sup>	2	2	2	2	2	2	2	6		
Canvasback	2	2	2	2	2	2	2	2		
Redhead	2	2	2	2	2	2	2	2		
Scaup	3	3	3	3	3	1	1	1		
Wood Duck	3	3	3	3	3	3	3	3		
Mottled Duck	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 WBPBS 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								R	R	R
5.0							R	R	M	M
5.5							R	R	M	M
ch 6.0		R	R	R	R	R	R	M	M	L
6.5		R	R	R	M	M	M	L	L	L
7.0		M	M	M	L	L	L	L	L	L
7.5		M	L	L	L	L	L	L	L	L
8.0		L	L	L	L	L	L	L	L	L
8.5		L	L	L	L	L	L	L	L	L
9.0		L	L	L	L	L	L	L	L	L
9.5		L	L	L	L	L	L	L	L	L
10.0		L	L	L	L	L	L	L	L	L
10.5		L	L	L	L	L	L	L	L	L
11.0		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 WBPBS 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										
6.0		VR	VR	VR	VR	VR	R	R	R	R
6.5	VR	VR	VR	VR	R	R	R	M	M	M
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	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 WBPBS 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										
5.5										
6.0		VR	VR	VR	VR	VR	R	R	R	R
6.5	VR	VR	VR	R	R	R	R	M	M	M
7.0	R	R	R	M	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 WBPBS 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										
5.0										
5.5										
6.0		VR	VR	VR	VR	VR	R	R	R	R
6.5	VR	VR	VR	R	R	R	R	M	M	M
7.0	R	R	R	M	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. 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 WBPBS and MN, WI, and MI.

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

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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										
ch 6.0		VR	VR	VR	VR	VR	R	R	R	R
6.5	VR	R	R	R	R	R	M	M	M	M
7.0	R	R	M	M	M	M	L	L	L	L
7.5	M	M	M	M	L	L	L	L	L	L
8.0	M	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 WBPBS and MN, WI, and MI.

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

## 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	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 WBPBS 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											
6.5											
7.0	VR	VR	VR	VR	R	R	R	R	R	R	VR
7.5	R	R	R	R	M	M	M	M	M	M	M
8.0	R	R	M	M	L	L	L	L	L	L	L
8.5	R	R	M	M	L	L	L	L	L	L	L
9.0	R	R	M	M	L	L	L	L	L	L	L
9.5	R	R	M	M	L	L	L	L	L	L	L
10.0	R	R	M	M	L	L	L	L	L	L	L
10.5	R	R	M	M	L	L	L	L	L	L	L
11.0	R	R	M	M	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 WBPBS 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	CANADIAN PONDS <sup>3</sup>
<=5.25											
5.50-6.50	R	R	R	R	R	R	R	R	R	R	R
6.75	R	R	R	R	R	R	R	R	M	M	M
7.0	R	R	R	R	R	R	R	M	M	M	M
7.25	R	R	R	R	M	M	M	M	L	L	L
7.5	R	R	R	M	L	L	L	L	L	L	L
7.75	R	M	M	L	L	L	L	L	L	L	L
8.0	M	M	M	L	L	L	L	L	L	L	L
8.25	M	L	L	L	L	L	L	L	L	L	L
>=8.5	L	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 3.52 million ponds).

<sup>2</sup> Estimated number (millions) of midcontinent mallards during May surveys in WBPBS 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	CANADIAN PONDS <sup>3</sup>
<=5.25											
5.50-6.25	C	C	C	C	C	C	C	C	C	C	C
6.50	R	R	R	R	R	R	R	R	R	R	R
6.75	R	R	R	R	R	R	R	R	M	M	M
7.00	R	R	R	R	R	M	M	M	M	L	L
7.25	R	R	R	M	M	L	L	L	L	L	L
7.50	R	R	M	M	L	L	L	L	L	L	L
7.75	M	M	L	L	L	L	L	L	L	L	L
8.00	M	L	L	L	L	L	L	L	L	L	L
>=8.5	L	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 WBPBS 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	CANADIAN PONDS <sup>3</sup>
<=5.25											
5.50-6.25	C	C	C	C	C	C	C	C	C	C	C
6.50	R	R	R	R	R	R	R	R	R	M	M
6.75	R	R	R	R	R	R	R	R	M	M	M
7.00	R	R	R	R	R	M	M	M	M	L	L
7.25	R	R	R	M	M	L	L	L	L	L	L
7.50	R	M	M	L	L	L	L	L	L	L	L
7.75	M	M	L	L	L	L	L	L	L	L	L
8.00	M	L	L	L	L	L	L	L	L	L	L
>=8.5	L	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 WBPBS and MN, WI, and MI.

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

MALLARDS <sup>2</sup>	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	CANADIAN PONDS <sup>3</sup>
<=5.25											
5.50-6.25	C	C	C	C	C	C	C	C	C	C	C
6.50	R	R	R	R	R	R	R	R	R	M	M
6.75	R	R	R	R	R	R	R	R	M	M	M
7.00	R	R	R	R	R	M	M	M	M	L	L
7.25	R	R	R	M	M	L	L	L	L	L	L
7.50	R	R	M	M	L	L	L	L	L	L	L
7.75	M	M	L	L	L	L	L	L	L	L	L
8.00	M	L	L	L	L	L	L	L	L	L	L
>=8.5	L	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 WBPBS and MN, WI, and MI.

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

## 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	M	
6.75	R	R	R	R	R	M	M	M	L	
7.00	R	R	R	R	M	M	L	L	L	
7.25	R	R	R	M	L	L	L	L	L	
7.50	R	M	M	L	L	L	L	L	L	
7.75	M	M	M	L	L	L	L	L	L	
8.00	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. 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 WBPMS 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	M	L	L	L	L
6.75	R	R	M	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. 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 WBPMS 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	M	M	
6.25	R	R	R	R	R	M	M	M	L	
6.50	R	R	R	R	M	M	L	L	L	
6.75	R	R	R	M	L	L	L	L	L	
7.00	R	M	M	L	L	L	L	L	L	
7.25	M	M	L	L	L	L	L	L	L	
7.50	M	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 WBPMS 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	M	L	L	L	L	L
7.00	R	R	R	M	M	L	L	L	L	L
7.25	R	M	M	L	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. 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 WBPMS 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	R	R	R	M
6.50	R	R	R	R	R	R	M	M	M	M
6.75	R	R	R	R	M	L	L	L	L	L
7.00	R	R	R	M	M	M	L	L	L	L
7.25	R	R	M	M	M	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. 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 WBPMS 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	M	M	M	M	L	L
7.00	R	R	R	M	M	M	L	L	L	L
7.25	R	R	M	M	M	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. 2012-2013 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 WBPMS 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	M	M	
6.75	R	R	R	R	R	R	M	M	M	
7.00	R	R	R	R	M	M	L	L	L	
7.25	R	R	M	M	M	L	L	L	L	
7.50	R	R	M	M	L	L	L	L	L	
7.75	M	M	L	L	L	L	L	L	L	
>=8.0	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 WBPMS (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	R	M	M
7.00	R	R	R	R	R	R	M	M	M	L
7.25	R	R	R	R	R	M	M	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 WBPMS (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	M	M	M
7.00	R	R	R	R	R	R	M	M	M	L
7.25	R	R	R	R	R	M	M	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 WBPMS (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	R
6.50	R	R	R	R	R	R	R	R	R	M
6.75	R	R	R	R	R	R	R	M	L	L
7.00	R	R	R	R	R	R	R	M	L	L
7.25	R	R	R	R	R	R	L	L	L	L
7.50	R	R	R	R	R	R	L	L	L	L
7.75	R	R	R	R	R	R	L	L	L	L
8.00	R	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. 2016-2017 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 WBPMS (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
6.50	#	R	R	R	R	R	R	R	R	M
6.75	#	R	R	R	R	R	R	L	L	L
7.00	#	R	R	R	R	R	R	L	L	L
7.25	#	R	R	R	R	R	R	M	L	L
7.50	#	R	R	R	M	L	L	L	L	L
7.75	#	R	R	M	L	L	L	L	L	L
8.00	#	R	M	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 WBPMS (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	R	M
6.75	R	R	R	R	R	R	R	R	L	L
7.00	R	R	R	R	R	R	R	L	L	L
7.25	R	R	R	R	R	R	M	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 WBPMS (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 WBPMS (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	R	L	L
7.00	R	R	R	R	R	R	R	L	L	L
7.25	R	R	R	R	R	M	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 WBPMS (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	M	L	L
6.75	R	R	R	R	R	R	R	L	L	L
7.00	R	R	R	R	R	R	R	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 WBPMS (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	R	L	L
7.00	R	R	R	R	R	R	R	R	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 WBPMS (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	L	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 WBPMS (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 WBPMS (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 COUNCIL**  
**1948-2022**

CO	KS	MT	NE	NM	ND	OK	SD	TX	WY	AB	NWT	SK
1948 C.N. Feast	D.D. Leahy	W.G. Freeman	L.P. Vance	H.C. Pickens	H.R. Morgan	A. D. Aldrich	E. Peterson	W.C. Glazener	L. Bagley			
1949 C.N. Feast	D.D. Leahy	R.D. Shipley	L.P. Vance	H.C. Pickens	H.R. Morgan	A. D. Aldrich	E. Peterson	W.C. Glazener	L. Bagley			
1950 C.N. Feast	D.D. Leahy	R.D. Shipley	L.P. Vance	H.C. Pickens	H.R. Morgan	A. D. Aldrich	E. Peterson	W.C. Glazener	L. Bagley			
1951 C.N. Feast	D.D. Leahy	R.D. Shipley	L.P. Vance	H.C. Pickens	H.R. Morgan	A. D. Aldrich	E. Peterson	W.C. Glazener	L. Bagley			
1952 T.L. Kimball	D.D. Leahy	R.D. Shipley	L.P. Vance	H.C. Pickens	H.R. Morgan	A. D. Aldrich	E. Peterson	W.J. Cutbirth	L. Bagley	Ernie L. Paynter		
1953 T.L. Kimball	D.D. Leahy	R.D. Shipley	L.P. Vance	H.C. Pickens	H.R. Morgan	A. D. Aldrich	E. Peterson	W.J. Cutbirth	L. Bagley	Ernie L. Paynter		
1954 T.L. Kimball	D.D. Leahy	R.D. Shipley	L.P. Vance	H.C. Pickens	H.R. Morgan	A. D. Aldrich	E. Peterson	W.J. Cutbirth	L. Bagley	Ernie L. Paynter		
1955 T.L. Kimball	D.D. Leahy	R.D. Shipley	L.P. Vance	H.C. Pickens	H.R. Morgan	D. Ware	E. Peterson	W.J. Cutbirth	L. Bagley	Ernie L. Paynter		
1956 T.L. Kimball	D.D. Leahy	A. O'Clair	L.P. Vance	H.C. Pickens	H.R. Morgan	D. Ware	E. Peterson	W.J. Cutbirth	A.F.C. Greene	Ernie L. Paynter		
1957 T.L. Kimball	D.D. Leahy	A. O'Clair	M.O. Steen	F.A. Thompson	I. G. Bue	C. Burch	T. A. Schrader	H. Dodgen	A.F.C. Greene	Ernie L. Paynter		
1958 T.L. Kimball	D.D. Leahy	A. O'Clair	M.O. Steen	F.A. Thompson	I. G. Bue	C. Burch	H.R. Woodward	H. Dodgen	A.F.C. Greene	Ernie L. Paynter		
1959 T.L. Kimball	D.D. Leahy	W.J. Everin	M.O. Steen	F.A. Thompson	I. G. Bue	R.A. Stafford	H.R. Woodward	H. Dodgen	A.F.C. Greene	Ernie L. Paynter		
1960 T.L. Kimball	D.D. Leahy	W.J. Everin	M.O. Steen	F.A. Thompson	I. G. Bue	R.A. Stafford	W.J. Fillmore	E. Walker	S.J. Jiacoletti	Ernie L. Paynter		
1961 H.L. Woodward	F. Warders	W.J. Everin	M.O. Steen	F.A. Thompson	I. G. Bue	R.A. Stafford	W.J. Fillmore	A.J. Springs	S.J. Jiacoletti	Ernie L. Paynter		
1962 H.L. Woodward	G. Moore	W.J. Everin	M.O. Steen	F.A. Thompson	R.W. Stuart	R.A. Stafford	W.J. Fillmore	A.J. Springs	S.J. Jiacoletti	Ernie L. Paynter		
1963 H.L. Woodward	G. Moore	W.J. Everin	M.O. Steen	F.S. Huey	R.W. Stuart	R.A. Stafford	W.J. Fillmore	A.J. Springs	G.F. Wrakestraw	Ernie L. Paynter		
1964 H.L. Woodward	G. Moore	W.G. Freeman	M.O. Steen	F.S. Huey	R.W. Stuart	W. Bever	W.J. Fillmore	A.J. Springs	G.F. Wrakestraw	Ernie L. Paynter		
1965 H.L. Woodward	G. Moore	F.H. Dunkle	M.O. Steen	F.S. Huey	R.W. Stuart	W. Bever	W.J. Fillmore	A.J. Springs	G.F. Wrakestraw	Ernie L. Paynter		
1966 H.L. Woodward	G. Moore	F.H. Dunkle	M.O. Steen	F.S. Huey	R.W. Stuart	W. Bever	W.J. Fillmore	A.J. Springs	J.B. White	Emile L. Paynter		
1967 H.L. Woodward	G. Moore	F.H. Dunkle	M.O. Steen	F.S. Huey	R.W. Stuart	W. Bever	R.A. Hodgins	A.J. Springs	J.B. White	Emile L. Paynter		
1968 H.L. Woodward	M.D. Schwilling	F.H. Dunkle	M.O. Steen	F.S. Huey	R.W. Stuart	W. Bever	R.A. Hodgins	A.J. Springs	J.B. White	C. Bernie Forbes		
1969 H.L. Woodward	M.D. Schwilling	F.H. Dunkle	W.R. Barbee	F.S. Huey	R.W. Stuart	F. Copelin	R.A. Hodgins	A.J. Springs	J.B. White	C. Bernie Forbes		
1970 H.L. Woodward	M.D. Schwilling	F.H. Dunkle	W.R. Barbee	F.S. Huey	R.W. Stuart	F. Copelin	R.A. Hodgins	J.R. Singleton	J.B. White	C. Bernie Forbes		
1971 H.L. Woodward	M.D. Schwilling	F.H. Dunkle	W.R. Barbee	F.S. Huey	R.W. Stuart	F. Copelin	R.A. Hodgins	D. Russell	E. Thomas	H. Maliepaard		
1972 H.L. Woodward	M.D. Schwilling	W.G. Freeman	W.R. Barbee	F.S. Huey	R.W. Stuart	F. Copelin	R.A. Hodgins	R. Kemp	G.F. Wrakestraw	H. Maliepaard		
1973 J.R. Grieb	M.D. Schwilling	W.G. Freeman	W.R. Barbee	F.S. Huey	R.W. Stuart	G. Wint	J. Popowski	R. Kemp	G.F. Wrakestraw	H. Maliepaard		
1974 J.R. Grieb	D. Wettersten	W.G. Freeman	W.R. Barbee	F.S. Huey	R.W. Stuart	G. Wint	J. Popowski	T.L. Clark	G.F. Wrakestraw	H. Maliepaard		
1975 J.R. Grieb	D. Wettersten	W.G. Freeman	W.R. Barbee	F.S. Huey	R.W. Stuart	G. Wint	J. Popowski	T.L. Clark	G.F. Wrakestraw	H. Maliepaard		
1976 J.R. Grieb	D. Wettersten	W.G. Freeman	W.J. Bailey	F.S. Huey	R.W. Stuart	G. Wint	J. Popowski	T.L. Clark	G.F. Wrakestraw	H. Maliepaard		
1977 J.R. Grieb	L. Quael	W.G. Freeman	W.J. Bailey	F.S. Huey	R.W. Stuart	G. Wint	J. Merwin	T.L. Clark	E. Thomas	H. Maliepaard		
1978 J.R. Grieb	L. Quael	W.G. Freeman	W.J. Bailey	F.S. Huey	R.W. Stuart	G. Wint	J. Merwin	T.L. Clark	E. Thomas	H. Maliepaard		
1979 J.R. Grieb	J. Conley	E. Allen	W.J. Bailey	H. Olsen	R.W. Stuart	G. Wint	J. Lounsbury	T.L. Clark	E. Thomas	H. Maliepaard		
1980 J.R. Grieb	W. Hanzlick	E. Allen	W.J. Bailey	H. Olsen	L. Kruckenberg	G. Wint	K. L. Cool	T.L. Clark	E. Thomas	G. Kemp		
1981 J.R. Grieb	W. Hanzlick	E. Allen	W.J. Bailey	H. Olsen	C.H. Schroeder	S. Lewis	K. L. Cool	T.L. Clark	E. Thomas	R.R. Andrews		
1982 J.R. Grieb	W. Hanzlick	E. Allen	W.J. Bailey	H. Olsen	C.H. Schroeder	S. Lewis	K. L. Cool	T.L. Clark	D. Dexter	R.R. Andrews		
1983 J.R. Grieb	W. Hanzlick	E. Allen	W.J. Bailey	H. Olsen	C.H. Schroeder	S. Lewis	K. L. Cool	T.L. Clark	D. Dexter	R.R. Andrews		
1984 J. Ruch	W. Hanzlick	D.W. Witt	W.J. Bailey	D. Sutcliffe	C.H. Schroeder	S. Lewis	K. L. Cool	T.L. Clark	D. Dexter	R.R. Andrews		
1985 J. Lipscomb	W. Hanzlick	D.W. Witt	W.J. Bailey	D. Sutcliffe	C.H. Schroeder	S. Lewis	J. Salyer	T.L. Clark	D. Strickland	R.R. Andrews		
1986 J. Lipscomb	W. Hanzlick	A. Olsen	W.J. Bailey	W. Montoya	C.H. Schroeder	S. Lewis	J. Salyer	B. Alexander	D. Strickland	R.R. Andrews		
1987 J. Lipscomb	W. A. Wentz	A. Olsen	W.J. Bailey	W. Montoya	C.H. Schroeder	S. Lewis	R. Beringson	C. Allen	D. Strickland	R.R. Andrews		
1988 R.M. Hopper	W. A. Wentz	A. Olsen	W.J. Bailey	W. Montoya	M.A. Johnson	S. Lewis	R. Beringson	C. Allen	D. Strickland	R.R. Andrews	K. Lloyd	
1989 R.M. Hopper	W. A. Wentz	K.L. Cool	W.J. Bailey	W. Montoya	L.A. Jones	S. Lewis	R. Beringson	B. Alexander	D. Strickland	R.R. Andrews	K. Lloyd	
1990 R.M. Hopper	W. A. Wentz	K.L. Cool	W.J. Bailey	W. Montoya	L.A. Jones	S. Lewis	R. Beringson	B. Alexander	J. Talbot	R.R. Andrews	K. Lloyd	
1991 R.M. Hopper	J. Kramer	K.L. Cool	W.J. Bailey	W. Montoya	L.A. Jones	S. Lewis	R. Beringson	B. Alexander	J. Talbot	R.R. Andrews	K. Lloyd	
1992 R.M. Hopper	J. Kramer	K.L. Cool	W.J. Bailey	W. Montoya	L.A. Jones	S. Lewis	R. Beringson	B. Alexander	J. Talbot	R.R. Andrews	K. Lloyd	D. Sherratt
1993 R.M. Hopper	J. Kramer	T.C. Hinz	W. Sheets	W. Montoya	K. L. Cool	G. Duffy	R. Beringson	V. Bevill	P. Petera	R.R. Andrews	D. Melton	H. Hunt
1994 P. Olson	J. Kramer	T.C. Hinz	W. Sheets	W. Montoya	K. L. Cool	G. Duffy	R. Beringson	V. Bevill	P. Petera	R.R. Andrews	D. Melton	D. Sherratt
1995 P. Olson	J. Kramer	T.C. Hinz	W. Sheets	D. Sutcliffe	K. L. Cool	G. Duffy	G. Vandel	V. Bevill	J. Talbot	R.R. Andrews	D. Melton	D. Sherratt
1996 J.K. Ringelman	J. Kramer	T.C. Hinz	W. Sheets	D. Sutcliffe	K. Trego	G. Duffy	G. Vandel	V. Bevill	R. Rothwell	R.R. Andrews	D. Melton	D. Sherratt
1997 J. Lipscomb	J. Kramer	T.C. Hinz	W. Sheets	D. Sutcliffe	K. Trego	G. Duffy	G. Vandel	V. Bevill	R. Rothwell	R.R. Andrews	D. Melton	D. Sherratt
1998 J. Mumma	J. Kramer	T.C. Hinz	K. Nelson	S.R. Gonzales	R. Kreil	G. Duffy	G. Vandel	W. Wickers	R. Rothwell	R.R. Andrews	D. Melton	D. Sherratt
1999 W. Graul	J. Kramer	T.C. Hinz	K. Nelson	B. Hale	R. Kreil	G. Duffy	G. Vandel	W. Wickers	R. Rothwell	R.R. Andrews	D. Melton	D. Sherratt
2000 W. Graul	J. Kramer	J. Herbert	K. Nelson	B. Hale	R. Kreil	G. Duffy	G. Vandel	W. Wickers	R. Rothwell	R.R. Andrews	D. Melton	D. Sherratt
2001 W. Graul	J. Kramer	J. Herbert	K. Nelson	B. Hale	R. Kreil	G. Duffy	G. Vandel	W. Wickers	R. Rothwell	R.R. Andrews	D. Melton	D. Sherratt
2002 J. Ver Steeg	J. Kramer	J. Herbert	K. Nelson	L. Rios	R. Kreil	A. Peoples	G. Vandel	V. Bevill	W. Wickers	B. Markham	D. Stewart	D. Sherratt
2003 J. Ver Steeg	J. Kramer	J. Herbert	K. Nelson	L. Rios	R. Kreil	A. Peoples	G. Vandel	V. Bevill	W. Wickers	B. Markham	D. Stewart	D. Sherratt
2004 J. Ver Steeg	J. Kramer	J. Herbert	K. Nelson	RJ Kirkpatrick	R. Kreil	A. Peoples	G. Vandel	V. Bevill	W. Wickers	B. Markham	D. Stewart	D. Sherratt
2005 J. Ver Steeg	J. Kramer	J. Herbert	K. Nelson	RJ Kirkpatrick	R. Kreil	A. Peoples	G. Vandel	V. Bevill	W. Wickers	B. Markham	D. Stewart	D. Sherratt
2006 J. Ver Steeg	J. Kramer	J. Herbert	K. Nelson	B. Thompson	R. Kreil	A. Peoples	G. Vandel	V. Bevill	W. Wickers	B. Markham	D. Stewart	D. Sherratt
2007 J. Ver Steeg	J. Kramer	J. Herbert	K. Nelson	B. Thompson	R. Kreil	A. Peoples	G. Vandel	V. Bevill	J. Emmerich	R. Millson	S. Fleck	H. Hunt
2008 J. Ver Steeg	J. Kramer	J. Herbert	K. Nelson	T. Frybarger	R. Kreil	A. Peoples	G. Vandel	V. Bevill	J. Emmerich	R. Millson	S. Fleck	H. Hunt
2009 J. Ver Steeg	J. Kramer	J. Herbert	K. Nelson	J. Lane	R. Kreil	M. O'Melia	T. Leif	V. Bevill	J. Emmerich	J. Allen	S. Fleck	K. Callele
2010 J. Ver Steeg	J. Kramer	J. Herbert	K. Nelson	J. Lane	R. Kreil	M. O'Melia	T. Leif	V. Bevill	J. Emmerich	J. Allen	S. Fleck	L. Saigeon
2011 J. Ver Steeg	J. Kramer	J. Herbert	T. McCoy	J. Lane	R. Kreil	M. O'Melia	T. Leif	D. Morrison	J. Emmerich	J. Allen	S. Fleck	L. Saigeon
2012 J. Ver Steeg	J. Kramer	G. Pauley	T. McCoy	C. Baca	R. Kreil	C. Endicott	T. Leif	D. Morrison	J. Emmerich	J. Allen	L. Yonge	L. Saigeon
2013 J. Ver Steeg	J. Kramer	G. Pauley	S. Taylor	C. Baca	R. Kreil	C. Endicott	T. Leif	D. Morrison	J. Emmerich	J. Allen	L. Yonge	L. Saigeon
2014 J. Ver Steeg	J. Kramer	J. Vore	S. Taylor	C. Baca	R. Kreil	C. Endicott	T. Leif	D. Morrison	S. Smith	J. Allen	L. Yonge	L. Saigeon
2015 J. Ver Steeg	B. Simpson	J. Vore	S. Taylor	S. Liley	J. Williams	C. Endicott	T. Leif	D. Morrison	S. Smith	M. Besko	L. Yonge	L. Saigeon
2016 J. Ver Steeg	J. George	J. Vore	K. Decker	S. Liley	J. Williams	J. Shaw	T. Leif	D. Morrison	S. Smith	M. Besko	Vacant	
2017 J. Ver Steeg	J. George	J. Vore	A. Hardin	S. Liley	J. Williams	J. Shaw	T. Leif	D. Morrison	S. Smith	B. Elkin	B. Kirchuk	
2018 J. Ver Steeg	J. George	J. Vore	A. Hardin	S. Liley	J. Williams	J. Shaw	T. Leif	D. Morrison	S. Smith	B. Elkin	B. Kirchuk	
2019 J. Ver Steeg	J. George	J. Vore	A. Hardin	S. Liley	J. Williams	J. Shaw	T. Leif	S. Oldenburger	A. Bruce	M. Besko	B. Elkin	B. Kirchuk
2020 J. Ver Steeg	J. George	B. Wakeling	A. Hardin	S. Liley	J. Williams	J. Shaw	T. Kirschenmann	S. Oldenburger	A. Bruce	M. Besko	B. Elkin	B. Kirchuk
2021 J. Ver Steeg	J. George	B. Wakeling	A. Hardin	S. Liley	J. Williams	J. Shaw	T. Kirschenmann	S. Oldenburger	A. Bruce	M. Besko	B. Elkin	B. Kirchuk
2022 J. Ver Steeg	J. George	B. Wakeling	A. Hardin	S. Liley	C. Anderson	J. Shaw	T. Kirschenmann	S. Oldenburger	A. Bruce	D. Park	B. Elkin	J. Sklinick

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

**CENTRAL FLYWAY WATERFOWL TECHNICAL COMMITTEE**  
**1954-2022**

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. Fashngbauer	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. Fashngbauer	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		
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	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. Wrakestraw	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. Wrakestraw	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. Wrakestraw	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. Wrakestraw	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. Wrakestraw	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. Wrakestraw	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. Wrakestraw	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. Wrakestraw	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. Wrakestraw	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. Wrakestraw	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. Wrakestraw	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. Wrakestraw	D. Neave	
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. Wrakestraw	D. Neave	
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. Wrakestraw	T. Burgess	
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. Wrakestraw	H. Weaver	
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. Wrakestraw	H. Weaver	
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. Wrakestraw	H. Weaver	
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. Wrakestraw	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'Melia	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'Melia	S.G. Simpson	D.W. Witt	R. Saul	H. Weaver	J. Mulhem
1987	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	G. Schmidt	M.A. Johnson	M.E. O'Melia	S.G. Simpson	R.L. Jessen	R. Saul	H. Weaver	J. Mulhem
1988	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	J. Ward	M.A. Johnson	M.E. O'Melia	S.G. Simpson	R.L. Jessen	R. Saul	K. Lungle	R. Bromley
1989	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	J. Ward	M.A. Johnson	M.E. O'Melia	D. Hansen	R.L. Jessen	R. Saul	K. Lungle	R. Bromley
1990	H.D. Funk	M.J. Kraft	T.C. Hinz	P. J. Gabig	J. Ward	M.A. Johnson	M.E. O'Melia	S.J. Vaa	R.L. Jessen	R. Saul	K. Lungle	R. Bromley
1991	H.D. Funk	M.J. Kraft	J. Hansen	P. J. Gabig	J. Ward	M.A. Johnson	M.E. O'Melia	S.J. Vaa	R.L. Jessen	R. Saul	K. Lungle	R. Bromley
1992	H.D. Funk	M.J. Kraft	J. Hansen	P. J. Gabig	B. Hale	M.A. Johnson	M.E. O'Melia	S.J. Vaa	R.L. Jessen	R. Saul	K. Lungle	R. Bromley
1993	H.D. Funk	M.J. Kraft	J. Hansen	P. J. Gabig	B. Hale	M.A. Johnson	M.E. O'Melia	S.J. Vaa	B. Sullivan	R. Saul	K. Lungle	R. Bromley
1994	J.K. Ringelman	M.J. Kraft	J. Hansen	P. J. Gabig	B. Hale	M.A. Johnson	M.E. O'Melia	S.J. Vaa	B. Sullivan	R. Saul	K. Lungle	R. Bromley
1995	J.K. Ringelman	M.J. Kraft	J. Hansen	P. J. Gabig	B. Hale	M.A. Johnson	M.E. O'Melia	S.J. Vaa	B. Sullivan	L. Roberts	K. Lungle	R. Bromley
1996	J.K. Ringelman	M.J. Kraft	J. Hansen	P. J. Gabig	B. Hale	M.A. Johnson	M.E. O'Melia	S.J. Vaa	B. Sullivan	L. Roberts	K. Lungle	R. Bromley
1997	J. Gammonley	M.J. Kraft	J. Hansen	P. J. Gabig	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	B. Sullivan	L. Roberts	K. Lungle	R. Case
1998	J. Gammonley	M.J. Kraft	J. Hansen	P. J. Gabig	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	B. Sullivan	L. Roberts	K. Lungle	R. Case
1999	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	B. Sullivan	L. Roberts	K. Lungle	R. Case
2000	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	R. Case
2001	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	R. Case
2002	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	D. McKinnon
2003	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	R. Case
2004	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	D. Morrison	L. Roberts	R. Millson	D. Brewster
2005	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	D. Morrison	L. Roberts	R. Millson	R. Case
2006	J. Gammonley	M.J. Kraft	J. Hansen	M. Vrtiska	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	M. Gollop
2007	J. Gammonley	F.M. McNew	J. Hansen	M. Vrtiska	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	R. Case
2008	J. Gammonley	F.M. McNew	J. Hansen	M. Vrtiska	T. Mitchuson	M.A. Johnson	M.E. O'Melia	S.J. Vaa	D. Morrison	L. Roberts	K. Lungle	M. Gollop
2009	J. Gammonley	F.M. McNew	J. Hansen	M. Vrtiska	T. Mitchuson	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. Mitchuson	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
2012	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	J. Sands	M.A. Johnson	J. Richardson	R. Murano	K. Kraai	L. Roberts	J. Caswell	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
2014	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	K. Madden	M.A. Johnson	J. Richardson	R. Murano	K. Kraai	L. Roberts	J. Caswell	M. Gollop
2015	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	K. Madden	M.A. Johnson	J. Richardson	R. Murano	K. Kraai	L. Roberts	J. Caswell	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
2017	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	M. Cline	M.L. Szymanski	J. Richardson	R. Murano	K. Kraai	N. Huck	J. Caswell	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
2019	J. Gammonley	T. Bidrowski	J. Hansen	M. Vrtiska	M. Cline	M.L. Szymanski	J. Richardson	R. Murano	K. Kraai	N. Huck	J. Caswell	K. Conkin
2020	J. Gammonley	T. Bidrowski	J. Hansen	W. Inselman	M. Cline	M.L. Szymanski	J. Richardson	R. Murano	K. Kraai	N. Smith	J. Caswell	S. Carrière
2021	J. Gammonley	T. Bidrowski	J. Hansen	W. Inselman	M. Cline	M.L. Szymanski	J. Morel	R. Murano	K. Kraai	N. Smith	J. Caswell	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

FILE: S:\MBMOICF\_DIPROJECTS\ADMINISTRATIVE\HISTORIC\CF MEMBERS.XLS

**CENTRAL FLYWAY WEBLESS MIGRATORY GAME BIRD TECHNICAL COMMITTEE**  
**1966-2022**

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. Twedt	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	C. Schwartz	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	R. George	K. Sadler	R.L. Jessen						
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. Jessen						
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. Jessen						
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. Jessen						
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. Jessen						
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. Jessen						
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. Jessen						
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. Jessen						
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. Jessen						
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. Jessen						
1986	H.D. Funk	G.J. Horak	T.C. Hinz	P.J. Gabig	J. Herring	S.C. Kohn	M.E. O'Melia	S.G. Simpson	R. George	R. Saul	R. Bishop	S. Yaich	D.L. Hallett	R.L. Jessen					
1987	H.D. Funk	G.J. Horak	T.C. Hinz	P.J. Gabig	J. Gonzales	S.C. Kohn	M.E. O'Melia	S.G. Simpson	R. George	R. Saul	R. Bishop	S. Yaich	D.L. Hallett	R.L. Jessen					
1988	H.D. Funk	G.J. Horak	T.C. Hinz	P.J. Gabig	J. Ward	S.C. Kohn	M.E. O'Melia	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'Melia	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'Melia	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'Melia	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'Melia	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'Melia	S.J. Vaa	J. Roberson	R. Saul	G. Zenner	I. 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'Melia	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'Melia	S.J. Vaa	J. Roberson	L. Roberts	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'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner					
1997	J. Gammonley	H. Hands	J. Hansen	P.J. Gabig	T. Mitchusson	S.C. Kohn	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	M. Hill	J.H. Schulz	R. Case					
1998	J. Gammonley	H. Hands	J. Hansen	P.J. Gabig	T. Mitchusson	S.C. Kohn	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	M. Hill	J.H. Schulz	R. Case					
1999	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	M. Hill	J.H. Schulz	R. Case					
2000	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	M. Gillespie	K. Lungle	R. Bromley	J. Mulhern	
2001	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	M. Gillespie	K. Lungle	R. Bromley	J. Mulhern	
2002	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2003	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2004	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S.C. Kohn	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2005	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	M.L. Szymanski	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2006	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	M.L. Szymanski	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2007	J. Gammonley	H. Hands	J. Hansen	J. Lusk	T. Mitchusson	M.L. Szymanski	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2008	J. Gammonley	H. Hands	J. Hansen	J. Lusk	T. Mitchusson	M.L. Szymanski	M.E. O'Melia	S.J. Vaa	J. Roberson	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
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	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
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	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2011	J. Gammonley	T. Bidrowski	J. Hansen	J. Lusk	B. Hale	M.L. Szymanski	J. Richardson	R. Murano	C. Mason	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2012	J. Gammonley	T. Bidrowski	J. Hansen	J. Lusk	J. Sands	M.L. Szymanski	J. Richardson	R. Murano	C. Mason	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2013	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	K. Madden	M.L. Szymanski	J. Richardson	R. Murano	S. Oldenburger	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2014	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	K. Madden	M.L. Szymanski	J. Richardson	R. Murano	S. Oldenburger	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2015	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	K. Madden	M.L. Szymanski	J. Richardson	R. Murano	S. Oldenburger	L. Roberts	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2016	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	M. Cline	A. Dinges	J. Richardson	R. Murano	S. Oldenburger	N. Huck	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2017	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	M. Cline	A. Dinges	J. Richardson	R. Murano	S. Oldenburger	N. Huck	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2018	J. Gammonley	R. Schultheis	J. Hansen	J. Lusk	M. Cline	A. Dinges	J. Richardson	R. Murano	O. Fitzsimmons	N. Huck	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2019	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Richardson	R. Murano	O. Fitzsimmons	N. Huck	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2020	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Richardson	R. Murano	O. Fitzsimmons	N. Smith	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2021	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Morel	R. Murano	O. Fitzsimmons	N. Smith	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	
2022	J. Gammonley	R. Schultheis	J. Hansen	J. Laux	M. Cline	A. Dinges	J. Morel	R. Murano	O. Fitzsimmons	N. Smith	T. Bogenschutz	T. Moser	J.H. Schulz	A. Berner	R. Millson	K. Lungle	R. Case	D. McKinnon	

<sup>1</sup>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**  
**2000-2022**

	<b>CO</b>	<b>KS</b>	<b>MT</b>	<b>NE</b>	<b>NM</b>	<b>ND</b>	<b>OK</b>	<b>SD</b>	<b>TX</b>	<b>WY</b>	<b>IA</b>	<b>AR</b>	<b>MO</b>	<b>MN</b>
2000	J. Gammonley	H. Hands	J. Hansen	S. Taylor	T. Mitchusson	S. C. Kohn	M.E. O'Melia	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'Melia	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'Melia	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'Melia	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'Melia	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'Melia	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'Melia	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'Melia	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'Melia	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

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# CENTRAL FLYWAY NONGAME MIGRATORY BIRD TECHNICAL COMMITTEE

## 2006-2022

	<b>CO</b>	<b>KS</b>	<b>MT</b>	<b>NE</b>	<b>NM</b>	<b>ND</b>	<b>OK</b>	<b>SD</b>	<b>TX</b>	<b>WY</b>	<b>AB</b>	<b>SK</b>	<b>NWT</b>	<b>FWS <sup>1,2</sup></b>
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. Howery	E. Dowd Stukel	C. Shackelford	A. Orabona				S. Jones
2010	D. Klute	F.M. McNew	C. Wightman	J. Jorgensen	H. Walker	S. Johnson	M. Howery	E. Dowd Stukel	C. Shackelford	A. Orabona				S. Jones
2011	D. Klute	T. Bidrowski	C. Wightman	J. Jorgensen	H. Walker	S. Johnson	M. Howery	E. Dowd Stukel	C. Shackelford	A. Orabona				S. Jones
2012	D. Klute	T. Bidrowski	C. Wightman	J. Jorgensen	H. Walker	S. Johnson	M. Howery	E. Dowd Stukel	C. Shackelford	A. Orabona				S. Jones
2013	D. Klute	R. Schultheis	L. Hanauska-Brown	J. Jorgensen	M. Neal	S. Johnson	M. Howery	E. Dowd Stukel	C. Shackelford	A. Orabona				S. Jones
2014	D. Klute	R. Schultheis	L. Hanauska-Brown	J. Jorgensen	P. Darr	S. Johnson	M. Howery	E. Dowd Stukel	C. Shackelford	A. Orabona				B. Howe
2015	D. Klute	R. Schultheis	A. Begley	J. Jorgensen	P. Darr	S. Johnson	M. Howery	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. Howery	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. Howery	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. Howery	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. Howery	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. Howery	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. Howery	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. Howery	E. Dowd Stukel	T. Homayoun	A. Orabona	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	Albuquerque, NM	Arlington, VA	Albuquerque, NM	Ruidoso, NM
2014	Amarillo, TX	Denver, CO	Galveston, TX	Kerrville, 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

<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
<b>1990</b>	Kent Luttschwager
<b>1991</b>	Cathy Henry
<b>1992</b>	Dr. Charles Dieter
<b>1993</b>	Lisa Peskin Sausville
<b>1994</b>	Mark Humpert
<b>1995</b>	Dr. Rex Johnson
<b>1996</b>	Dr. Jeff Gleason
<b>1997</b>	Dr. Dave Naugle
<b>1998</b>	Dr. Diane Granfors
<b>1999</b>	Tate Fischer
<b>2000</b>	Dr. Joshua Stafford
<b>2001</b>	Shawn May
<b>2002</b>	Kent Werlin
<b>2003</b>	Bryan Rieger
<b>2004</b>	Rachel Mockler
<b>2005</b>	Kimberly Strand
<b>2006</b>	Sharon N. Kahara
<b>2007</b>	Jennifer L. Gutscher
<b>2008</b>	Tandi L. Perkins
<b>2009</b>	Nick Docken
<b>2010</b>	Heather N. McWilliams
<b>2011</b>	-----
<b>2012</b>	Cody Warner
<b>2013</b>	Anna Sidie-Slettedahl
<b>2014</b>	Adam Janke
<b>2015</b>	Ryann Cressey
<b>2016</b>	Matt Gottlob
<b>2017</b>	Neal Martorelli
<b>2018</b>	Fred Oslund
<b>2019</b>	Charles "Will" Gallman
<b>2020</b>	Cynthia Anchor
<b>2021</b>	Samantha Fino
<b>2022</b>	
<b>Zach Cunningham, University of Nebraska-Lincoln Ingrid Barcelo, University of Nebraska-Lincoln</b>	
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<b>Scott Groepper, University of Nebraska-Lincoln Todd Buckley, University of Nebraska-Lincoln Dustin Casady, University of Nebraska-Kearney Matt Haugen, University of Nebraska-Lincoln</b>	
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<b>Heather Johnson, University of Nebraska-Kearney</b>	
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<b>Matthew Hinrichs, University of Nebraska-Lincoln</b>	
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<sup>1</sup> Criteria modified in 2018.

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

YEAR	CONSULTANT	
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)

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

**SERVICE REGULATIONS COMMITTEE**  
**U.S. Fish & Wildlife Service**  
**1975-2022**

YR	CHAIR	MBM	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		J. Hemphill								
1979	H.K. Nelson	R.I. Smith	R.K. Martinson										
1980	J.P. Rogers	J.P. Rogers	R.K. Martinson		H.K. Nelson								
1981	R.E. Gilmore	J.P. Rogers	R.K. Martinson		H.K. Nelson								
1982	R. Putz	J.P. Rogers			H.K. Nelson	J.W. Pulliam							
1983	J.P. Rogers	J.P. Rogers			H. Benson	J.W. Pulliam							
1984	J.P. Rogers	J.P. Rogers			H.K. Nelson	J.W. Pulliam							
1985	R. Lambertson	R.D. Sparrowe			H.K. Nelson	J.W. Pulliam							
1986	R. Lambertson	R.D. Sparrowe			H.K. Nelson	J.W. Pulliam							
1987	H.K. Nelson	R.D. Sparrowe	R.L. Wallenstrom			J.W. Pulliam		G.L. Butterbaugh					
1988	H.K. Nelson	R.D. Sparrowe	R.L. Wallenstrom	1	M. Spear	J.C. Gritman	J.W. Pulliam	G.L. Butterbaugh	W. Steiglitz	1		M. Plenert	
1989	M. Plenert	B.K. Williams			M. Spear	J.C. Gritman	J.W. Pulliam	G.L. Butterbaugh	W. Steiglitz				
1990	M. Plenert/D. Olsen	T.J. Dwyer				J.C. Gritman	J.W. Pulliam	G.L. Butterbaugh	W. Steiglitz				
1991	D. Olsen	T.J. Dwyer				J.C. Gritman	J.W. Pulliam	G.L. Butterbaugh	W. Steiglitz				
1992	D. Olsen	T.J. Dwyer				J.S. Marler		R.E. Lambertson	R.O. Morgenweck				
1993	D. Olsen	P.R. Schmidt	M. Plenert		J.G. Rogers	J.S. Marler		R.E. Lambertson	R.O. Morgenweck				
1994	W.F. Hartwig	P.R. Schmidt	M. Plenert		J.G. Rogers	J.S. Marler		R.E. Lambertson	R.O. Morgenweck				
1995	R.G. Streeter	P.R. Schmidt			N. Kaufman		N. Clough						
1996	R.G. Streeter	P.R. Schmidt			N. Kaufman		N. Clough						
1997	R.G. Streeter	P.R. Schmidt			N. Kaufman	W.F. Hartwig	1						
1998	J.G. Rogers/D. Ashe	P.R. Schmidt			N. Kaufman	W.F. Hartwig	N. Clough						
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	W.F. Hartwig	S.D. Hamilton						
2001	T.O. Melius	J. Andrew			N. Kaufman	W.F. Hartwig	S.D. Hamilton						
2002	T.O. Melius	J. Andrew/R.J. Blohm					S.D. Hamilton	M. Parker	R.O. Morgenweck				
2003	P.R. Schmidt	B.A. Millsap					S.D. Hamilton	M. Parker	R.O. Morgenweck				
2004	P.R. Schmidt	B.A. Millsap					S.D. Hamilton	M. Morarity	R.O. Morgenweck				
2005	P.R. Schmidt	B.A. Millsap						M. Morarity	R.O. Morgenweck				
2006	P.R. Schmidt	B.A. Millsap	D.B. Allen			R. Thorson							
2007	P.R. Schmidt	R.J. Blohm				R. Thorson							
2008	P.R. Schmidt	R.J. Blohm			B. Tuggle	R. Thorson							
2009	P.R. Schmidt	R.J. Blohm			B. Tuggle	R. Thorson	S.D. Hamilton						
2010	P.R. Schmidt	R.J. Blohm			B. Tuggle	T.O. Melius	S.D. Hamilton						
2011	T.O. Melius/J. Ford	J.B. Bortner				T.O. Melius							
2012	J. Ford	J.B. Bortner				T.O. Melius							
2013	J. Ford	J.B. Bortner			B. Tuggle	T.O. Melius							
2014	J. Ford	J.B. Bortner			B. Tuggle	T.O. Melius							
2015	J. Ford	J.B. Bortner			B. Tuggle	C. Dohner							
2016	J. Ford	J.B. Bortner	R. Thorson		B. Tuggle	T.O. Melius	C. Dohner						
2017	J. Ford	J.B. Bortner	R. Thorson			T.O. Melius	C. Dohner						
2018	J. Ford	K.D. Richkus	R. Thorson			C. Wooley	C. Wooley						
2019	J. Ford	K.D. Richkus											
2020	J. Ford	K.D. Richkus											
2021	J. Ford	K.D. Richkus											
2022	J. Ford	K.D. Richkus											

<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

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# USFWS FLYWAY REPRESENTATIVES

## 1949-2022

**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		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		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

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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

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

MBMO/CF\_D/Projects/Administrative/Historic/FWSMBC.xls

<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.