

HARVEST INFORMATION PROGRAM

Preliminary Estimates of Waterfowl Hunter Activity and Harvest during the 2001 and 2002 Hunting Seasons

Administrative Report - July 2003



**U.S. Fish and Wildlife Service
Division of Migratory Bird Management
Harvest Surveys Section
Laurel, MD**

Introduction

Since the early 1950s, the U.S. Fish and Wildlife Service (Service) has conducted a survey of Federal Duck Stamp purchasers to estimate waterfowl hunter activity and harvest in the United States. That survey was conducted annually through the 2001-02 hunting season, after which it was replaced by a new migratory bird harvest survey system. In 1992, the Service and State Fish and Wildlife Agencies (States) established the national, cooperative Migratory Bird Harvest Information Program (HIP), which was fully operational nationwide by 1999. This cooperative State-Federal program requires licensed migratory bird hunters to annually identify themselves to the State licensing authority by providing the State their name, address, and date of birth, and requires them to carry evidence of their compliance whenever they hunt migratory birds in that state. States are required to collect the name, address, and date of birth information from each licensed migratory bird hunter, provide the migratory bird hunters with proof of compliance, ask each migratory bird hunter a series of screening questions about their hunting success the previous year, and provide all of this information to the Service. The Service is responsible for using the data provided by the States to annually conduct national hunter activity and harvest surveys for all migratory game birds.

Each year from 1999 through 2001, the Service conducted both the Federal Duck Stamp-based survey and a HIP waterfowl harvest survey concurrently, with the objective of comparing and evaluating the results of the two surveys. That evaluation will provide the basis for maintaining continuity of the long-term harvest data.

The purpose of the current report is to present the results of the HIP waterfowl harvest surveys for the 2001-02 and 2002-03 hunting seasons. All hunter activity and harvest estimates contained herein are preliminary, pending (1) final counts of the number of migratory bird hunters in each state, and (2) complete audits of all survey response data.

HIP Survey Design And Methods

Sample Frame. The HIP sample frame consisted of hunters who identified themselves as potential migratory bird hunters when they purchased State hunting licenses. The States forwarded the sample frame data to the Service either weekly or twice a month, starting in July and continuing through the end of their migratory bird hunting seasons. People who hunted migratory birds in more than one state had to comply with the HIP requirement in each state in which they hunted, thus the sample frame was specific to each state.

Stratification and Sample Selection. States were required to ask migratory bird hunters a series of screening questions about the species they hunted and their hunting success the previous year. The Service used this prior year information as a predictor of current year hunting activity and success, and assigned each hunter to a success/activity stratum for each of nine species/species groups (ducks, sea ducks, geese, brant, doves, band-tailed pigeons, woodcock, coots and/or snipe, and rails and/or gallinules) based on his/her responses to the screening questions. The Service selected stratified samples for each species/species group, sampling the small group of active/very successful hunters at a high rate, the larger group of less successful hunters at a lower

rate, and the very large group of migratory bird hunters who rarely if ever hunt the species/species group at a very low rate.

Survey Methodology. A daily hunting diary format was used in an effort to reduce memory bias. Hunters selected for the surveys were asked to record the date of each hunt, the state and county where they hunted that day, and how many birds of various species/species groups they personally bagged that day. For hunters who forgot to record their daily hunting information, or did not receive the form until after the hunting season began, space was provided on the form to record season totals. Appendix A shows the format of the survey form. Hunter response was voluntary.

Soon after the initial batch of names and addresses was received from a State, stratified samples were selected according to predetermined sampling rates. The survey packet was sent to each selected hunter within one to two weeks after his/her name was received. The sample selection and initial mailing process continued with each subsequent batch of names and addresses (roughly twice per month), with the last initial mailing occurring on or shortly after the closing date of the last waterfowl hunting season in the state. For all hunters who received their initial packet prior to the close of the hunting season, reminder postcards were sent at the close of the season asking them to return their completed survey form. For hunters who received the initial packet after the close of the hunting season, a reminder postcard was mailed approximately one week after the initial packet. Two to three weeks after the reminder postcard, a follow-up packet was sent via regular mail to all hunters who had not yet responded. Finally, three to four weeks later, an additional follow-up packet was sent to the remaining non-respondents.

Analysis. Reported season totals were used to obtain estimates of harvest and hunter activity for each state and species/species group combination. The following estimates were derived for each of the surveyed species/species group for which there was a hunting season in a given state: the proportion of active hunters (at least one day hunted), total birds bagged, total days afield, and mean birds bagged per active hunter. By using the total number of migratory bird hunters in the State's sample frame and the proportion of active hunters by success stratum, the total number of active hunters was estimated.

The number of active hunters, the number of birds harvested, the number of days afield, and the average number of birds harvested per active hunter for each species/species group were estimated at the state level, and the number of days afield and the number of birds harvested were also estimated at the management unit and national levels. Variance estimates for these parameters were also estimated and converted to 95% confidence intervals. The total number of active hunters and the average seasonal bag per active hunter could not be estimated at the management unit or national levels because some people hunted migratory birds in more than one state, thus simply adding the number of active hunters in each state would have overestimated the total number of active hunters and underestimated the average bag per hunter. Species-specific waterfowl harvest estimates were derived from the Waterfowl Parts Collection Survey, as were special September duck season estimates.

Survey Results

The species-specific estimates for ducks and geese (Table 1A-E) are presented by flyway. We were unable to split the estimates for Colorado, Montana, New Mexico, and Wyoming into their Central and Pacific Flyway portions for this report, so we arbitrarily assigned all of Colorado, New Mexico, and Wyoming to the Central Flyway and all of Montana to the Pacific Flyway. However, the Waterfowl Parts Collection Survey enabled us to provide Flyway-specific point estimates of duck and goose harvest for those four states; those point estimates are shown in Appendix B.

Sea duck and brant hunter activity and harvest were estimated separately from other ducks and geese for states that have specific seasons for those species (Tables 2 and 3). Sea duck and brant harvest estimates are also shown in the species-specific waterfowl estimates in Table 1. However, for those states with specific sea duck and/or brant seasons, sea ducks and brant bagged are not included in the estimates of birds bagged per active hunter that are shown in Table 1.

Estimates for special September duck seasons are given in Table 4, and Table 5 summarizes the waterfowl harvest in Canada. Data for Table 5 were provided by the Canadian Wildlife Service, which conducts annual surveys similar to those conducted in the U.S.

Long-term trends in Federal Duck Stamp sales, duck harvest, and goose harvest since 1961 are shown in Figures 1-3. The curves are locally weighted regression (lowess) lines (Cleveland and Devlin, 1988, J. Am. Stat. Assoc.) that fit a pattern to the majority of the estimates and identify points that deviate from that pattern. The duck and goose harvest graphs both show one lowess line and point estimates for the Federal Duck Stamp-based survey's estimates from 1961-2001 and a separate lowess line and point estimates for the HIP survey estimates for 1999-2002.

Acknowledgments

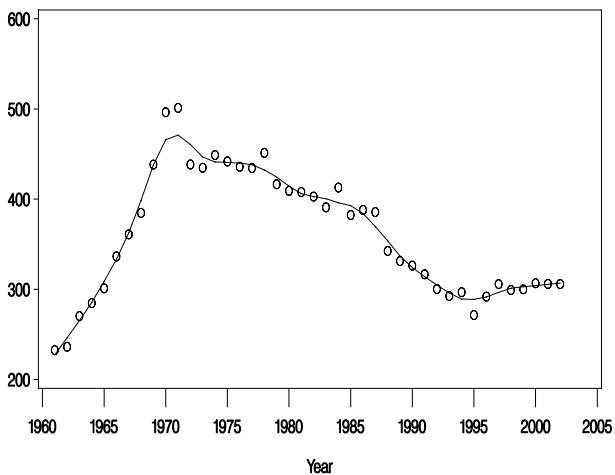
The Harvest Surveys Section's survey clerks (Ellen Griffin, Robert Mack, and Pamela Mathias), mail clerk (Joe Duncan), computer assistant (Howard Spriggs), and secretary (Susane Finucane) were major contributors to this project.

The HIP waterfowl survey could not be conducted without the close cooperation of participating States, and we appreciate the efforts of all State personnel who were involved with the HIP at various levels. We particularly appreciate the cooperation of the following individuals who were responsible for getting the HIP sample frame for their State to the Service:

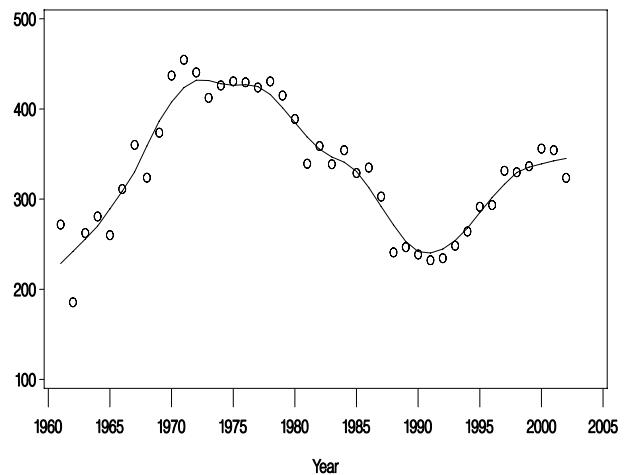
Stacey Norris, Alabama Department of Conservation and Natural Resources
Doris Kirchhofer, Alaska Department of Fish and Game
Amber Munig, Arizona Game and Fish Department
Alice Browning, Arkansas Game and Fish Commission
Amanda Palacios, California Department of Fish and Game
Lyn Stevens, Colorado Division of Wildlife
Min Huang, Connecticut Department of Environmental Protection

Lynn Herman, Delaware Department of Natural Resources and Environmental Control
Debbie Manderfield, Florida Fish and Wildlife Conservation Commission
David Neyhart and Mike Hughes, Georgia Department of Natural Resources
Gary Rasco, Idaho Department of Fish and Game
Don Newton, Illinois Department of Natural Resources
John Olson, Indiana Department of Natural Resources
Steve Weaver, Iowa Department of Natural Resources
Vicki Shanley, Kansas Department of Wildlife and Parks
Sherry Kefauver, Kentucky Department of Fish and Wildlife Resources
Janis Landry, Louisiana Department of Wildlife and Fisheries
Vesta Billing and Danny Morris, Maine Department of Inland Fisheries and Wildlife
Bill Harvey and Brent Evans, Maryland Department of Natural Resources
Rick Kennedy, Massachusetts Division of Fisheries and Wildlife
Lisa Winters, Michigan Department of Natural Resources
Roger Lake, Minnesota Department of Natural Resources
Terrell Chester and Curtis Thornhill, Mississippi Department of Wildlife, Fisheries and Parks
Sheila Theobald, Missouri Department of Conservation
Nancy Kraft, Montana Department of Fish, Wildlife and Parks
Kit Hams, Nebraska Game and Parks Commission
Patty Wagner, Nevada Department of Wildlife
Richard Cunningham, New Hampshire Fish and Game Department
Verna Gengler, New Jersey Division of Fish and Wildlife
Tim Mitchusson, New Mexico Department of Game and Fish
Art Jacobsen, New York Department of Environmental Conservation
Bobby Dunn, North Carolina Wildlife Resources Commission
Jerry Gulke, North Dakota Game and Fish Department
Cheryl Allen, Ohio Department of Natural Resources
Rodney Derrick, Oklahoma Department of Wildlife Conservation
Valerie Finger, Oregon Department of Fish and Wildlife
Valerie Kazakavage, Pennsylvania Game Commission
Margaret McGrath, Rhode Island Division of Fish and Wildlife Resources
Derrell Shipes and Diane Lee, South Carolina Department of Natural Resources
Corey Huxoll, South Dakota Game, Fish and Parks Department
Gary Clouse, Tennessee Wildlife Resources Agency
Steve Cordts, Texas Parks and Wildlife Department
Tom Aldrich, Utah Division of Wildlife Resources
Tina Hull, Vermont Fish and Wildlife Department
Ken Perry, Virginia Department of Game and Inland Fisheries
Jim Rieck, Washington Department of Wildlife
Steve Wilson, West Virginia Department of Natural Resources
Brian Dhuey, Wisconsin Department of Natural Resources
Roxanne Hudson and Jim Taylor, Wyoming Game and Fish Department

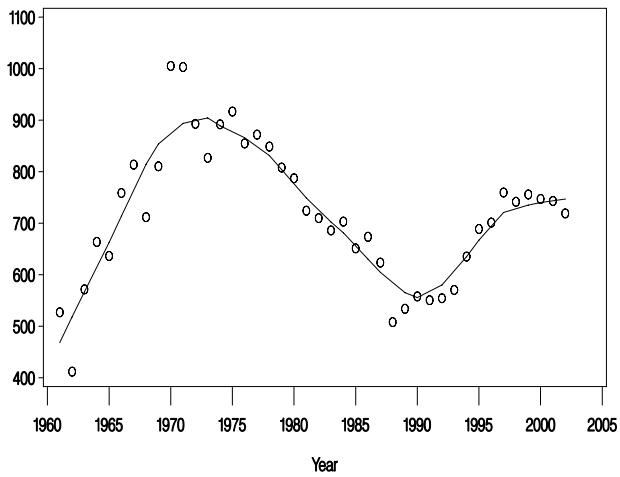
Atlantic Flyway



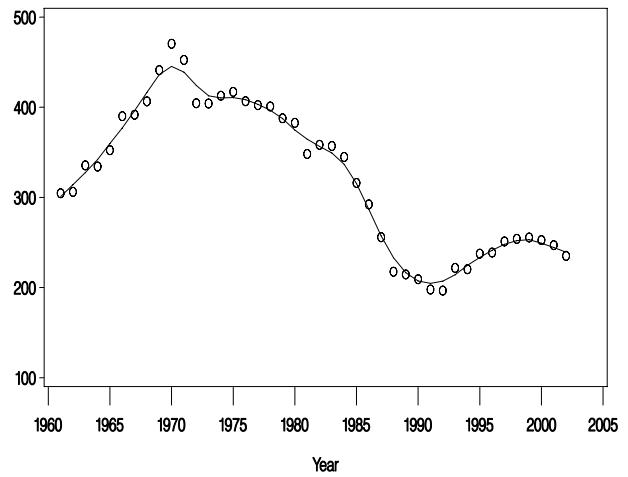
Central Flyway



Mississippi Flyway



Pacific Flyway and Alaska



United States

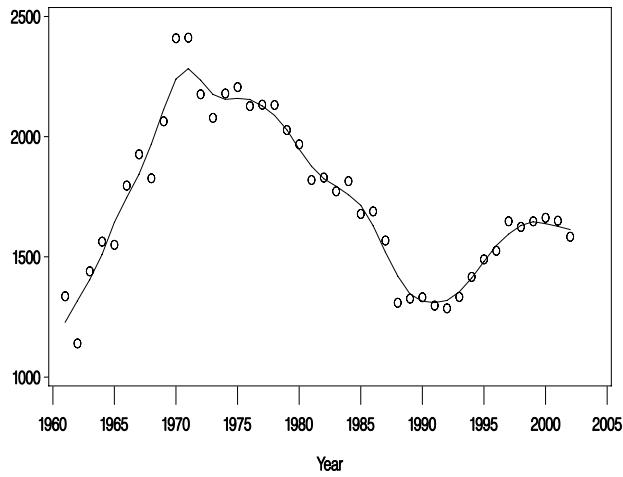


Figure 1. Number of Federal duck stamps sold (in thousands) in the United States, 1961-2002.

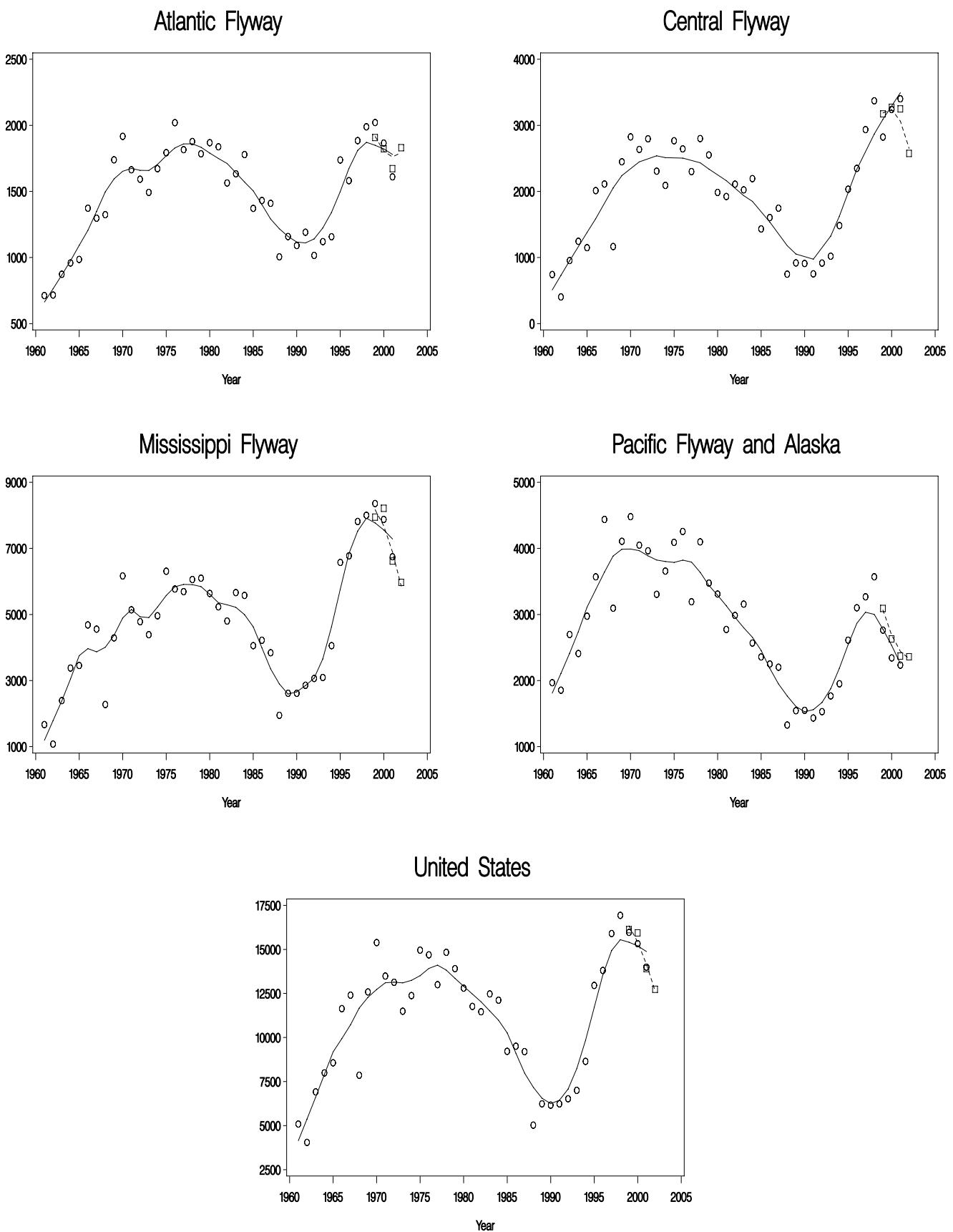


Figure 2. Number of ducks harvested (in thousands) by hunters in the United States, 1961-2002. (Federal Duck Stamp survey - circles and solid line, HIP survey - squares and dashed line).

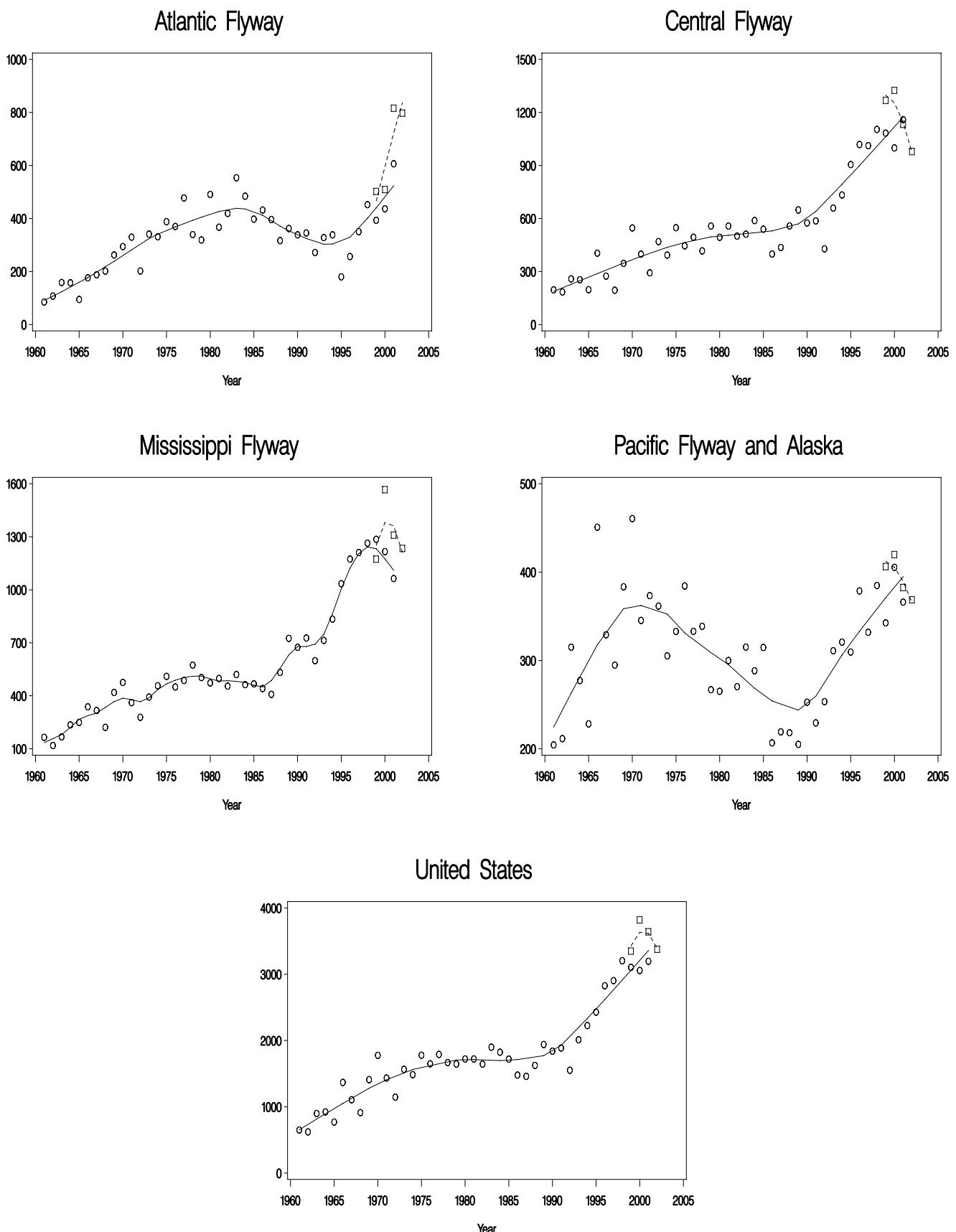


Figure 3. Number of geese harvested (in thousands) by hunters in the United States, 1961-2002. (Federal Duck Stamp survey - circles and solid line, HIP survey - squares and dashed line.)

Table 1A. Estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Connecticut		Delaware		Florida	
	2001	2002	2001	2002	2001	2002
Mallard	10,844	15,070	15,029	20,303	761	587
Domestic Mallard	87	90	206	454	69	685
Black Duck	2,973	2,870	3,157	6,422	69	98
Mallard x Black Duck Hybrid	262	269	137	519	0	0
Mottled Duck	0	0	0	0	6,784	9,489
Gadwall	262	269	1,441	2,984	208	391
Wigeon	612	807	755	1,686	831	293
Green-winged Teal	1,137	628	12,764	10,703	5,953	17,414
Blue-winged/Cinnamon Teal	0	0	686	389	21,527	36,882
Northern Shoveler	0	0	1,029	1,881	4,638	3,522
Northern Pintail	87	90	1,304	2,400	1,384	1,174
Wood Duck	4,460	4,754	5,147	6,357	9,968	10,174
Redhead	0	90	0	65	1,246	98
Canvasback	87	0	0	0	0	0
Greater Scaup	0	0	274	65	969	391
Lesser Scaup	0	0	69	389	15,367	9,098
Ring-necked Duck	175	179	137	130	23,742	34,827
Goldeneyes	87	359	0	65	0	0
Bufflehead	350	538	1,510	2,076	208	489
Ruddy Duck	0	0	69	0	554	978
Long-tailed Duck	5,400	5,581	---	0	0	0
Eiders	0	0	---	0	0	0
Scoters	0	319	---	1,400	0	98
Hooded Merganser	175	269	69	584	1,177	1,370
Other Mergansers	700	718	549	65	69	98
Other Ducks	0	0	69	65	277	2,544
Total Duck Harvest	27,700±24%	32,900±30%	46,900±13% ^c	59,000±14%	95,800±34%	130,700±24%
Percent Change		19%		33%		36%
Total Active Duck Hunters ^a	3,000±14%	2,800±14%	4,400±11%	4,700±10%	6,900±38%	10,300±27%
Percent Change		-7%		7%		49%
Total Duck Hunter Days Afield ^a	19,500±21%	20,000±21%	36,600±12%	36,700±13%	49,700±42%	80,000±34%
Percent Change		3%		0%		61%
Seasonal Duck Harvest Per Hunter ^a	7.4±28%	9.6±33%	10.1±17%	12.3±17%	13.9±51%	12.7±36%
Percent Change		30%		22%		-9%
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Goose Species Composition						
Canada Goose	17,800	20,462	11,244	21,605	700	---
Snow Goose	0	38	20,784	15,092	0	---
Blue Goose	0	0	273	103	0	---
Ross's Goose	0	0	0	0	0	---
White-fronted Goose	0	0	0	0	0	---
Brant	800	1,400	1,100	2,500	0	---
Other Geese	0	0	0	0	0	---
Total Goose Harvest	18,600±29%	21,900±33%	33,400±16%	39,300±35%	700±145%	3,700±127% ^d
Percent Change		18%		18%		429%
Total Active Goose Hunters ^b	2,900±14%	2,800±15%	4,800±9%	4,500±11%	400±137%	1,100±73%
Percent Change		-3%		-6%		175%
Total Goose Hunter Days Afield ^b	17,300±20%	18,400±22%	28,500±14%	29,900±19%	900±138%	3,300±85%
Percent Change		6%		5%		267%
Seasonal Goose Harvest Per Hunter ^b	6.1±32%	7.3±36%	6.7±18%	8.2±36%	1.8±200%	3.4±146%
Percent Change		20%		22%		89%
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Sample Sizes						
Duck Wings	295	338	647	889	1,384	1,336
Goose Tails	460	543	474	367	2	0
Hunters Sampled	544	497	923	1,023	420	748
Responses	384	330	467	462	207	389
Response Rate (%)	70.6%	66.4%	50.6%	45.2%	49.3%	52.0%
Federal Duck Stamps Sold	5,476	6,231	7,052	7,201	18,979	20,219
Percent Change		14%		2%		7%

Table 1A. Estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Georgia		Maine		Maryland	
	2001	2002	2001	2002	2001	2002
Mallard	10,631	14,434	7,839	15,744	69,746	64,311
Domestic Mallard	166	208	188	0	4,118	4,601
Black Duck	166	312	5,868	9,717	14,082	21,294
Mallard x Black Duck Hybrid	0	0	422	861	1,727	1,605
Mottled Duck	166	312	0	0	0	0
Gadwall	3,322	4,569	0	0	3,853	3,745
Wigeon	1,827	623	47	185	5,713	3,745
Green-winged Teal	5,814	6,438	2,723	9,287	26,039	17,656
Blue-winged/Cinnamon Teal	5,149	2,181	469	185	6,111	1,926
Northern Shoveler	498	727	0	62	797	963
Northern Pintail	498	312	94	554	3,454	1,605
Wood Duck	54,151	36,033	7,323	7,319	18,466	14,339
Redhead	332	0	0	0	133	214
Canvasback	166	0	0	0	531	0
Greater Scaup	166	312	0	123	797	3,210
Lesser Scaup	4,651	5,088	0	123	2,657	19,154
Ring-necked Duck	8,139	6,334	610	1,845	1,196	4,173
Goldeneyes	0	0	704	431	399	1,070
Bufflehead	0	1,142	1,925	1,661	11,558	9,310
Ruddy Duck	664	415	0	0	1,196	2,247
Long-tailed Duck	0	0	1,371	2,800	10,744	6,404
Eiders	0	0	17,257	20,600	0	0
Scoters	0	0	5,371	6,400	17,356	7,796
Hooded Merganser	2,325	1,661	1,643	1,415	930	1,819
Other Mergansers	166	0	845	1,292	266	1,712
Other Ducks	0	0	0	0	133	0
Total Duck Harvest	99,000±35%	81,100±47%	54,700±30%	80,600±32%	202,100±14%	192,900±15%
Percent Change		-18%		47%		-5%
Total Active Duck Hunters ^a	12,200±38%	10,800±40%	6,500±26%	6,300±25%	21,500±9%	17,100±8%
Percent Change		-11%		-3%		-20%
Total Duck Hunter Days Afield ^a	85,900±56%	57,600±32%	33,500±29%	38,700±29%	138,700±14%	109,900±11%
Percent Change		-33%		16%		-21%
Seasonal Duck Harvest Per Hunter ^a	8.1±52%	7.5±61%	4.7±40%	8.1±41%	8.1±16%	10.5±17%
Percent Change		-7%		72%		30%
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Goose Species Composition						
Canada Goose	24,400	26,300	5,165	12,800	152,860	114,140
Snow Goose	0	0	35	0	35,340	11,250
Blue Goose	0	0	0	0	0	409
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	0	0	0	0	2,300	1,100
Other Geese	0	0	0	0	0	0
Total Goose Harvest	24,400±49%	26,300±47%	5,200±52%	12,800±41%	190,500±15%	126,900±11%
Percent Change		8%		146%		-33%
Total Active Goose Hunters ^b	11,700±30%	9,100±34%	3,900±35%	4,500±31%	28,400±7%	21,500±6%
Percent Change		-22%		15%		-24%
Total Goose Hunter Days Afield ^b	43,300±38%	45,700±47%	17,200±46%	19,800±42%	186,800±11%	142,000±10%
Percent Change		6%		15%		-24%
Seasonal Goose Harvest Per Hunter ^b	2.1±57%	2.9±58%	1.3±62%	2.8±52%	6.6±16%	5.9±13%
Percent Change		38%		115%		-11%
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Sample Sizes						
Duck Wings	596	781	864	975	1,343	1,721
Goose Tails	55	106	150	227	904	1,272
Hunters Sampled	1,878	1,822	691	1,015	1,872	2,032
Responses	800	878	415	505	966	972
Response Rate (%)	42.6%	48.2%	60.1%	49.8%	51.6%	47.8%
Federal Duck Stamps Sold	23,728	23,348	11,041	10,319	31,569	31,559
Percent Change		-2%		-7%		0%

Table 1A. Estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Massachusetts		New Hampshire		New Jersey	
	2001	2002	2001	2002	2001	2002
Mallard	6,885	9,338	5,877	7,663	15,575	19,623
Domestic Mallard	61	88	37	83	67	759
Black Duck	4,125	4,384	1,684	2,568	13,158	11,855
Mallard x Black Duck Hybrid	516	351	150	497	1,074	1,110
Mottled Duck	0	0	0	0	0	0
Gadwall	121	88	0	0	470	1,226
Wigeon	91	44	0	166	403	1,285
Green-winged Teal	1,335	1,271	711	1,367	11,547	12,381
Blue-winged/Cinnamon Teal	0	0	37	41	201	58
Northern Shoveler	0	0	0	0	1,074	467
Northern Pintail	121	88	37	83	1,343	526
Wood Duck	3,064	2,937	4,155	4,308	4,834	3,913
Redhead	30	0	0	0	0	234
Canvasback	30	0	0	0	0	0
Greater Scaup	0	175	112	41	201	642
Lesser Scaup	0	307	37	124	67	467
Ring-necked Duck	152	219	112	41	269	993
Goldeneyes	61	88	0	207	67	292
Bufflehead	1,881	658	262	249	3,625	9,169
Ruddy Duck	0	0	0	0	403	467
Long-tailed Duck	651	0	459	0	2,343	0
Eiders	13,406	2,362	804	1,400	0	0
Scoters	2,343	1,538	1,837	600	1,757	3,100
Hooded Merganser	273	307	599	414	2,014	3,971
Other Mergansers	455	658	187	207	873	2,161
Other Ducks	0	0	0	41	134	0
Total Duck Harvest	35,600±16%	24,900±19%	17,100±18%	20,100±18%	61,500±16%	74,700±19%
Percent Change		-30%		18%		21%
Total Active Duck Hunters ^a	3,200±9%	3,000±11%	2,900±11%	2,700±13%	6,900±9%	7,200±8%
Percent Change		-6%		-7%		4%
Total Duck Hunter Days Afield ^a	18,800±11%	22,100±15%	17,400±14%	18,100±16%	42,900±11%	46,400±15%
Percent Change		18%		4%		8%
Seasonal Duck Harvest Per Hunter ^a	6.0±18%	7.0±21%	4.8±21%	6.7±22%	8.3±19%	9.9±21%
Percent Change		17%		40%		19%
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Goose Species Composition						
Canada Goose	12,376	13,100	3,809	6,364	22,174	27,906
Snow Goose	24	0	68	36	6,525	4,896
Blue Goose	0	0	23	0	0	49
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	2,100	800	100	0	9,500	9,800
Other Geese	0	0	0	0	0	49
Total Goose Harvest	14,500±26%	13,900±21%	4,000±24%	6,400±21%	38,200±27%	42,700±18%
Percent Change		-4%		60%		12%
Total Active Goose Hunters ^b	2,400±13%	2,300±12%	1,800±15%	2,100±14%	4,300±12%	4,600±11%
Percent Change		-4%		17%		7%
Total Goose Hunter Days Afield ^b	13,600±21%	13,900±17%	8,900±19%	14,100±19%	21,800±16%	25,600±16%
Percent Change		2%		58%		17%
Seasonal Goose Harvest Per Hunter ^b	5.2±29%	5.7±24%	2.2±29%	3.0±26%	6.7±30%	7.2±22%
Percent Change		10%		36%		7%
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Sample Sizes						
Duck Wings	759	550	401	447	862	1,227
Goose Tails	563	372	171	179	633	873
Hunters Sampled	495	520	587	577	737	753
Responses	323	353	364	322	438	411
Response Rate (%)	65.3%	67.9%	62.0%	55.8%	59.4%	54.6%
Federal Duck Stamps Sold	9,164	8,907	5,150	4,789	12,415	12,043
Percent Change		-3%		-7%		-3%

Table 1A. Estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	New York		North Carolina		Pennsylvania	
	2001	2002	2001	2002	2001	2002
Mallard	81,055	108,038	40,770	41,488	125,696	124,569
Domestic Mallard	906	1,019	2,792	1,572	3,092	2,074
Black Duck	18,040	26,264	3,537	4,475	13,760	15,166
Mallard x Black Duck Hybrid	2,224	1,964	745	363	1,546	1,685
Mottled Duck	0	0	372	0	0	0
Gadwall	1,812	2,546	7,260	9,798	1,082	1,555
Wigeon	3,295	3,638	12,473	10,039	1,391	1,555
Green-winged Teal	12,521	15,060	23,643	27,094	7,421	11,796
Blue-winged/Cinnamon Teal	1,400	800	6,888	2,782	1,855	1,296
Northern Shoveler	412	873	3,909	2,540	618	518
Northern Pintail	2,059	4,147	6,143	3,266	618	778
Wood Duck	27,265	26,628	86,380	66,647	72,511	60,923
Redhead	1,153	873	2,606	484	155	0
Canvasback	82	0	186	0	0	0
Greater Scaup	1,565	6,621	1,862	1,451	928	1,815
Lesser Scaup	906	3,638	50,637	29,393	2,165	3,500
Ring-necked Duck	2,636	4,511	8,936	11,128	2,319	1,167
Goldeneyes	3,542	5,966	0	0	309	907
Bufflehead	3,295	11,058	5,213	9,193	4,638	6,352
Ruddy Duck	165	146	2,979	847	464	1,167
Long-tailed Duck	3,989	4,293	0	0	155	259
Eiders	0	195	0	0	0	0
Scoters	15,511	3,512	1,489	484	928	389
Hooded Merganser	741	2,110	2,979	3,871	4,638	4,278
Other Mergansers	2,224	3,201	0	363	1,855	6,352
Other Ducks	0	0	0	121	155	0
Total Duck Harvest	186,800±10%	237,100±10%	271,800±32%	227,400±28%	248,300±33%	248,100±29%
Percent Change		27%		-16%		0%
Total Active Duck Hunters ^a	19,900±6%	20,200±6%	32,900±27%	19,800±32%	34,200±13%	30,200±15%
Percent Change		2%		-40%		-12%
Total Duck Hunter Days Afield ^a	128,600±8%	134,500±9%	165,100±34%	155,100±37%	236,200±25%	177,800±22%
Percent Change		5%		-6%		-25%
Seasonal Duck Harvest Per Hunter ^a	8.4±12%	11.3±12%	8.3±42%	11.5±42%	7.3±35%	8.2±33%
Percent Change		35%		39%		12%
Goose Species Composition						
Canada Goose	95,277	104,985	44,547	50,388	215,062	199,941
Snow Goose	4,970	3,015	354	356	5,769	1,743
Blue Goose	153	0	0	0	0	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	16,400	8,400	5,500	5,700	123	116
Other Geese	0	0	0	356	246	0
Total Goose Harvest	116,800±52%	116,400±15%	50,400±39%	56,800±66%	221,200±16%	201,800±23%
Percent Change		0%		13%		-9%
Total Active Goose Hunters ^b	15,100±7%	15,300±7%	16,400±27%	15,000±31%	44,400±9%	42,600±10%
Percent Change		1%		-9%		-4%
Total Goose Hunter Days Afield ^b	82,700±9%	96,200±11%	55,700±35%	56,400±41%	265,600±13%	242,600±16%
Percent Change		16%		1%		-9%
Seasonal Goose Harvest Per Hunter ^b	6.6±52%	7.1±17%	2.7±48%	3.4±73%	5.0±19%	4.7±25%
Percent Change		8%		26%		-6%
Sample Sizes						
Duck Wings	2,075	3,190	1,460	1,880	1,606	1,914
Goose Tails	1,374	1,684	254	290	1,802	1,737
Hunters Sampled	1,903	1,780	1,670	1,188	1,755	1,623
Responses	1,157	982	1,046	605	1,338	972
Response Rate (%)	60.8%	55.2%	62.6%	50.9%	76.2%	59.9%
Federal Duck Stamps Sold	42,337	39,029	30,929	34,667	52,753	51,475
Percent Change		-8%		12%		-2%

Table 1A. Estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Rhode Island		South Carolina		Vermont	
	2001	2002	2001	2002	2001	2002
Mallard	1,438	988	21,575	27,910	9,221	14,541
Domestic Mallard	13	11	1,895	3,683	32	0
Black Duck	1,033	882	1,895	1,558	1,941	3,216
Mallard x Black Duck Hybrid	170	96	292	567	453	357
Mottled Duck	0	0	1,458	850	0	0
Gadwall	52	32	7,289	2,408	32	110
Wigeon	248	106	5,394	3,825	129	220
Green-winged Teal	327	255	18,222	18,417	1,229	1,924
Blue-winged/Cinnamon Teal	26	11	6,123	5,384	32	55
Northern Shoveler	0	11	3,499	1,983	0	55
Northern Pintail	65	21	437	567	259	302
Wood Duck	261	138	63,122	102,996	2,524	1,732
Redhead	0	11	437	0	32	0
Canvasback	0	0	146	0	0	0
Greater Scaup	157	584	146	850	194	27
Lesser Scaup	65	191	15,453	7,084	65	165
Ring-necked Duck	39	11	13,557	15,584	226	522
Goldeneyes	170	255	0	0	582	2,309
Bufflehead	797	425	1,020	1,275	129	302
Ruddy Duck	39	21	0	142	97	0
Long-tailed Duck	41	0	0	0	65	0
Eiders	1,890	1,091	0	0	32	0
Scoters	1,068	409	0	0	65	55
Hooded Merganser	288	170	5,394	6,092	97	110
Other Mergansers	1,111	1,881	146	283	162	797
Other Ducks	0	0	0	142	0	0
Total Duck Harvest	9,300±35%	7,600±26%	167,500±41%	201,600±45%	17,600±16%	26,800±28%
Percent Change		-18%		20%		52%
Total Active Duck Hunters ^a	1,000±19%	700±15%	15,200±26%	16,600±28%	1,700±27%	2,800±23%
Percent Change		-30%		9%		65%
Total Duck Hunter Days Afield ^a	3,500±25%	4,700±19%	107,800±39%	125,100±38%	13,400±19%	20,800±28%
Percent Change		34%		16%		55%
Seasonal Duck Harvest Per Hunter ^a	6.3±40%	8.7±30%	11.0±49%	12.1±53%	10.4±32%	9.6±33%
Percent Change		38%		10%		-8%
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Goose Species Composition						
Canada Goose	3,800	3,500	16,400	31,400	4,303	7,129
Snow Goose	0	0	0	0	2,151	1,271
Blue Goose	0	0	0	0	0	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	700	600	0	0	246	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	4,500±41%	4,100±23%	16,400±55%	31,400±34%	6,700±22%	8,400±32%
Percent Change		-9%		91%		25%
Total Active Goose Hunters ^b	700±24%	600±20%	5,000±31%	11,400±35%	2,100±22%	2,300±21%
Percent Change		-14%		128%		10%
Total Goose Hunter Days Afield ^b	4,200±33%	4,200±30%	20,500±36%	45,900±39%	9,300±34%	9,100±27%
Percent Change		0%		124%		-2%
Seasonal Goose Harvest Per Hunter ^b	5.4±47%	5.8±30%	3.3±63%	2.8±43%	3.2±31%	3.7±39%
Percent Change		7%		-15%		16%
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Sample Sizes						
Duck Wings	555	607	1,149	1,423	544	975
Goose Tails	315	341	107	80	218	185
Hunters Sampled	222	279	1,475	1,357	479	505
Responses	144	188	703	577	292	302
Response Rate (%)	64.9%	67.4%	47.7%	42.5%	61.0%	59.8%
Federal Duck Stamps Sold	1,645	1,645	23,497	23,326	4,825	5,172
Percent Change		0%		-1%		7%

Table 1A. Estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Virginia		West Virginia		Flyway Total	
	2001	2002	2001	2002	2001	2002
Mallard	42,573	66,214	1,548	3,883	467,064	554,703
Domestic Mallard	843	964	0	76	14,574	16,367
Black Duck	8,957	16,929	113	609	94,559	128,620
Mallard x Black Duck Hybrid	1,686	2,143	16	114	11,420	12,501
Mottled Duck	0	0	0	0	8,780	10,651
Gadwall	5,901	12,214	0	0	33,107	41,936
Wigeon	3,477	4,821	32	38	36,719	33,078
Green-winged Teal	10,854	6,214	0	343	142,239	158,248
Blue-winged/Cinnamon Teal	948	429	145	152	51,601	52,570
Northern Shoveler	632	536	0	0	17,107	14,138
Northern Pintail	1,370	1,179	0	0	19,276	17,089
Wood Duck	20,970	21,536	1,081	2,208	385,682	372,941
Redhead	0	214	16	0	6,141	2,282
Canvasback	316	0	0	0	1,546	0
Greater Scaup	211	1,500	0	0	7,582	17,809
Lesser Scaup	5,058	5,679	32	0	97,228	84,399
Ring-necked Duck	4,320	10,071	16	0	66,583	91,736
Goldeneyes	105	429	0	0	6,027	12,377
Bufflehead	3,583	7,179	0	0	39,993	61,074
Ruddy Duck	0	750	0	0	6,629	7,180
Long-tailed Duck	12,600	867	0	0	37,818	20,204
Eiders	0	0	0	0	33,390	25,648
Scoters	0	12,133	0	0	47,726	38,233
Hooded Merganser	3,267	4,500	0	38	26,608	32,978
Other Mergansers	422	1,500	0	38	10,029	21,325
Other Ducks	105	0	0	0	873	2,912
Total Duck Harvest	128,200±14%	178,000±16%	3,000±45%	7,500±42%	1,672,800±10% ^c	1,831,000±9%
Percent Change		39%		150%		9%
Total Active Duck Hunters ^a	18,000±11%	19,300±10%	600±38%	700±30%		
Percent Change		7%		17%		
Total Duck Hunter Days Afield ^a	88,500±12%	109,000±12%	2,400±29%	5,700±40%	1,187,400±9%	1,162,300±8%
Percent Change		23%		138%		-2%
Seasonal Duck Harvest Per Hunter ^a	6.4±17%	8.5±19%	5.0±59%	10.7±51%		
Percent Change		33%		114%		
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Goose Species Composition						
Canada Goose	53,088	71,470	4,900	5,200	687,904	716,689
Snow Goose	1,333	1,036	0	0	77,354	38,734
Blue Goose	0	0	0	0	448	561
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	11,200	6,800	0	0	50,069	37,216
Other Geese	78	94	0	0	324	499
Total Goose Harvest	65,700±13%	79,400±25%	4,900±43%	5,200±49%	816,100±10%	797,400±9% ^d
Percent Change		21%		6%		-2%
Total Active Goose Hunters ^b	16,500±10%	17,100±10%	1,100±33%	800±32%		
Percent Change		4%		-27%		
Total Goose Hunter Days Afield ^b	74,500±13%	79,700±14%	5,000±47%	5,900±42%	855,800±6%	852,900±7%
Percent Change		7%		18%		0%
Seasonal Goose Harvest Per Hunter ^b	3.3±16%	4.2±27%	4.5±54%	6.5±59%		
Percent Change		27%		44%		
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Sample Sizes						
Duck Wings	1,099	1,555	186	197	15,825	20,005
Goose Tails	715	812	181	188	8,378	9,256
Hunters Sampled	1,663	1,783	192	218	17,506	17,720
Responses	973	995	130	141	10,147	9,384
Response Rate (%)	58.5%	55.8%	67.7%	64.7%	58.0%	53.0%
Federal Duck Stamps Sold	23,432	24,090	2,029	1,817	306,021	305,837
Percent Change		3%		-10%		0%

Table 1B. Estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Alabama		Arkansas		Illinois	
	2001	2002	2001	2002	2001	2002
Mallard	54,709	55,868	751,335	575,305	225,268	220,603
Domestic Mallard	2,304	426	0	462	998	1,049
Black Duck	576	0	1,202	462	748	3,410
Mallard x Black Duck Hybrid	576	0	801	0	0	787
Mottled Duck	0	0	0	462	0	0
Gadwall	39,160	43,074	254,051	211,809	26,194	24,919
Wigeon	4,607	1,706	43,277	43,472	6,237	8,394
Green-winged Teal	6,911	3,838	134,239	107,754	25,944	23,346
Blue-winged/Cinnamon Teal	12,094	5,971	14,025	12,487	15,966	9,443
Northern Shoveler	2,304	2,985	70,125	39,309	14,469	4,459
Northern Pintail	576	1,279	24,043	20,811	6,486	525
Wood Duck	52,981	67,383	57,302	88,331	43,407	36,986
Redhead	0	0	1,603	0	1,247	1,049
Canvasback	576	0	401	0	0	0
Greater Scaup	0	426	0	0	0	787
Lesser Scaup	576	1,279	18,433	6,474	7,235	9,968
Ring-necked Duck	11,518	19,618	27,649	19,423	11,974	11,804
Goldeneyes	2,879	0	801	462	998	787
Bufflehead	2,879	1,279	4,007	1,850	5,239	3,410
Ruddy Duck	0	0	801	0	1,247	0
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	0	262
Hooded Merganser	576	4,265	3,206	7,862	3,493	1,312
Other Mergansers	0	0	0	0	249	0
Other Ducks	0	0	401	462	0	0
Total Duck Harvest	195,800±39%	209,400±45%	1,407,700±13%	1,137,200±13%	397,400±13%	363,300±14%
Percent Change		7%		-19%		-9%
Total Active Duck Hunters	14,200±25%	14,800±24%	87,000±8%	81,700±9%	33,500±8%	33,500±9%
Percent Change		4%		-6%		0%
Total Duck Hunter Days Afield	117,800±35%	101,600±25%	722,500±11%	682,100±12%	335,000±10%	302,300±11%
Percent Change		-14%		-6%		-10%
Seasonal Duck Harvest Per Hunter	13.8±47%	14.1±51%	16.2±15%	13.9±15%	11.9±13%	10.8±16%
Percent Change		2%		-14%		-9%
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Goose Species Composition						
Canada Goose	13,147	16,800	7,816	12,302	63,920	73,164
Snow Goose	876	0	85,979	73,811	0	0
Blue Goose	0	0	63,507	43,569	340	454
Ross's Goose	0	0	14,655	13,840	0	0
White-fronted Goose	876	0	31,265	23,579	340	682
Brant	0	0	0	0	0	0
Other Geese	0	0	977	0	0	0
Total Goose Harvest	14,900±48%	16,800±44%	204,200±32%	167,100±35%	64,600±19%	74,300±21%
Percent Change		13%		-18%		15%
Total Active Goose Hunters	6,700±32%	7,400±30%	24,400±15%	19,800±17%	27,500±9%	26,000±10%
Percent Change		10%		-19%		-5%
Total Goose Hunter Days Afield	38,400±42%	36,400±40%	120,500±26%	95,500±25%	222,500±13%	205,700±14%
Percent Change		-5%		-21%		-8%
Seasonal Goose Harvest Per Hunter	2.2±57%	2.3±54%	8.4±35%	8.4±39%	2.3±21%	2.9±24%
Percent Change		5%		0%		26%
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Sample Sizes						
Duck Wings	340	491	3,513	2,459	1,593	1,385
Goose Tails	17	15	209	326	190	327
Hunters Sampled	1,018	1,049	2,637	2,508	1,364	1,226
Responses	556	540	1,287	1,093	810	743
Response Rate (%)	54.6%	51.5%	48.8%	43.6%	59.4%	60.6%
Federal Duck Stamps Sold	17,918	16,420	66,143	61,854	56,843	52,891
Percent Change		-8%		-6%		-7%

Table 1B. Estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Indiana		Iowa		Kentucky	
	2001	2002	2001	2002	2001	2002
Mallard	73,006	86,284	117,161	97,172	120,915	80,929
Domestic Mallard	384	514	291	188	1,296	324
Black Duck	3,458	3,338	291	0	5,182	5,179
Mallard x Black Duck Hybrid	384	514	0	0	1,296	0
Mottled Duck	0	0	0	0	0	0
Gadwall	6,532	7,961	12,241	19,885	12,523	9,711
Wigeon	768	770	4,372	6,003	2,159	1,619
Green-winged Teal	6,724	7,961	29,727	42,958	7,341	3,885
Blue-winged/Cinnamon Teal	4,995	1,798	49,254	50,649	3,455	3,885
Northern Shoveler	768	0	10,492	2,626	2,591	1,295
Northern Pintail	961	257	6,703	6,003	2,159	647
Wood Duck	13,256	22,085	45,465	44,459	31,524	22,336
Redhead	961	514	3,206	2,251	0	0
Canvasback	0	0	1,457	0	0	0
Greater Scaup	0	0	583	563	0	324
Lesser Scaup	576	1,798	8,160	6,378	1,296	5,827
Ring-necked Duck	4,611	2,311	3,497	4,127	2,159	1,295
Goldeneyes	192	0	0	938	1,296	0
Bufflehead	768	257	874	1,126	2,159	2,913
Ruddy Duck	0	257	291	563	0	0
Long-tailed Duck	0	0	0	188	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	0	0
Hooded Merganser	961	1,027	2,332	563	4,750	4,532
Other Mergansers	192	257	0	563	0	0
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	119,500±16%	137,900±30%	296,400±13%	287,200±13%	202,100±32%	144,700±30%
Percent Change		15%		-3%		-28%
Total Active Duck Hunters	18,100±14%	16,700±14%	25,000±8%	23,300±9%	22,800±23%	15,000±27%
Percent Change		-8%		-7%		-34%
Total Duck Hunter Days Afield	114,400±13%	121,600±18%	203,500±10%	185,700±13%	234,100±30%	158,000±32%
Percent Change		6%		-9%		-33%
Seasonal Duck Harvest Per Hunter	6.6±21%	8.3±33%	11.9±15%	12.3±16%	8.9±39%	9.6±41%
Percent Change		26%		3%		8%
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Goose Species Composition						
Canada Goose	47,300	59,700	58,148	67,059	25,151	21,722
Snow Goose	0	0	3,680	1,141	762	0
Blue Goose	0	0	1,472	0	762	472
Ross's Goose	0	0	0	0	0	472
White-fronted Goose	0	0	0	0	1,524	2,833
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	47,300±18%	59,700±16%	63,300±23%	68,200±19%	28,200±38%	25,500±37%
Percent Change		26%		8%		-10%
Total Active Goose Hunters	15,900±13%	16,800±11%	15,900±10%	16,100±10%	14,700±28%	13,100±28%
Percent Change		6%		1%		-11%
Total Goose Hunter Days Afield	99,600±18%	112,200±16%	104,100±15%	113,600±14%	94,200±29%	138,900±43%
Percent Change		13%		9%		47%
Seasonal Goose Harvest Per Hunter	3.0±22%	3.6±20%	4.0±25%	4.2±21%	1.9±47%	1.9±46%
Percent Change		20%		5%		0%
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Sample Sizes						
Duck Wings	622	537	1,017	1,531	468	447
Goose Tails	258	145	172	239	37	54
Hunters Sampled	822	845	1,042	965	514	461
Responses	520	527	735	551	275	207
Response Rate (%)	63.3%	62.4%	70.5%	57.1%	53.5%	44.9%
Federal Duck Stamps Sold	29,279	29,023	31,771	30,806	20,099	18,078
Percent Change		-1%		-3%		-10%

Table 1B. Estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Louisiana		Michigan		Minnesota	
	2001	2002	2001	2002	2001	2002
Mallard	120,038	105,518	94,314	200,400	328,231	278,399
Domestic Mallard	0	0	444	527	666	0
Black Duck	0	414	5,034	9,744	333	1,862
Mallard x Black Duck Hybrid	357	0	888	2,107	333	0
Mottled Duck	28,895	22,512	0	0	0	0
Gadwall	290,732	182,998	2,961	6,320	17,328	47,486
Wigeon	44,056	27,622	4,442	5,530	16,661	22,812
Green-winged Teal	170,337	115,185	14,510	46,084	50,318	79,144
Blue-winged/Cinnamon Teal	271,647	161,729	3,701	3,423	131,292	130,820
Northern Shoveler	62,070	29,694	2,813	2,370	15,995	11,173
Northern Pintail	28,716	15,192	3,998	13,430	10,663	18,622
Wood Duck	65,994	66,984	21,172	40,554	106,300	135,010
Redhead	3,567	691	6,663	3,687	20,660	13,967
Canvasback	535	138	740	0	4,332	466
Greater Scaup	1,070	1,381	1,777	11,060	1,999	5,587
Lesser Scaup	56,006	52,621	6,515	16,590	36,988	49,814
Ring-necked Duck	40,667	33,837	4,146	16,590	85,973	94,972
Goldeneyes	178	0	3,405	9,744	8,331	16,294
Bufflehead	2,140	967	7,847	20,540	11,330	19,553
Ruddy Duck	0	138	1,184	527	666	2,328
Long-tailed Duck	0	0	148	263	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	296	527	1,000	0
Hooded Merganser	4,816	2,348	2,221	4,213	5,998	12,570
Other Mergansers	1,070	276	1,481	2,370	0	3,724
Other Ducks	1,605	552	0	0	0	0
Total Duck Harvest	1,194,500±16%	820,800±16%	190,700±21%	416,600±25%	855,400±9%	944,600±9%
Percent Change		-31%		118%		10%
Total Active Duck Hunters	55,400±12%	57,600±13%	27,900±15%	39,700±11%	91,300±7%	87,500±7%
Percent Change		4%		42%		-4%
Total Duck Hunter Days Afield	505,800±19%	421,100±15%	157,400±16%	269,000±16%	572,700±8%	599,800±10%
Percent Change		-17%		71%		5%
Seasonal Duck Harvest Per Hunter	21.6±20%	14.3±21%	6.8±26%	10.5±27%	9.4±11%	10.8±11%
Percent Change		-34%		54%		15%
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Goose Species Composition						
Canada Goose	4,549	0	86,935	102,100	243,574	235,604
Snow Goose	39,126	15,512	165	0	361	0
Blue Goose	52,774	24,375	0	0	2,165	4,197
Ross's Goose	5,459	4,432	0	0	0	0
White-fronted Goose	71,882	80,881	0	0	0	0
Brant	0	0	0	0	0	0
Other Geese	910	0	0	0	0	0
Total Goose Harvest	174,700±36%	125,200±46%	87,100±23%	102,100±20%	246,100±15%	239,800±12%
Percent Change		-28%		17%		-3%
Total Active Goose Hunters	20,100±19%	14,700±24%	22,100±16%	28,400±12%	67,200±8%	66,300±8%
Percent Change		-27%		29%		-1%
Total Goose Hunter Days Afield	114,300±34%	103,600±37%	113,900±19%	139,500±14%	415,500±10%	425,200±11%
Percent Change		-9%		22%		2%
Seasonal Goose Harvest Per Hunter	8.7±41%	8.5±52%	3.9±28%	3.6±23%	3.7±17%	3.6±15%
Percent Change		-2%		-8%		-3%
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Sample Sizes						
Duck Wings	6,697	5,943	1,288	1,582	2,567	2,029
Goose Tails	192	113	528	606	682	400
Hunters Sampled	1,464	1,306	994	1,760	2,084	2,129
Responses	647	550	547	998	1,314	1,266
Response Rate (%)	44.2%	42.1%	55.0%	56.7%	63.1%	59.5%
Federal Duck Stamps Sold	106,304	96,092	62,722	65,334	140,980	144,851
Percent Change		-10%		4%		3%

Table 1B. Estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Mississippi		Missouri		Ohio	
	2001	2002	2001	2002	2001	2002
Mallard	129,433	98,569	323,648	130,324	70,056	94,613
Domestic Mallard	0	278	648	0	0	1,358
Black Duck	0	139	0	172	5,040	11,317
Mallard x Black Duck Hybrid	0	139	0	172	756	905
Mottled Duck	1,632	139	0	0	0	0
Gadwall	39,156	31,098	67,710	34,902	8,064	9,959
Wigeon	6,526	5,414	10,043	5,674	2,772	453
Green-winged Teal	18,762	18,742	41,144	19,256	4,788	12,675
Blue-winged/Cinnamon Teal	6,254	5,970	41,468	12,723	13,860	10,412
Northern Shoveler	7,886	10,412	24,622	7,737	1,260	4,527
Northern Pintail	4,079	4,581	16,847	4,814	756	2,263
Wood Duck	53,024	53,172	14,903	6,877	21,420	24,898
Redhead	816	139	1,620	860	504	453
Canvasback	0	0	0	0	252	0
Greater Scaup	272	139	324	172	0	1,811
Lesser Scaup	3,263	4,304	7,451	1,032	6,048	3,622
Ring-necked Duck	1,632	4,304	4,860	3,439	2,772	5,432
Goldeneyes	272	0	648	172	756	905
Bufflehead	816	278	324	516	3,528	5,432
Ruddy Duck	0	139	0	0	0	453
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	0	0
Hooded Merganser	4,079	8,607	3,240	860	1,764	1,358
Other Mergansers	0	0	0	0	252	453
Other Ducks	0	139	0	0	252	0
Total Duck Harvest	277,900±38%	246,700±30%	559,500±41%	229,700±14%	144,900±22%	193,300±42%
Percent Change		-11%		-59%		33%
Total Active Duck Hunters	15,500±17%	14,500±24%	33,100±14%	21,800±26%	19,700±22%	25,400±23%
Percent Change		-6%		-34%		29%
Total Duck Hunter Days Afield	142,300±32%	112,000±23%	294,400±25%	156,500±15%	161,700±23%	189,600±27%
Percent Change		-21%		-47%		17%
Seasonal Duck Harvest Per Hunter	17.9±41%	17.0±39%	16.9±43%	10.5±29%	7.4±32%	7.6±47%
Percent Change		-5%		-38%		3%
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Goose Species Composition						
Canada Goose	5,400	9,237	79,500	25,165	104,700	103,747
Snow Goose	1,080	1,776	42,000	16,412	0	0
Blue Goose	540	1,421	19,500	12,309	0	0
Ross's Goose	540	355	4,000	1,915	0	0
White-fronted Goose	540	711	2,500	0	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	353
Total Goose Harvest	8,100±33%	13,500±77%	147,500±45%	55,800±28%	104,700±16%	104,100±22%
Percent Change		67%		-62%		-1%
Total Active Goose Hunters	4,600±28%	3,200±54%	18,300±16%	12,900±20%	30,100±16%	28,200±17%
Percent Change		-30%		-30%		-6%
Total Goose Hunter Days Afield	16,000±41%	14,200±71%	109,200±30%	75,000±24%	204,800±18%	188,400±17%
Percent Change		-11%		-31%		-8%
Seasonal Goose Harvest Per Hunter	1.8±43%	4.2±94%	8.1±47%	4.3±34%	3.5±22%	3.7±28%
Percent Change		133%		-47%		6%
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Sample Sizes						
Duck Wings	1,022	1,777	1,727	1,336	575	427
Goose Tails	15	38	295	204	313	295
Hunters Sampled	1,123	375	1,175	1,087	1,046	1,218
Responses	616	232	622	596	635	677
Response Rate (%)	54.9%	61.9%	52.9%	54.8%	60.7%	55.6%
Federal Duck Stamps Sold	25,598	24,955	40,828	39,484	36,902	30,957
Percent Change		-3%		-3%		-16%

Table 1B. Estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Tennessee		Wisconsin		Flyway Total	
	2001	2002	2001	2002	2001	2002
Mallard	212,361	172,580	147,558	226,572	2,768,031	2,423,134
Domestic Mallard	0	1,997	335	0	7,367	7,123
Black Duck	6,088	5,193	2,683	6,233	30,636	47,465
Mallard x Black Duck Hybrid	358	399	1,341	623	7,091	5,646
Mottled Duck	0	0	0	0	30,526	23,114
Gadwall	45,838	25,967	6,036	17,764	828,527	673,853
Wigeon	12,534	5,193	10,731	12,778	169,185	147,440
Green-winged Teal	23,635	19,575	38,902	47,995	573,282	548,398
Blue-winged/Cinnamon Teal	8,237	799	35,548	41,138	611,796	451,246
Northern Shoveler	9,311	5,193	7,043	6,856	231,748	128,638
Northern Pintail	12,176	4,394	4,360	9,661	122,522	102,481
Wood Duck	54,075	39,949	52,316	71,369	633,140	720,392
Redhead	716	399	9,055	4,986	50,617	28,995
Canvasback	358	0	2,683	0	11,334	604
Greater Scaup	358	799	1,677	7,168	8,060	30,216
Lesser Scaup	7,162	4,794	6,036	20,881	165,746	185,381
Ring-necked Duck	6,804	11,985	18,445	21,192	226,706	250,330
Goldeneyes	716	0	2,012	8,103	22,485	37,405
Bufflehead	1,791	4,394	15,762	19,011	59,465	81,526
Ruddy Duck	0	0	0	312	4,191	4,715
Long-tailed Duck	0	0	0	0	148	451
Eiders	0	0	0	0	0	0
Scoters	0	1,198	1,341	623	2,637	2,611
Hooded Merganser	3,581	6,791	2,348	3,740	43,362	60,048
Other Mergansers	0	1,198	3,689	2,493	6,933	11,335
Other Ducks	0	399	0	0	2,258	1,553
Total Duck Harvest	406,100±54%	313,200±28%	369,900±13%	529,500±12%	6,617,800±7%	5,974,100±5%
Percent Change		-23%		43%		-10%
Total Active Duck Hunters	26,600±43%	22,500±49%	62,100±9%	70,500±9%		
Percent Change		-15%		14%		
Total Duck Hunter Days Afield	281,400±48%	242,500±42%	422,000±13%	462,800±9%	4,265,100±6%	4,004,600±5%
Percent Change		-14%		10%		-6%
Seasonal Duck Harvest Per Hunter	15.3±69%	13.9±56%	6.0±16%	7.5±15%		
Percent Change		-9%		25%		
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Goose Species Composition						
Canada Goose	53,900	73,892	64,382	105,861	858,422	906,351
Snow Goose	0	1,508	0	339	174,029	110,499
Blue Goose	0	0	418	0	141,479	86,797
Ross's Goose	0	0	0	0	24,655	21,014
White-fronted Goose	0	0	0	0	108,928	108,685
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	1,887	353
Total Goose Harvest	53,900±51%	75,400±52%	64,800±15%	106,200±15%	1,309,400±10%	1,233,700±9%
Percent Change		40%		64%		-6%
Total Active Goose Hunters	30,400±31%	38,900±31%	50,600±9%	61,800±8%		
Percent Change		28%		22%		
Total Goose Hunter Days Afield	234,400±43%	431,500±46%	270,200±13%	336,100±11%	2,157,800±7%	2,415,900±9%
Percent Change		84%		24%		12%
Seasonal Goose Harvest Per Hunter	1.8±60%	1.9±61%	1.3±18%	1.7±17%		
Percent Change		6%		31%		
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Sample Sizes						
Duck Wings	1,134	784	1,103	1,699	23,666	22,427
Goose Tails	97	50	155	313	3,160	3,125
Hunters Sampled	1,201	1,168	2,338	2,276	18,822	18,373
Responses	500	479	1,602	1,523	10,666	9,982
Response Rate (%)	41.6%	41.0%	68.5%	66.9%	56.7%	54.3%
Federal Duck Stamps Sold	34,739	35,904	73,031	72,445	743,157	719,094
Percent Change		3%		-1%		-3%

Table 1C. Estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Colorado		Kansas		Nebraska	
	2001	2002	2001	2002	2001	2002
Mallard	93,092	51,856	96,280	96,063	131,487	114,096
Domestic Mallard	70	0	0	0	0	0
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	0	0	0	0	0	0
Mottled Duck	0	0	0	0	0	0
Gadwall	8,712	5,538	18,868	37,731	13,286	21,498
Wigeon	9,906	10,184	6,172	13,444	6,261	15,169
Green-winged Teal	9,836	10,184	21,513	36,322	19,395	33,596
Blue-winged/Cinnamon Teal	4,215	4,913	11,638	12,577	21,685	16,938
Northern Shoveler	1,405	2,010	3,350	3,903	4,276	4,560
Northern Pintail	1,897	1,742	7,230	4,771	6,719	4,281
Wood Duck	2,037	1,295	3,879	3,253	2,291	3,536
Redhead	422	581	2,821	2,927	1,985	1,861
Canvasback	141	0	529	0	305	0
Greater Scaup	0	45	176	217	0	745
Lesser Scaup	422	1,563	882	2,060	916	3,536
Ring-necked Duck	1,194	1,072	2,645	5,204	2,291	3,071
Goldeneyes	1,265	1,742	882	542	153	838
Bufflehead	632	804	529	1,084	1,222	745
Ruddy Duck	70	268	0	0	305	186
Long-tailed Duck	0	45	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	0	93
Hooded Merganser	141	179	705	1,301	764	465
Other Mergansers	773	581	0	0	458	93
Other Ducks	70	0	0	0	0	93
Total Duck Harvest	136,300±18%	94,600±14%	178,100±18%	221,400±16%	213,800±11%	225,400±10%
Percent Change		-31%		24%		5%
Total Active Duck Hunters	17,500±12%	12,200±14%	16,600±14%	15,700±13%	18,000±9%	17,200±9%
Percent Change		-30%		-5%		-4%
Total Duck Hunter Days Afield	113,700±16%	68,700±19%	100,600±14%	106,700±14%	142,000±10%	141,400±12%
Percent Change		-40%		6%		0%
Seasonal Duck Harvest Per Hunter	7.8±21%	7.8±20%	10.7±23%	14.1±20%	11.9±14%	13.1±14%
Percent Change				32%		10%
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Goose Species Composition						
Canada Goose	59,689	64,237	71,793	96,211	84,167	60,771
Snow Goose	7,658	10,900	6,837	21,647	11,573	9,384
Blue Goose	450	1,082	2,486	4,123	2,735	5,094
Ross's Goose	1,877	1,498	622	4,467	1,894	536
White-fronted Goose	225	83	4,662	10,652	631	715
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	69,900±14%	77,800±15%	86,400±27%	137,100±42%	101,000±16%	76,500±16%
Percent Change		11%		59%		-24%
Total Active Goose Hunters	16,700±12%	15,300±12%	15,700±13%	14,500±13%	17,800±9%	15,500±9%
Percent Change		-8%		-8%		-13%
Total Goose Hunter Days Afield	102,900±15%	85,100±15%	87,500±18%	83,600±15%	143,600±12%	129,900±13%
Percent Change		-17%		-4%		-10%
Seasonal Goose Harvest Per Hunter	4.2±18%	5.1±19%	5.5±30%	9.5±44%	5.7±18%	4.9±19%
Percent Change		21%		73%		-14%
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Sample Sizes						
Duck Wings	1,940	2,118	1,010	2,042	1,400	2,422
Goose Tails	931	935	278	399	480	856
Hunters Sampled	1,270	1,131	1,092	1,101	1,457	1,387
Responses	763	657	672	651	926	892
Response Rate (%)	60.1%	58.1%	61.5%	59.1%	63.6%	64.3%
Federal Duck Stamps Sold	34,519	31,297	29,590	26,345	33,829	32,000
Percent Change		-9%		-11%		-5%

Table 1C. Estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	New Mexico		North Dakota		Oklahoma	
	2001	2002	2001	2002	2001	2002
Mallard	26,324	44,509	243,380	234,019	102,371	102,160
Domestic Mallard	0	0	0	372	0	0
Black Duck	0	0	0	248	0	0
Mallard x Black Duck Hybrid	0	0	0	0	0	0
Mottled Duck	0	0	0	0	0	0
Gadwall	7,357	9,385	83,302	101,338	28,489	34,186
Wigeon	7,817	8,888	24,574	32,086	8,038	11,898
Green-winged Teal	7,472	7,181	13,467	34,688	16,077	21,812
Blue-winged/Cinnamon Teal	2,759	3,342	34,154	43,731	11,703	2,617
Northern Shoveler	2,414	2,773	18,049	20,069	1,537	3,252
Northern Pintail	2,759	1,849	21,381	17,716	4,137	1,745
Wood Duck	1,264	1,920	1,111	2,106	1,537	2,617
Redhead	805	213	14,022	5,946	2,246	2,142
Canvasback	0	0	4,998	124	236	0
Greater Scaup	115	0	139	124	0	159
Lesser Scaup	230	569	23,602	26,264	473	3,411
Ring-necked Duck	805	1,849	6,803	6,070	3,665	7,376
Goldeneyes	0	569	694	619	236	397
Bufflehead	230	924	2,221	2,973	473	397
Ruddy Duck	0	0	1,250	619	236	79
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	248	0	0
Hooded Merganser	115	71	278	619	946	872
Other Mergansers	230	782	0	496	0	79
Other Ducks	805	4,977	278	124	0	0
Total Duck Harvest	61,500±43%	89,800±62%	493,700±9%	530,600±9%	182,400±34%	195,200±35%
Percent Change		46%	7%	7%		7%
Total Active Duck Hunters	5,000±20%	4,800±48%	36,400±6%	34,700±6%	11,300±32%	12,800±28%
Percent Change		-4%	-5%			13%
Total Duck Hunter Days Afield	30,100±25%	33,500±38%	186,500±7%	188,200±8%	77,600±38%	92,200±35%
Percent Change		11%	1%			19%
Seasonal Duck Harvest Per Hunter	12.3±47%	18.7±68%	13.6±11%	15.3±11%	16.1±47%	15.3±45%
Percent Change		52%	13%			-5%
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Goose Species Composition						
Canada Goose	3,548	3,771	121,254	112,535	15,983	21,756
Snow Goose	7,741	6,869	22,705	9,876	4,732	2,974
Blue Goose	323	0	20,169	10,873	1,998	1,190
Ross's Goose	11,289	2,424	3,019	544	1,367	1,530
White-fronted Goose	0	135	1,932	272	421	850
Brant	0	0	0	0	0	0
Other Geese	0	0	121	0	0	0
Total Goose Harvest	22,900±43%	13,200±58%	169,200±17%	134,100±15%	24,500±31%	28,300±38%
Percent Change		-42%	-21%			16%
Total Active Goose Hunters	3,400±22%	3,400±28%	26,700±7%	24,300±8%	7,500±30%	5,500±34%
Percent Change		0%	-9%			-27%
Total Goose Hunter Days Afield	15,800±30%	20,600±54%	132,400±9%	121,700±11%	30,000±37%	22,400±36%
Percent Change		30%	-8%			-25%
Seasonal Goose Harvest Per Hunter	6.7±48%	3.9±65%	6.3±19%	5.5±17%	3.3±44%	5.1±51%
Percent Change		-42%	-13%			55%
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Sample Sizes						
Duck Wings	535	1,263	3,556	4,283	1,543	2,461
Goose Tails	71	98	1,401	1,480	233	333
Hunters Sampled	921	604	1,059	959	776	767
Responses	664	354	725	707	379	391
Response Rate (%)	72.1%	58.6%	68.5%	73.7%	48.8%	51.0%
Federal Duck Stamps Sold	5,449	5,114	34,516	30,359	22,419	21,770
Percent Change		-6%	-12%			-3%

Table 1C. Estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	South Dakota		Texas		Wyoming	
	2001	2002	2001	2002	2001	2002
Mallard	126,237	116,388	303,398	219,889	28,799	24,401
Domestic Mallard	0	0	345	206	0	0
Black Duck	0	0	0	206	0	0
Mallard x Black Duck Hybrid	0	0	345	0	0	0
Mottled Duck	0	0	14,497	6,994	0	0
Gadwall	23,638	36,482	305,469	154,683	2,376	2,730
Wigeon	9,958	14,565	129,091	80,427	3,612	3,967
Green-winged Teal	18,307	25,864	218,143	123,418	3,849	3,413
Blue-winged/Cinnamon Teal	20,017	21,100	266,811	102,025	428	2,176
Northern Shoveler	13,277	9,393	86,291	39,082	285	1,109
Northern Pintail	10,159	9,257	79,733	18,513	665	597
Wood Duck	2,917	4,901	95,955	60,886	570	299
Redhead	5,935	953	64,200	13,370	143	512
Canvasback	302	0	7,248	1,028	95	0
Greater Scaup	0	408	1,381	1,851	0	43
Lesser Scaup	2,917	4,492	42,110	42,373	95	427
Ring-necked Duck	3,420	4,084	58,333	41,756	48	427
Goldeneyes	201	136	1,381	1,234	808	2,304
Bufflehead	1,308	1,497	7,248	2,468	190	256
Ruddy Duck	704	136	1,381	617	0	0
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	0	0
Hooded Merganser	201	0	6,213	5,965	0	85
Other Mergansers	201	408	690	1,028	238	256
Other Ducks	0	136	11,736	6,377	0	0
Total Duck Harvest	239,700±14%	250,200±14%	1,701,200±23%	924,400±25%	42,200±28%	43,000±20%
Percent Change		4%		-46%		2%
Total Active Duck Hunters	18,200±9%	19,100±9%	140,700±17%	95,000±23%	4,200±16%	4,400±15%
Percent Change		5%		-32%		5%
Total Duck Hunter Days Afield	123,100±12%	123,200±11%	727,900±20%	510,400±27%	26,500±38%	26,200±17%
Percent Change		0%		-30%		-1%
Seasonal Duck Harvest Per Hunter	13.2±17%	13.1±17%	12.1±28%	9.7±34%	10.0±32%	9.8±25%
Percent Change		-1%		-20%		-2%
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Goose Species Composition						
Canada Goose	131,226	128,170	124,492	83,801	14,900	16,000
Snow Goose	10,744	12,801	187,860	133,822	0	0
Blue Goose	7,674	10,370	49,348	27,284	0	0
Ross's Goose	1,535	648	47,666	33,780	0	0
White-fronted Goose	921	810	82,434	63,663	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	650	0	0
Total Goose Harvest	152,100±13%	152,800±16%	491,800±25%	343,000±28%	14,900±20%	16,000±49%
Percent Change		0%		-30%		7%
Total Active Goose Hunters	21,100±7%	22,000±8%	76,200±19%	63,300±23%	3,700±16%	4,000±16%
Percent Change		4%		-17%		8%
Total Goose Hunter Days Afield	139,200±10%	145,400±11%	251,200±25%	197,800±30%	22,500±21%	21,700±21%
Percent Change		4%		-21%		-4%
Seasonal Goose Harvest Per Hunter	7.2±15%	6.9±18%	6.5±31%	5.4±36%	4.0±26%	4.0±52%
Percent Change		-4%		-17%		0%
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Sample Sizes						
Duck Wings	2,383	1,838	4,931	4,494	888	1,008
Goose Tails	991	943	877	528	218	242
Hunters Sampled	1,171	1,348	3,282	3,025	655	619
Responses	893	866	1,377	1,211	423	384
Response Rate (%)	76.3%	64.2%	42.0%	40.0%	64.6%	62.0%
Federal Duck Stamps Sold	33,466	30,851	149,898	138,075	10,652	7,837
Percent Change		-8%		-8%		-26%

Table 1C. Estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Flyway Total	
	2001	2002
Mallard	1,151,367	1,003,381
Domestic Mallard	415	577
Black Duck	0	453
Mallard x Black Duck Hybrid	345	0
Mottled Duck	14,497	6,994
Gadwall	491,497	403,572
Wigeon	205,429	190,629
Green-winged Teal	328,059	296,477
Blue-winged/Cinnamon Teal	373,410	209,419
Northern Shoveler	130,884	86,152
Northern Pintail	134,680	60,469
Wood Duck	111,562	80,813
Redhead	92,579	28,506
Canvasback	13,855	1,152
Greater Scaup	1,811	3,591
Lesser Scaup	71,646	84,695
Ring-necked Duck	79,202	70,910
Goldeneyes	5,619	8,380
Bufflehead	14,053	11,149
Ruddy Duck	3,946	1,906
Long-tailed Duck	0	45
Eiders	0	0
Scoters	0	341
Hooded Merganser	9,362	9,559
Other Mergansers	2,590	3,723
Other Ducks	12,888	11,707
Total Duck Harvest	3,249,700±12%	2,574,600±10%
Percent Change		-21%
Total Active Duck Hunters		
Percent Change		
Total Duck Hunter Days Afield	1,529,200±10%	1,290,300±11%
Percent Change		-16%
Seasonal Duck Harvest Per Hunter		
Percent Change		
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Goose Species Composition		
Canada Goose	627,052	587,253
Snow Goose	259,849	208,274
Blue Goose	85,184	60,016
Ross's Goose	69,268	45,427
White-fronted Goose	91,226	77,179
Brant	0	0
Other Geese	121	650
Total Goose Harvest	1,132,700±13%	978,800±12%
Percent Change		-14%
Total Active Goose Hunters		
Percent Change		
Total Goose Hunter Days Afield	937,900±8%	828,300±8%
Percent Change		-12%
Seasonal Goose Harvest Per Hunter		
Percent Change		
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Sample Sizes		
Duck Wings	18,186	21,929
Goose Tails	5,480	5,814
Hunters Sampled	11,683	10,941
Responses	6,822	6,113
Response Rate (%)	58.4%	55.9%
Federal Duck Stamps Sold	354,338	323,648
Percent Change		-9%

Table 1D. Estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Arizona		California		Idaho	
	2001	2002	2001	2002	2001	2002
Mallard	13,741	8,989	302,802	225,408	104,288	110,220
Domestic Mallard	0	106	1,186	837	135	189
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	0	0	0	0	0	0
Mottled Duck	0	0	0	0	0	0
Gadwall	2,130	2,803	65,433	71,389	4,728	4,036
Wigeon	4,900	4,812	146,927	134,408	12,496	15,385
Green-winged Teal	9,054	6,134	200,502	239,758	8,105	9,269
Blue-winged/Cinnamon Teal	959	1,586	36,112	35,635	203	631
Northern Shoveler	1,278	1,957	111,678	103,915	1,216	2,648
Northern Pintail	2,343	582	89,687	79,999	2,702	2,711
Wood Duck	107	0	32,555	24,753	1,554	1,829
Redhead	0	529	4,312	4,903	135	567
Canvasback	213	0	6,576	717	0	0
Greater Scaup	0	0	6,144	5,022	0	378
Lesser Scaup	213	529	13,690	13,991	270	694
Ring-necked Duck	2,557	3,226	17,571	19,013	1,148	883
Goldeneyes	107	635	4,312	3,109	946	8,765
Bufflehead	746	1,322	5,282	8,849	135	1,766
Ruddy Duck	0	159	2,264	2,033	135	252
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	323	0	0	63
Hooded Merganser	0	0	1,725	239	203	189
Other Mergansers	213	159	108	0	203	126
Other Ducks	639	1,375	108	120	0	0
Total Duck Harvest	39,200±27%	34,900±19%	1,049,300±10%	974,100±12%	138,600±20%	160,600±20%
Percent Change		-11%		-7%		16%
Total Active Duck Hunters	3,700±14%	4,200±13%	50,400±7%	46,200±8%	12,000±25%	14,500±15%
Percent Change		14%		-8%		21%
Total Duck Hunter Days Afield	26,900±21%	26,300±16%	492,800±12%	439,400±9%	71,200±15%	88,600±17%
Percent Change		-2%		-11%		24%
Seasonal Duck Harvest Per Hunter	10.6±30%	8.3±23%	20.8±12%	21.1±13%	11.6±32%	11.1±25%
Percent Change		-22%		1%		-4%
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Goose Species Composition						
Canada Goose	13,115	2,553	30,228	37,762	63,901	36,253
Snow Goose	0	274	33,167	30,279	399	179
Blue Goose	0	0	210	0	0	0
Ross's Goose	1,192	274	13,015	15,662	100	0
White-fronted Goose	1,192	0	27,080	31,497	0	268
Brant	0	0	4,100	1,100	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	15,500±49%	3,100±29%	107,800±16%	116,300±16%	64,400±33%	36,700±24%
Percent Change		-80%		8%		-43%
Total Active Goose Hunters	2,800±19%	1,400±24%	30,100±10%	31,700±12%	14,900±16%	9,900±17%
Percent Change		-50%		5%		-34%
Total Goose Hunter Days Afield	34,000±32%	8,600±38%	223,600±14%	249,000±17%	91,000±22%	61,800±21%
Percent Change		-75%		11%		-32%
Seasonal Goose Harvest Per Hunter	5.5±53%	2.2±37%	3.6±18%	3.6±20%	4.3±37%	3.7±29%
Percent Change		-60%		0%		-14%
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Sample Sizes						
Duck Wings	368	660	9,734	8,146	2,052	2,547
Goose Tails	13	34	508	665	645	411
Hunters Sampled	349	369	2,616	1,713	697	718
Responses	226	222	1,550	1,120	481	482
Response Rate (%)	64.8%	60.2%	59.3%	65.4%	69.0%	67.1%
Federal Duck Stamps Sold	6,487	5,574	77,563	72,120	24,278	21,949
Percent Change		-14%		-7%		-10%

Table 1D. Estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Montana		Nevada		Oregon	
	2001	2002	2001	2002	2001	2002
Mallard	93,522	79,434	12,590	19,152	147,281	177,015
Domestic Mallard	0	0	0	46	827	188
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	0	0	0	0	0	0
Mottled Duck	0	0	0	0	0	0
Gadwall	3,554	8,731	2,645	7,056	10,039	8,945
Wigeon	7,820	9,938	1,958	3,986	49,723	54,894
Green-winged Teal	3,949	8,447	9,970	6,094	30,472	40,770
Blue-winged/Cinnamon Teal	2,133	3,620	966	641	591	1,036
Northern Shoveler	711	2,272	2,645	3,574	14,527	10,169
Northern Pintail	1,580	3,833	2,289	2,153	18,779	17,702
Wood Duck	1,580	1,136	127	229	16,063	6,873
Redhead	395	1,491	102	412	118	377
Canvasback	237	71	76	0	591	94
Greater Scaup	0	142	0	92	4,252	8,380
Lesser Scaup	2,370	3,194	76	275	5,551	8,380
Ring-necked Duck	1,185	1,207	331	641	4,961	4,708
Goldeneyes	1,975	5,324	254	412	2,008	847
Bufflehead	158	994	432	779	9,803	8,003
Ruddy Duck	79	213	636	275	118	0
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	79	0	0	46	0	471
Hooded Merganser	237	213	0	46	1,417	753
Other Mergansers	237	639	102	92	1,181	1,695
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	121,800±18%	130,900±11%	35,200±17%	46,000±23%	318,300±12%	351,300±14%
Percent Change		7%		31%		10%
Total Active Duck Hunters	10,900±10%	14,900±10%	3,800±18%	3,900±18%	22,300±7%	21,200±7%
Percent Change		37%		3%		-5%
Total Duck Hunter Days Afield	70,700±16%	80,600±18%	25,000±28%	29,400±23%	166,900±10%	171,900±14%
Percent Change		14%		18%		3%
Seasonal Duck Harvest Per Hunter	11.2±20%	8.8±15%	9.3±25%	11.8±29%	14.3±14%	16.6±15%
Percent Change		-21%		27%		16%
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Goose Species Composition						
Canada Goose	46,726	49,911	5,765	6,883	45,752	58,345
Snow Goose	743	1,220	327	117	6,213	7,845
Blue Goose	0	0	0	0	0	0
Ross's Goose	319	281	208	0	0	0
White-fronted Goose	212	188	0	0	1,036	609
Brant	0	0	0	0	1,000	200
Other Geese	0	0	0	0	0	0
Total Goose Harvest	48,000±15%	51,600±16%	6,300±24%	7,000±21%	54,000±15%	67,000±17%
Percent Change		8%		11%		24%
Total Active Goose Hunters	10,600±8%	13,700±9%	2,900±17%	3,000±18%	12,600±9%	12,300±9%
Percent Change		29%		3%		-2%
Total Goose Hunter Days Afield	59,400±13%	67,400±13%	13,900±30%	14,600±21%	67,800±12%	77,200±15%
Percent Change		13%		5%		14%
Seasonal Goose Harvest Per Hunter	4.5±17%	3.8±18%	2.2±29%	2.3±28%	4.2±17%	5.4±20%
Percent Change		-16%		5%		29%
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Sample Sizes						
Duck Wings	1,542	1,844	1,384	1,004	2,695	3,731
Goose Tails	452	550	212	120	563	877
Hunters Sampled	1,469	2,633	701	664	1,991	2,154
Responses	984	1,630	446	409	1,380	1,242
Response Rate (%)	67.0%	61.9%	63.6%	61.6%	69.3%	57.7%
Federal Duck Stamps Sold	21,994	21,243	7,293	6,683	33,057	31,164
Percent Change		-3%		-8%		-6%

Table 1D. Estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2001 and 2002 hunting seasons.

Duck Species Composition	Utah		Washington		Flyway Total	
	2001	2002	2001	2002	2001	2002
Mallard	70,597	63,076	252,395	231,429	997,216	914,724
Domestic Mallard	83	110	354	70	2,585	1,546
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	0	55	0	0	0	55
Mottled Duck	0	0	0	0	0	0
Gadwall	16,170	16,608	13,648	11,253	118,348	130,821
Wigeon	12,753	15,563	66,289	63,047	302,866	302,033
Green-winged Teal	30,089	36,350	27,296	32,013	319,438	378,835
Blue-winged/Cinnamon Teal	1,334	8,139	266	699	42,562	51,987
Northern Shoveler	6,168	21,282	5,849	8,527	144,072	154,343
Northern Pintail	12,503	11,548	16,218	13,560	146,101	132,089
Wood Duck	250	165	2,836	3,705	55,070	38,690
Redhead	2,000	2,200	4,431	1,398	11,493	11,876
Canvasback	1,000	0	798	70	9,490	953
Greater Scaup	333	275	4,520	5,592	15,249	19,881
Lesser Scaup	1,584	3,959	5,760	3,635	29,515	34,657
Ring-necked Duck	1,834	1,320	8,242	6,570	37,827	37,568
Goldeneyes	2,751	10,613	2,481	2,376	14,833	32,082
Bufflehead	1,917	2,475	9,217	3,844	27,690	28,031
Ruddy Duck	2,000	330	89	0	5,321	3,262
Long-tailed Duck	0	0	0	419	0	419
Eiders	0	0	0	0	0	0
Scoters	0	55	1,595	2,936	1,998	3,570
Hooded Merganser	83	0	1,063	1,398	4,728	2,838
Other Mergansers	1,750	825	1,152	489	4,946	4,024
Other Ducks	0	55	0	70	747	1,619
Total Duck Harvest	165,200±22%	195,000±15%	424,500±16%	393,100±15%	2,292,100±6%	2,285,900±6%
Percent Change		18%		-7%		0%
Total Active Duck Hunters	15,600±13%	17,300±15%	25,600±4%	23,300±10%		
Percent Change		11%		-9%		
Total Duck Hunter Days Afield	111,400±20%	111,500±15%	194,200±12%	182,000±15%	1,159,100±6%	1,129,700±5%
Percent Change		0%		-6%		-3%
Seasonal Duck Harvest Per Hunter	10.6±25%	11.3±21%	16.6±17%	16.9±18%		
Percent Change		7%		2%		
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Goose Species Composition						
Canada Goose	18,208	24,705	55,774	48,860	279,469	265,273
Snow Goose	92	0	3,526	6,566	44,468	46,479
Blue Goose	0	0	0	0	210	0
Ross's Goose	0	0	0	59	14,834	16,276
White-fronted Goose	0	147	0	414	29,520	33,124
Brant	0	0	1,100	100	6,200	1,400
Other Geese	0	147	0	0	0	147
Total Goose Harvest	18,300±31%	25,000±22%	60,400±21%	56,000±15%	374,700±15%	362,700±7%
Percent Change		37%		-7%		-3%
Total Active Goose Hunters	10,800±11%	10,800±14%	14,200±13%	13,300±11%		
Percent Change		0%		-6%		
Total Goose Hunter Days Afield	67,200±15%	73,100±18%	85,200±21%	63,000±15%	642,100±7%	614,600±8%
Percent Change		9%		-26%		-4%
Seasonal Goose Harvest Per Hunter	1.7±33%	2.3±26%	4.2±25%	4.2±19%		
Percent Change		35%		0%		
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Sample Sizes						
Duck Wings	1,982	3,546	4,790	5,624	24,547	27,102
Goose Tails	199	339	753	951	3,345	3,947
Hunters Sampled	1,160	738	809	1,246	9,792	10,235
Responses	706	505	568	793	6,341	6,403
Response Rate (%)	60.9%	68.4%	70.2%	63.6%	64.8%	62.6%
Federal Duck Stamps Sold	30,401	33,284	35,952	32,998	237,025	225,015
Percent Change		9%		-8%		-5%

Table 1E. Estimates of waterfowl harvest and hunter activity in Alaska and the entire US during the 2001 and 2002 hunting seasons.

Duck Species Composition	Alaska		United States Total	
	2001	2002	2001	2002
Mallard	27,044	19,655	5,410,722	4,915,597
Domestic Mallard	0	0	24,942	25,613
Black Duck	0	0	125,195	176,538
Mallard x Black Duck Hybrid	0	0	18,856	18,202
Mottled Duck	0	0	53,803	40,758
Gadwall	1,899	1,177	1,473,378	1,251,359
Wigeon	16,552	14,395	730,752	687,574
Green-winged Teal	10,040	7,544	1,373,058	1,389,501
Blue-winged/Cinnamon Teal	271	484	1,079,641	765,706
Northern Shoveler	2,442	4,014	526,254	387,285
Northern Pintail	11,306	11,281	433,885	323,409
Wood Duck	0	0	1,185,455	1,212,835
Redhead	0	208	160,831	71,866
Canvasback	0	346	36,225	3,055
Greater Scaup	362	761	33,064	72,258
Lesser Scaup	452	1,315	364,587	390,446
Ring-necked Duck	452	1,246	410,771	451,789
Goldeneyes	1,085	5,191	50,049	95,435
Bufflehead	995	1,384	142,196	183,165
Ruddy Duck	0	0	20,087	17,063
Long-tailed Duck	0	0	37,966	21,119
Eiders	0	3,353	33,390	29,001
Scoters	6,100	0	58,461	44,755
Hooded Merganser	0	0	84,061	105,422
Other Mergansers	0	0	24,498	40,407
Other Ducks	0	2,347	16,766	20,139
Total Duck Harvest	79,000±12%	74,700±11%	13,913,700±5% ^c	12,740,300±4%
Percent Change		-5%		-8%
Total Active Duck Hunters ^a	5,600±6%	6,000±6%		
Percent Change		7%		
Total Duck Hunter Days Afield ^a	28,500±11%	33,900±11%	8,168,900±4%	7,616,600±4%
Percent Change		19%		-7%
Seasonal Duck Harvest Per Hunter ^a	13.0±13%	11.5±13%		
Percent Change		-12%		
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Goose Species Composition				
Canada Goose	5,825	4,875	2,458,672	2,480,442
Snow Goose	0	329	555,700	404,316
Blue Goose	0	0	227,320	147,375
Ross's Goose	0	66	108,757	82,782
White-fronted Goose	475	329	230,149	219,318
Brant	1,600	400	57,869	39,016
Other Geese	0	0	2,332	1,649
Total Goose Harvest	7,900±22%	6,000±17%	3,640,800±6%	3,378,600±5% ^d
Percent Change		-24%		-7%
Total Active Goose Hunters ^b	2,400±11%	2,200±10%		
Percent Change		-8%		
Total Goose Hunter Days Afield ^b	9,800±21%	10,400±15%	4,590,100±4%	4,722,100±5%
Percent Change		6%		3%
Seasonal Goose Harvest Per Hunter ^b	2.6±25%	2.5±30%		
Percent Change		-4%		
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Sample Sizes				
Duck Wings	807	1,014	83,031	92,477
Goose Tails	68	103	20,431	22,245
Hunters Sampled	1,166	1,584	58,969	58,853
Responses	803	1,031	34,779	32,913
Response Rate (%)	68.9%	65.1%	59.0%	55.9%
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Federal Duck Stamps Sold	10,068	10,253	1,650,609	1,583,847
Percent Change		2%		-4%

^a Duck hunter statistics do not include sea duck hunter statistics for states with special sea duck seasons: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Virginia, and Alaska. (Refer to Table 2.)

^b Goose hunter statistics do not include Brant hunter statistics for states with special Brant seasons: Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Rhode Island, Virginia, California, Oregon, Washington, and Alaska. (Refer to Table 3.)

^c Harvest estimate contains an additional 2,500 sea ducks harvested in Delaware for which there were no species composition estimates from the Parts Collection Survey.

^d Harvest estimate contains an additional 3,700 geese harvested in Florida for which there were no species composition estimates from the Parts Collection Survey.

Table 2. Estimates of sea duck harvest and hunter activity for states with special sea duck seasons during the 2001 and 2002 hunting seasons.

State / Flyway	Sea Duck Harvest ^a		Active Sea Duck Hunters		Sea Duck Hunter Days Afield		Seasonal Harvest Per Hunter	
	2001	2002	2001	2002	2001	2002	2001	2002
Connecticut	5,400 ± 60%	5,900 ± 42%	700 ± 29%	800 ± 28%	3,500 ± 44%	5,100 ± 39%	7 ± 66%	7 ± 51%
Delaware	2,500 ± 78%	1,400 ± 71%	300 ± 47%	300 ± 46%	1,100 ± 66%	700 ± 57%	8 ± 91%	5 ± 85%
Maine	24,000 ± 62%	29,800 ± 107%	2,600 ± 44%	3,000 ± 47%	11,400 ± 67%	17,000 ± 83%	9 ± 76%	10 ± 117%
Maryland	28,100 ± 32%	14,200 ± 31%	4,400 ± 21%	2,700 ± 23%	12,100 ± 30%	8,200 ± 35%	6 ± 38%	5 ± 39%
Massachusetts	16,400 ± 58%	3,900 ± 30%	1,300 ± 20%	700 ± 25%	6,300 ± 36%	2,300 ± 28%	12 ± 61%	6 ± 39%
New Hampshire	3,100 ± 57%	2,000 ± 65%	500 ± 31%	300 ± 44%	2,100 ± 46%	900 ± 50%	6 ± 65%	6 ± 79%
New Jersey	4,100 ± 70%	3,100 ± 59%	700 ± 35%	700 ± 38%	2,100 ± 48%	1,800 ± 49%	6 ± 78%	5 ± 70%
New York	19,500 ± 31%	8,000 ± 32%	3,300 ± 18%	1,700 ± 25%	16,500 ± 27%	6,500 ± 38%	6 ± 35%	5 ± 41%
Rhode Island	3,000 ± 63%	1,500 ± 56%	400 ± 32%	200 ± 34%	1,800 ± 50%	900 ± 50%	8 ± 71%	9 ± 66%
Virginia	12,600 ± 38%	13,000 ± 41%	3,400 ± 22%	2,600 ± 28%	900 ± 30%	8,100 ± 38%	4 ± 44%	5 ± 50%
Atlantic Flyway Total	118,700 ± 18%	82,700 ± 40%			65,700 ± 19%	51,600 ± 29%		
Alaska	6100 ± 30% ^b	5,700 ± 40%	900 ± 27%	900 ± 21%	3,700 ± 30%	3,400 ± 27%		
U.S. Total	124,800 ± 17%	88,400 ± 37%			69,400 ± 18%	55,000 ± 27%		7 ± 45%

^a Sea ducks include Long-tailed Ducks, Common Eiders, King Eiders, Black Scoters, Whitled-winged Scoters, and Surf Scoters.

^b In addition to the aforementioned, sea ducks also include Harlequin Ducks, Common Mergansers, and Red-breasted Mergansers in Alaska.

Table 3. Estimates of Brant harvest and hunter activity for states with special Brant seasons during the 2001 and 2002 hunting seasons.

State / Flyway	Brant Harvest		Active Brant Hunters		Brant Hunter Days Afield		Seasonal Harvest Per Hunter	
	2001	2002	2001	2002	2001	2002	2001	2002
Connecticut	800 ± 81%	1,400 ± 59%	400 ± 43%	600 ± 35%	1,100 ± 55%	2,800 ± 48%	2 ± 92%	2 ± 69%
Delaware	1,100 ± 61%	2,500 ± 51%	400 ± 43%	500 ± 36%	1,200 ± 58%	1,500 ± 52%	3 ± 75%	5 ± 62%
Maryland	2,300 ± 83%	1,100 ± 74%	700 ± 55%	700 ± 50%	2,700 ± 96%	3,000 ± 65%	3 ± 99%	2 ± 89%
Massachusetts	2,100 ± 45%	800 ± 73%	800 ± 27%	300 ± 49%	2,800 ± 40%	700 ± 56%	3 ± 53%	3 ± 88%
New Hampshire	100 ± 111%	<50 ± 182	100 ± 62%	100 ± 100%	400 ± 71%	600 ± 133%	1 ± 128%	<1 ± 208
New Jersey	9,500 ± 27%	9,800 ± 29%	2,300 ± 18%	1,700 ± 22%	8,800 ± 25%	6,900 ± 26%	4 ± 32%	6 ± 36%
New York	16,400 ± 28%	8,400 ± 28%	3,300 ± 18%	2,200 ± 22%	20,800 ± 30%	11,500 ± 28%	5 ± 33%	4 ± 35%
North Carolina	5,500 ± 120%	5,700 ± 141%	1,400 ± 77%	1,600 ± 81%	12,100 ± 99%	8,100 ± 110%	4 ± 142%	4 ± 163%
Rhode Island	700 ± 55%	600 ± 58%	200 ± 45%	100 ± 54%	1,100 ± 60%	500 ± 48%	3 ± 71%	4 ± 79%
Virginia	11,200 ± 36%	6,800 ± 35%	4,500 ± 19%	2,100 ± 30%	15,700 ± 35%	7,400 ± 47%	3 ± 41%	3 ± 46%
Atlantic Flyway Total	49,800 ± 19%	37,200 ± 25%	1,000 ± 60%	300 ± 109%	66,700 ± 22%	43,200 ± 25%		
California	4,100 ± 89%	1,100 ± 99%	200 ± 106%	100 ± 179%	4,200 ± 123%	1,500 ± 86%	4 ± 107%	3 ± 147%
Oregon	1,000 ± 192%	200 ± 195%	600 ± 73%	100 ± 136%	1,500 ± 144%	300 ± 195%	6 ± 220%	2 ± 264%
Washington	1,100 ± 109%	100 ± 194%			1,200 ± 79%	200 ± 145%	2 ± 131%	1 ± 236%
Pacific Flyway Total	6,300 ± 70%	1,400 ± 70%	400 ± 32%	500 ± 28%	6,900 ± 82%	2,000 ± 70%		
Alaska	1,600 ± 40%	38,900 ± 24%			2,200 ± 40%	800 ± 53%	3 ± 49%	2 ± 45%
U.S. Total	57,700 ± 18%				75,900 ± 21%	45,900 ± 23%		

Table 4. Harvest estimates for special September teal/duck seasons for 2001 and 2002 hunting seasons.

State	Green-winged Teal		Blue-winged/Cinnamon Teal		Wood Duck		Other Ducks		Total Duck Harvest		Wings Received		
	2001		2002		2001		2002		2001		2002		
	September Teal Season												
Delaware	1,853	908	412	65	0	0	0	0	2,265	973	33	15	
Georgia	1,827	0	2,824	1,765	0	0	0	0	4,651	1,765	28	17	
Maryland	3,454	856	3,853	1,284	0	0	133	0	7,440	2,140	56	20	
North Carolina	0	242	1,489	242	0	0	0	0	1,489	484	8	4	
South Carolina	0	0	1,895	992	292	0	0	0	2,187	992	15	7	
Virginia	211	107	316	214	0	0	0	0	527	321	5	3	
Subtotal	7,345	2,113	10,789	4,562	292	0	133	0	18,558	6,675	145	66	
Alabama	576	0	11,518	5,118	0	0	576	0	12,669	5,118	22	12	
Arkansas	801	1,387	12,422	8,787	0	0	0	0	13,223	10,174	33	22	
Illinois	1,247	262	14,718	5,771	499	0	0	0	16,465	6,033	66	23	
Indiana	384	514	3,266	1,027	0	0	0	0	3,650	1,541	19	6	
Louisiana	4,637	829	146,614	64,084	0	0	357	0	151,609	64,913	850	470	
Mississippi	0	0	5,710	2,777	0	0	0	0	5,710	2,777	21	20	
Missouri	3,564	1,032	40,497	11,347	324	0	0	0	44,384	12,379	137	72	
Ohio	504	1,811	12,348	9,054	0	0	0	0	12,852	10,865	51	24	
Subtotal	11,714	5,834	247,093	107,964	823	0	933	0	260,563	113,799	1,199	649	
Colorado	1,265	447	1,124	447	0	0	0	0	0	2,389	893	34	20
Kansas	1,763	3,903	10,580	8,999	0	0	0	0	0	12,344	12,902	70	119
Nebraska	1,069	1,675	10,232	4,839	0	0	0	0	0	11,301	6,514	74	70
New Mexico	1,379	1,209	1,609	1,920	0	0	0	0	0	2,989	3,128	26	44
Oklahoma	1,891	872	11,230	2,221	0	0	0	0	159	13,121	3,252	111	41
Texas	21,055	8,434	219,869	58,623	0	0	0	0	0	240,924	67,057	698	326
Subtotal	28,423	16,540	254,644	77,049	0	0	0	0	283,067	93,747	1,013	620	
Total	47,482	24,487	512,527	189,576	1,114	0	1,065	159	562,188	214,222	2,357	1,335	
<hr/>													
September Duck Season													
Florida	0	0	4,153	7,239	1,661	2,837	208	0	6,022	10,076	87	103	
Kentucky	0	0	2,591	3,885	17,274	16,509	0	0	19,865	20,394	46	63	
Tennessee	0	0	7,878	799	20,054	13,982	0	0	27,933	14,781	78	37	
Total	0	0	14,623	11,923	38,989	33,329	208	0	53,820	45,251	211	203	
U.S. Total	47,482	24,487	527,149	201,498	40,104	33,329	1,273	159	616,008	259,473	2,568	1,538	

Table 5. Waterfowl harvest estimates in Canada during the 2001 and 2002 hunting seasons (estimates courtesy of the Canadian Wildlife Service).

Duck Species Composition	Newfoundland		Prince Edward Isl.		Nova Scotia		New Brunswick		Quebec		Ontario		Manitoba	
	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
Mallard	601	300	1,192	2,176	5,721	6,498	7,047	6,002	79,896	66,533	166,629	147,847	92,115	77,992
Black Duck	16,802	18,022	9,465	6,214	26,730	28,310	12,879	14,449	38,719	36,348	19,187	19,133	293	0
Gadwall	0	0	0	614	0	106	224	184	2,285	1,279	2,730	3,497	10,164	9,459
Wigeon	86	0	2,855	0	624	557	1,839	1,019	3,559	2,050	6,563	7,527	5,782	5,167
Green-winged Teal	4,718	3,877	3,579	3,851	7,033	6,339	5,755	6,775	28,592	27,993	21,031	32,954	6,840	12,775
Blue-winged/Cinnamon Teal	235	117	543	234	344	299	2,699	1,463	3,957	2,049	13,486	5,199	9,283	9,209
Northern Shoveler	0	0	0	78	92	157	130	0	690	605	927	2,477	6,011	4,471
Northern Pintail	137	1,153	0	78	401	543	611	702	4,911	5,527	3,709	9,910	9,216	13,879
Wood Duck	172	0	181	78	1,924	780	2,389	2,662	16,342	14,124	55,823	54,970	132	991
Redhead	0	0	0	0	0	0	0	0	63	121	3,109	1,571	7,580	3,396
Canvasback	0	0	0	0	0	0	0	0	0	0	897	952	4,224	3,196
Greater Scaup	1,210	1,126	0	78	235	438	1,493	1,519	1,537	2,726	4,276	4,817	747	691
Lesser Scaup	415	1,437	0	549	60	412	138	845	5,084	5,576	13,532	14,260	8,118	6,008
Ring-necked Duck	7,432	5,222	0	418	1,498	1,784	2,462	4,337	8,752	6,574	19,556	20,725	5,027	5,512
Goldeneyes	2,620	1,989	0	162	1,066	1,239	2,144	1,714	6,046	3,103	11,052	8,140	365	873
Bufflehead	0	0	0	0	0	0	864	126	210	1,044	922	10,208	9,657	1,348
Ruddy Duck	0	0	0	0	0	0	0	0	0	0	67	1,075	371	676
Long-tailed Duck	473	866	0	0	569	896	29	0	821	536	545	356	0	0
Eiders	7,716	8,470	0	159	6,967	8028	316	111	3,192	2,882	0	145	0	0
Scoters	1,523	2,790	0	477	3,682	3,064	307	196	3,519	4,108	1,062	596	159	0
Hooded Merganser	337	302	0	0	132	638	504	299	3,169	2,886	7,272	5,080	193	833
Other Mergansers	5,730	4,785	0	487	1,400	1,166	565	563	3,536	3,469	1,825	1,708	0	0
Other Ducks	0	0	0	0	0	0	0	0	68	0	0	0	0	0
Total Duck Harvest	50,207	50,456	17,815	15,653	58,478	62,118	41,657	43,050	215,782	189,478	364,494	351,892	168,273	155,537
Percent Change	0%	-12%	6%	-12%	3%	3%	3%	-12%	-12%	-12%	-3%	-3%	-3%	-8%
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Goose Species Composition														
Canada Goose	5,553	6,744	25,136	22,126	10,554	10,831	5,615	4,962	67,763	87,177	148,705	160,474	102,034	108,306
Snow Goose	0	0	0	0	0	0	0	0	225	97,116	48,259	647	618	7,414
Blue Goose	0	0	0	0	0	0	0	0	1,322	330	335	79	17,921	9,722
Ross's Goose	0	0	0	0	0	0	0	0	0	0	0	0	665	14,530
White-fronted Goose	0	0	0	0	0	0	0	0	0	0	0	0	0	1,987
Brant	0	0	0	0	0	0	0	0	618	404	186	50	0	0
Total Goose Harvest	5,553	6,744	25,136	22,126	10,554	10,831	5,615	5,187	166,819	136,170	149,873	161,221	128,034	134,545
Percent Change	21%	-6%	2,416	2,341	6,645	6,316	5,975	5,942	29,138	28,702	58,458	56,645	15,038	14,832
Percent Change	-6%	-3%	-12%	-3%	-5%	-5%	-8%	-8%	-18%	-18%	-18%	-18%	-3%	-1%
Migratory Bird Permits Sold	16,998	16,056	0	0	0	0	0	0	0	0	0	0	0	0
Percent Change	-6%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-1%

Table 5. Waterfowl harvest estimates in Canada during the 2001 and 2002 hunting seasons (estimates courtesy of the Canadian Wildlife Service).

Duck Species Composition	Saskatchewan		Alberta		British Columbia		Nunavut		Northwest Terr.		Yukon Territory		Canada Total	
	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
Mallard	107,413	118,857	94,699	80,707	35,575	37,371	0	0	643	1,702	229	609	591,760	546,594
Black Duck	0	77	0	89	0	0	0	0	0	0	0	0	124,075	122,642
Gadwall	7,451	9,844	9,027	7,825	1,448	858	0	0	19	0	0	0	33,348	33,666
Wigeon	5,364	7,103	7,644	6,791	8,383	9,380	0	0	85	1,188	0	91	0	41,043
Green-winged Teal	5,603	9,489	3,439	4,467	2,745	3,234	0	0	0	0	0	0	89,426	111,754
Blue-winged/Cinnamon Teal	8,767	5,201	2,347	4,533	491	660	0	0	48	0	0	0	42,200	28,964
Northern Shoveler	7,434	4,078	4,457	5,137	534	1,150	0	0	30	0	0	0	20,305	18,153
Northern Pintail	7,051	13,055	8,732	7,640	4,807	4,551	0	0	19	0	0	60	0	39,654
Wood Duck	0	0	0	0	429	114	0	0	0	0	0	0	0	77,392
Redhead	828	1,414	1,451	1,589	0	71	0	0	30	0	0	0	0	13,061
Canvasback	411	756	466	253	136	95	0	0	0	0	0	0	0	6,134
Greater Scaup	0	0	0	0	18	0	0	0	0	0	0	0	0	9,516
Lesser Scaup	1,777	1,525	861	1,791	121	384	0	0	129	0	0	8	174	30,243
Ring-necked Duck	1,247	737	429	1,093	257	59	0	0	19	0	0	0	0	46,679
Goldeneyes	0	0	999	1,278	248	404	0	0	0	0	0	0	0	27
Bufflehead	0	952	607	2,222	376	320	0	0	0	0	0	20	0	13,729
Ruddy Duck	0	0	195	0	0	0	0	0	0	0	0	0	0	1,946
Long-tailed Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	2,437
Eiders	0	0	0	0	0	0	0	0	0	0	0	0	0	18,191
Scoters	157	0	0	0	26	42	0	0	0	0	0	0	0	10,435
Hooded Merganser	0	0	0	115	0	46	0	0	0	0	0	0	0	11,607
Other Mergansers	0	0	0	0	0	0	0	0	0	0	0	0	0	10,199
Other Ducks	0	0	0	0	0	0	0	0	0	0	0	0	0	12,178
Total Duck Harvest	153,503	173,088	135,353	125,530	55,594	58,739	0	0	1,022	3,345	408	1,071	1,262,586	1,229,957
Percent Change	13%	-13%	-7%	-7%	6%	14%	---	---	227%	227%	163%	-3%		
<hr/>														
Goose Species Composition														
Canada Goose	146,829	125,588	111,751	108,758	13,076	10,459	---	0	---	0	---	0	239	637,016
Snow Goose	69,682	54,516	12,395	9,399	2,354	7,121	---	0	---	0	---	0	0	189,608
Blue Goose	30,843	31,948	1,040	433	0	163	---	0	---	0	---	0	0	51,461
Ross's Goose	14,573	27,842	5,747	4,127	0	0	---	0	---	0	---	0	0	47,483
White-fronted Goose	61,391	39,870	31,722	10,691	81	0	---	0	---	0	---	0	6	93,194
Brant	0	0	0	0	0	0	---	0	---	0	---	0	0	804
Total Goose Harvest	323,318	279,764	162,655	133,408	15,511	17,743	16	0	47	0	78	245	993,209	907,984
Percent Change	-13%	-8%	-9%	-9%	-18%	14%	-100%	-100%	20%	9%	-100%	-100%	214%	-9%
Migratory Bird Permits Sold	18,387	16,958	19,527	17,814	8,185	7,464	20	24	223	244	251	217	181,261	173,555
Percent Change														-4%

Appendix A. HIP waterfowl survey form sent to randomly selected hunters from the HIP sampling frame.

Waterfowl Hunting Record																
<p>1. IF YOU DID NOT HUNT DUCKS, GEESE, OR BRANT THIS SEASON, please check the box to the right and mail this form. <input checked="" type="checkbox"/></p> <p>2. Please record your personal hunting activity for each day you hunted ducks, geese, or brant in the State specified in the attached letter. Record the number of birds you personally bagged; DO NOT include birds shot by other people. Please include ALL of your hunts for the birds listed; if you did not bag any birds during a hunt, record zero (0) for the birds you hunted that day.</p> <p>3. IF YOU HUNTED DUCKS, GEESE, OR BRANT BUT DO NOT HAVE DETAILED RECORDS, check the box to the right and go to question number 6 to record your Season Totals. <input checked="" type="checkbox"/></p> <p>4. Please include additional comments on a SEPARATE SHEET of paper.</p>																
2 2																
Please print all characters in BLACK ink using CAPITAL LETTERS ONLY as shown below.																
ABCDEFGHIJKLMNOPQRSTUVWXYZ 0123456789																
Number of Birds Killed and Retrieved																
Date of Hunt				County of Hunt		State of Hunt		Ducks		Sea Ducks		Geese		Brant		
Month		Day														
1	/		/		/		/		/		/		/		/	
2	/		/		/		/		/		/		/		/	
3	/		/		/		/		/		/		/		/	
4	/		/		/		/		/		/		/		/	
5	/		/		/		/		/		/		/		/	
6	/		/		/		/		/		/		/		/	
7	/		/		/		/		/		/		/		/	
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9	/		/		/		/		/		/		/		/	
10	/		/		/		/		/		/		/		/	
11	/		/		/		/		/		/		/		/	
12	/		/		/		/		/		/		/		/	
13	/		/		/		/		/		/		/		/	
14	/		/		/		/		/		/		/		/	
5. IF YOU RUN OUT OF SPACE ON THIS FORM, please call 1-800-419-2965 from 7:30 am to 5:00 pm EST to receive an additional form. We will ask you for the <u>serial number</u> located at the bottom of this form.																
6. SEASON TOTALS:																
Ducks		Days Hunted		Birds Killed and Retrieved		Birds Downed but Lost		Please call 1-800-327-BAND to report banded birds.								
Sea Ducks		/		/		/										
Geese		/		/		/										
Brant		/		/		/										

Appendix B. Flyway-specific point estimates of duck and goose harvest in Colorado, Montana, New Mexico, and Wyoming during the 2001 and 2002 hunting seasons.

	2001		2002	
	Central Flyway	Pacific Flyway	Central Flyway	Pacific Flyway
Duck Harvest				
Colorado	120,200	16,100	79,100	15,500
Montana	37,200	84,600	35,600	95,300
New Mexico	54,700	6,800	75,400	14,400
Wyoming	35,900	6,300	40,400	2,600
Goose Harvest				
Colorado	64,800	5,100	73,800	4,000
Montana	19,500	28,500	31,100	20,500
New Mexico	21,300	1,600	10,600	2,600
Wyoming	13,400	1,500	15,500	500