

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

US Fish & Wildlife Publications

US Fish & Wildlife Service

7-2005

Migratory bird hunting activity and harvest during the 2003 and 2004 hunting seasons: preliminary estimates

Paul I. Padding

U.S. Fish and Wildlife Service, paul_padding@fws.gov

Kenneth D. Richkus

U.S. Fish and Wildlife Service, ken_richkus@fws.gov

Mary T. Moore

U.S. Fish and Wildlife Service, mary_moore@fws.gov

Elwood Martin

U.S. Fish and Wildlife Service

Sheri S. Williams

U.S. Fish and Wildlife Service, Sheri_S_Williams@fws.gov

See next page for additional authors

Follow this and additional works at: <https://digitalcommons.unl.edu/usfwspubs>

Padding, Paul I.; Richkus, Kenneth D.; Moore, Mary T.; Martin, Elwood; Williams, Sheri S.; and Spriggs, Howard L., "Migratory bird hunting activity and harvest during the 2003 and 2004 hunting seasons: preliminary estimates" (2005). *US Fish & Wildlife Publications*. 353.

<https://digitalcommons.unl.edu/usfwspubs/353>

This Article is brought to you for free and open access by the US Fish & Wildlife Service at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in US Fish & Wildlife Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Authors

Paul I. Padding, Kenneth D. Richkus, Mary T. Moore, Elwood Martin, Sheri S. Williams, and Howard L. Spriggs

Migratory bird hunting activity and harvest during the 2003 and 2004 hunting seasons

Preliminary Estimates

July 2005



Paul I. Padding, Kenneth D. Richkus, Mary T. Moore, Elwood M. Martin, Sheri
S. Williams, and Howard L. Spriggs

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

This report should be cited as: Padding, P.I., K.D. Richkus, M.T. Moore, E.M. Martin, S.S. Williams, and H.L. Spriggs. 2005. Migratory bird hunting activity and harvest during the 2003 and 2004 hunting seasons, preliminary estimates. U.S. Department of the Interior, Washington, D.C. U.S.A.

The primary purpose of this report is to facilitate the prompt distribution of timely information. Results are preliminary and may change with the inclusion of additional data.

All Division of Migratory Bird Management reports are available at our home page (<http://migratorybirds.fws.gov>)

Introduction

Since the 1952-53 hunting season, the U.S. Fish and Wildlife Service (FWS) 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 game bird harvest survey system. In 1992, the FWS and State Fish and Wildlife Agencies (States) established the Migratory Bird Harvest Information Program (HIP), which was fully operational nationwide by 1999. This cooperative State-Federal program requires licensed migratory game bird hunters to register annually in each state in which they hunt. Each State is responsible for collecting the name, address, and date of birth from each migratory bird hunter, asking each of them a series of general screening questions about his/her hunting success the previous year, and sending all of this information to the FWS. The States are also responsible for providing the migratory bird hunters with proof of compliance to carry while they are hunting. The FWS is responsible for using these data to conduct annual national migratory game bird hunter activity and harvest surveys.

This report presents hunter activity and harvest estimates from the HIP surveys for the 2003-04 and 2004-05 hunting seasons. These estimates are preliminary, pending (1) final counts of the number of HIP registrants in each state each season, and (2) complete audits of all survey response data.

HIP Survey Design and Methods

Sample Frame. The HIP sample frame consisted of people who identified themselves as potential migratory game bird hunters when they purchased State hunting licenses. The States forwarded the sample frame data to the FWS 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 asked each migratory bird hunter a series of short screening questions about the species they hunted and their hunting success the previous year. The list of species/species groups involved (dependent on seasons in each state) included ducks, sea ducks, geese, brant, doves, band-tailed pigeons, woodcock, coots and/or snipe, rails and/or gallinules and sandhill cranes (only in Alaska). We 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 the 10 species/species groups based on his/her answers to the screening questions. We selected stratified-random samples from each state for each species/species group. We sampled 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 hunters who rarely if ever hunt the species/species group at a very low rate. We administered 5 separate harvest surveys to estimate hunter activity and harvest of: (1) waterfowl (ducks, sea ducks, geese and brant), (2) doves and band-tailed pigeons, (3) woodcock, (4) snipe, rails, gallinules and coots, and (5) sandhill cranes in Alaska.

Survey Methodology. Survey forms consisted of a daily hunting diary format, which was used in an effort to reduce memory bias. We asked hunters selected for the surveys to record the date of each hunt, the state and county where they hunted, and how many birds of various species/species groups they personally bagged that day. As a check on hunter's record-keeping and for hunters who forgot to record

their daily hunting information throughout the season, or did not receive the form until after the hunting season began, space was provided on the form to record season totals. Hunter response was voluntary.

Soon after the initial batch of names and addresses was received from a State, we selected stratified-random samples according to predetermined sampling rates. A survey packet including a cover letter and a survey form for recording daily hunting activity was sent to each selected hunter within 1-2 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 date the season closed in the state. We sent postcards at the close of the season reminding sampled hunters to return their completed survey forms and to thank them for their help. About 3 weeks after this mailing, we sent a follow-up packet with an additional form to each hunter who had not yet responded. Finally, 3-4 weeks later, an additional follow-up packet was sent to the remaining non-respondents.

Analysis. We used standard analyses for stratified samples to obtain estimates of harvest and hunter activity for each state and species/species group combination. The proportion of respondents who hunted (active hunters), their average days hunted, and their average seasonal harvest were calculated and the corresponding totals estimated (active hunters, days hunted, birds bagged) at the state level. We also calculated variance estimates for these parameters and converted to them 95% confidence intervals. The number of days afield and the number of birds harvested were also estimated at the management unit and national levels, along with their corresponding 95% confidence intervals. However, the total number of active hunters (and any averages 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.

Parts Collection Surveys

The FWS has conducted a cooperative Waterfowl Parts Collection Survey (PCS) annually to estimate the species, age and sex composition of the duck harvest since 1961 and the species and age composition of the goose harvest since 1962. We provided hunters who agreed to participate in this survey with large, postage-paid “wing envelopes” and asked them to send us a wing from each duck, brant and coot they shot and the tail feathers and primary feather tips from each goose they shot throughout the hunting season. We also asked hunters to report the state, county and date of harvest for each specimen they submitted. After the waterfowl hunting seasons ended, FWS and State biologists examined the specimens to determine the species, age and sex of the birds.

We combined species composition estimates derived from the PCS with harvest estimates from the HIP waterfowl survey to calculate species-specific duck and goose harvest estimates. Similarly, date information provided by PCS participants was combined with HIP survey results to estimate special September season duck and goose harvests. Estimates of the number of immatures per adult in the harvest (age ratio), and the number of males per female (sex ratio) were calculated for each species and state. Because sampling intensity varied among states, we weighted state ratios by harvest estimates from the HIP waterfowl survey to obtain flyway and U.S. ratios.

The FWS has also conducted a Woodcock Wing Collection Survey annually since 1977, primarily to estimate the age and sex composition of the woodcock harvest. Age and sex ratio estimates obtained from the woodcock wings collected in 2003 and 2004 were reported in, “American woodcock population status, 2004” (Kelley, 2005, U.S. Fish and Wildlife Service). This survey was expanded in 1997 to include rail wings to determine the species composition of the rail harvest, and band-tailed pigeon wings to obtain age ratio estimates.

Survey Results

Waterfowl Hunter Activity and Harvest (Tables 1-7, Figures 1-3). HIP waterfowl harvest survey sample sizes and response rates were 59,259 hunters and 62% for the 2003-04 survey, and 68,681 hunters and 60% for the 2004-05 survey. 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 PCS enabled us to provide Flyway-specific point estimates of duck and goose harvest for those 4 states; those point estimates are shown in Table 2.

We estimated sea duck hunter activity and harvest separately from other ducks for states that had special sea duck seasons and/or regulations (Table 3). Likewise, we estimated brant hunter activity and harvest along the Atlantic and Pacific coasts separately (Table 4). Sea duck and brant harvest estimates are also shown in the species-specific waterfowl estimates in Table 1, but the estimates of sea ducks and brant bagged shown in Tables 3 and 4 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 5, and Table 6 shows estimates of Canada goose harvest during special resident goose seasons compared to regular season harvest. Table 7 summarizes the waterfowl harvest in Canada; those data 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 1999-2004.

Waterfowl Age and Sex Ratios (Tables 8-12, Figures 4-7). The 2003-04 PCS collected 94,110 duck wings and 23,157 goose tails and primary tips, whereas the 2004-05 sample consisted of 82,464 duck wings and 20,722 goose tails and primary tips. State-specific mallard age ratios and flyway-level age ratios for other ducks species are reported in Tables 8 and 9, respectively, followed by state-specific mallard sex ratios (Table 10) and flyway-level sex ratios for other duck species (Table 11). Table 12 gives age ratios for geese. Figures 4-7 show the long-term trends in age ratios of mallards (Figure 4), northern pintails (Figure 5), American black ducks and wood ducks (Figure 6) and lesser scaup (Figure 7). The long-term trends curves are lowess lines.

Dove and Band-tailed Pigeon Hunter Activity and Harvest (Tables 13-15). The dove and band-tailed pigeon estimates were based on samples of 39,501 hunters in 2003-04 (64% response rate) and 52,748 hunters in 2004-05 (59% response rate). Estimated numbers of active hunters, days afield, harvest and birds harvested per hunter are given in Table 13 for mourning doves, Table 14 for white-winged doves and Table 15 for band-tailed pigeons.

Woodcock Hunter Activity and Harvest (Table 16). Results of the HIP woodcock harvest survey are presented in Table 16. The 2003-04 survey had a sample size of 17,279 hunters and a 64% response rate, and the 2004-05 survey sample size and response rate were 22,728 hunters and 62%.

Snipe, Rail, Gallinule and Coot Hunter Activity and Harvest (Tables 17-21). The sample for the 2003-04 snipe, rail, gallinule and coot harvest survey was 16,904 hunters (63% response rate) and 19,935 hunters (59% response rate) for the 2004-05 survey. Tables 17-20 give the estimates for common snipe (Table 17), rails (Table 18; all species combined), gallinules (Table 19) and American coot (Table 20).

We believe that the number of rail wings collected each year is too low to provide reliable annual species composition estimates, even at the flyway and national levels. Therefore, we used 5-year running averages to obtain species-specific rail harvest estimates (Table 21). The 2003-04 estimates are based on the species composition of 1,180 rail wings collected from 1999-2003, and the 2004-05 estimates are based on 1,213 rail wings collected from 2000-2004.

Alaska Sandhill Crane Hunter Activity and Harvest Estimates. The estimates presented below were derived from surveys of 593 (2003-04, 75% response rate) and 621 (2004-05, 74% response rate) Alaska migratory bird hunters. For Alaska's 2003 season, we estimated that 900 active sandhill crane hunters spent 4,100 days hunting cranes and harvested 600 birds. In 2004, an estimated 1,100 active hunters spent 4,400 days hunting cranes and harvested 1,100 birds.

Mid-continent sandhill crane hunting activity and harvest in the Central Flyway states are estimated in a separate annual survey. Results of that survey for the 2003 and 2004 seasons were reported in, "Sandhill crane harvest and hunter activity in the Central Flyway during the 2004-05 hunting season" (Martin, 2005, U.S. Fish and Wildlife Service).

Acknowledgments

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

The HIP surveys 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. Appendix A provides a list of individuals who were responsible for getting the HIP sample frame for their state to the FWS. We are also appreciative of the help that we received from all the people that participated in at the 2005 wingbees (Appendix B).

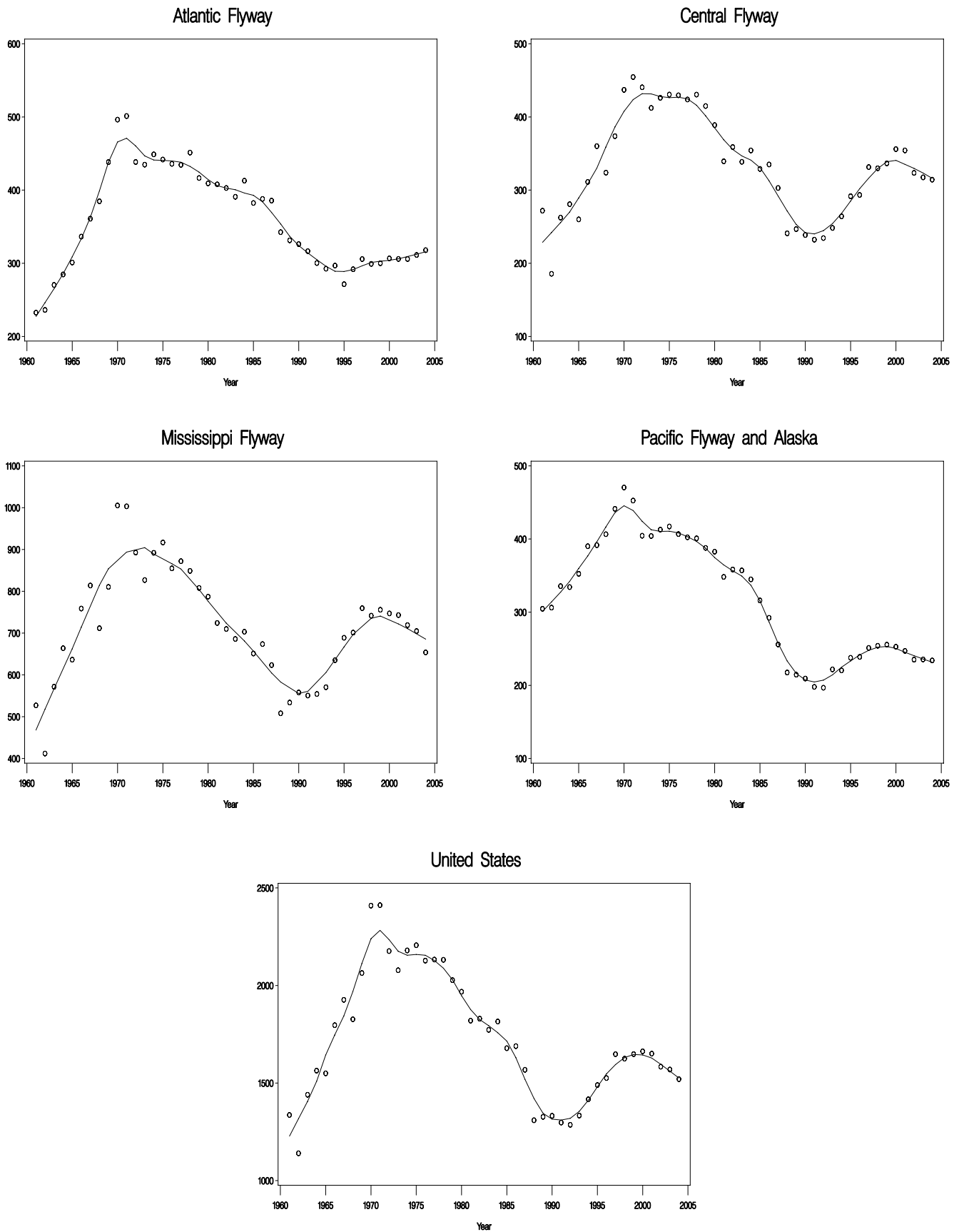


Figure 1. Number of Federal Duck Stamps sold (in thousands) in the United States (1961-2004).

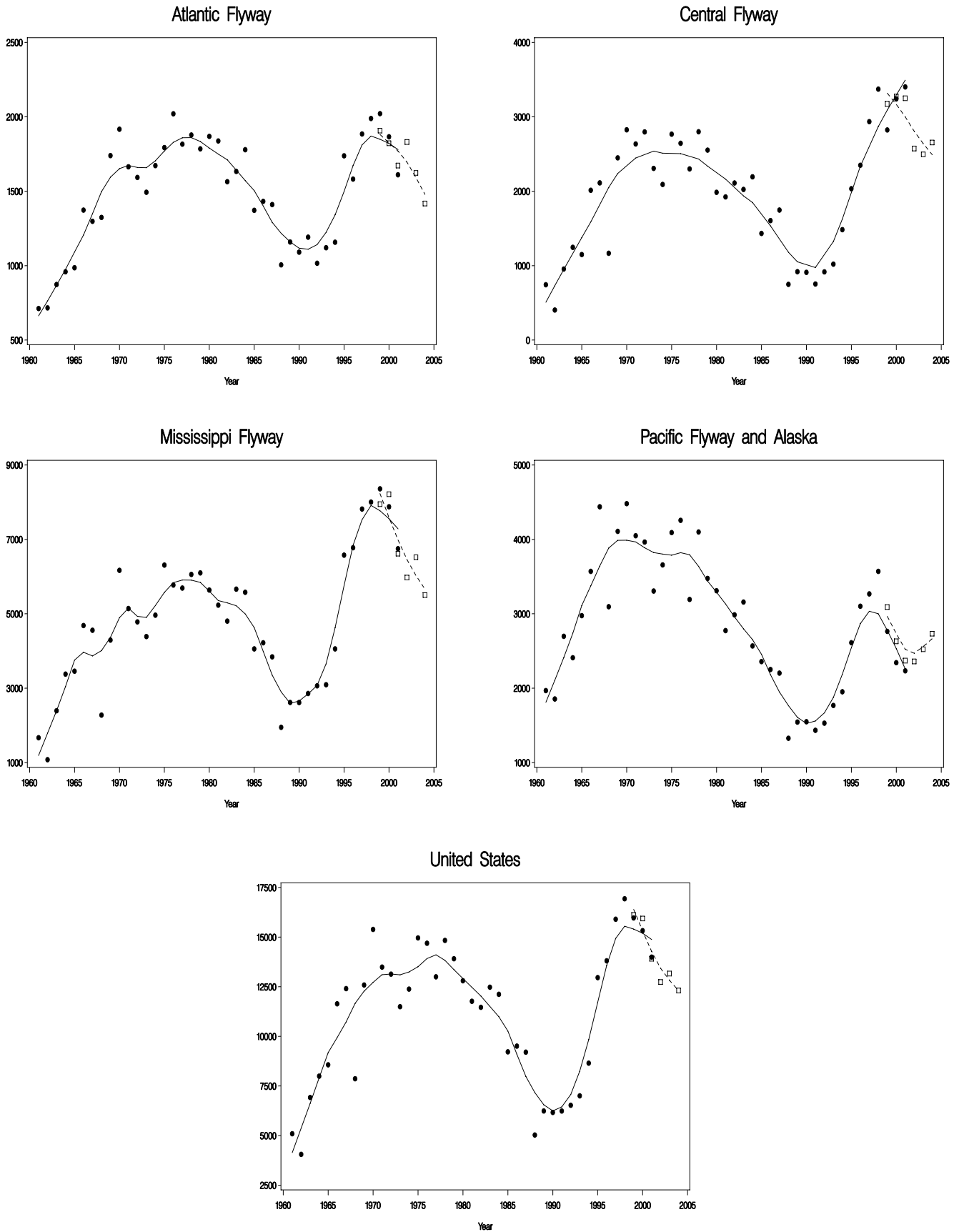


Figure 2. Number of ducks harvested (in thousands) by hunters in the United States, 1961-2004. (Federal Duck Stamp survey - circles and solid line; HIP survey - squares and dashed line.)

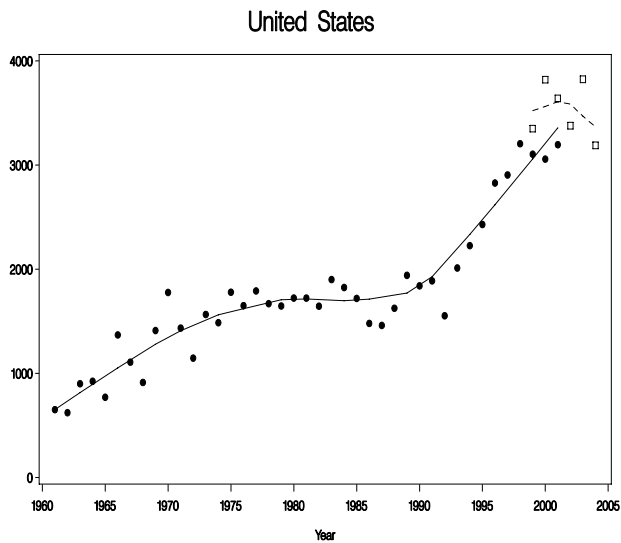
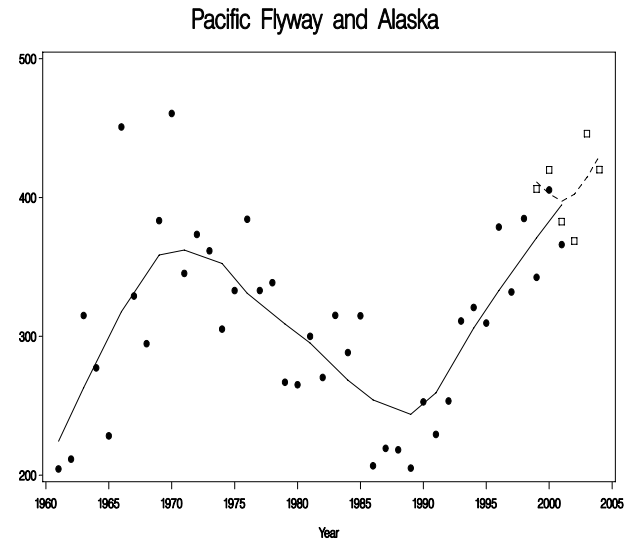
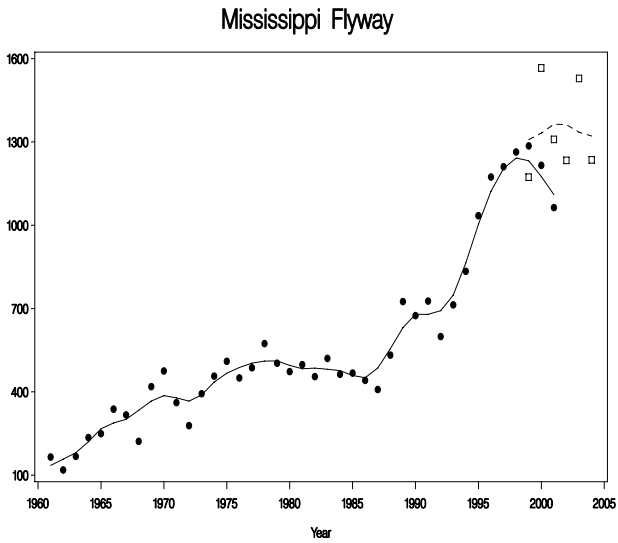
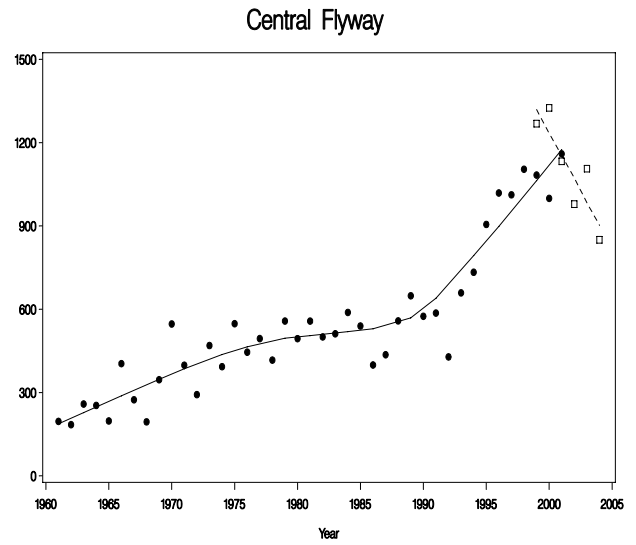
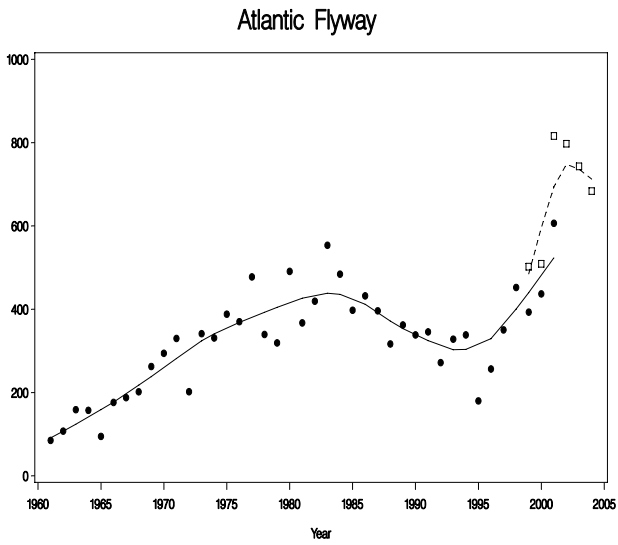


Figure 3. Number of geese harvested (in thousands) by hunters in the United States, 1961-2004. (Federal Duck Stamp survey - circles and solid line; HIP survey - squares and dashed line.)

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Connecticut		Delaware		Florida	
	2003	2004	2003	2004	2003	2004
Mallard	11,672	11,877	21,495	21,054	143	345
Domestic Mallard	0	77	649	68	285	345
Black Duck	4,499	3,085	5,652	4,211	0	0
Mallard x Black Duck Hybrid	522	308	278	815	0	173
Mottled Duck	0	0	0	0	8,349	15,097
Gadwall	196	154	1,390	611	214	259
Wigeon	130	77	1,668	679	4,995	4,055
Green-winged Teal	522	1,080	18,438	7,742	9,419	10,956
Blue-winged/Cinnamon Teal	0	0	463	407	30,540	55,990
Northern Shoveler	0	0	3,057	1,562	2,212	2,502
Northern Pintail	65	0	2,038	1,630	1,070	949
Wood Duck	3,586	2,545	7,227	3,939	5,566	8,541
Redhead	0	0	0	0	357	518
Canvasback	65	0	0	0	143	0
Greater Scaup	652	308	0	68	71	604
Lesser Scaup	65	0	0	272	8,135	6,988
Ring-necked Duck	130	0	649	272	37,105	34,077
Goldeneyes	717	308	0	68	0	0
Bufflehead	522	231	741	883	143	1,208
Ruddy Duck	0	0	93	272	357	86
Long-tailed Duck	4,271	4,727	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	129	1,773	600	900	0	0
Hooded Merganser	65	77	463	679	1,284	2,502
Other Mergansers	391	771	0	68	357	431
Other Ducks	0	0	0	0	1,356	2,674
Total Duck Harvest	28,200±24%	27,400±19%	64,900±26%	46,200±18%	112,100±24%	148,300±39%
Total Active Duck Hunters ^a	3,000±14%	2,900±15%	3,000±12%	4,500±12%	12,900±26%	12,400±26%
Total Duck Hunter Days Afield ^a	16,800±17%	16,700±18%	16,800±17%	32,400±16%	70,500±25%	75,600±40%
Seasonal Duck Harvest Per Hunter ^a	7.9±28%	7.2±24%	21.4±29%	10.1±22%	8.7±35%	12.0±47%
<hr/>						
Goose Species Composition						
Canada Goose	18,661	20,400	11,703	14,003	---	---
Snow Goose	39	0	12,115	12,397	---	---
Blue Goose	0	0	82	0	---	---
Ross's Goose	0	0	0	0	---	---
White-fronted Goose	0	0	0	0	---	---
Brant	2,500	1,000	1,500	600	---	---
Other Geese	0	0	0	0	---	---
Total Goose Harvest	21,200±21%	21,400±28%	25,400±22%	27,000±24%	3,800±89% ^c	300±195% ^d
Total Active Goose Hunters ^b	2,800±14%	3,000±12%	4,700±12%	4,300±12%	1,000±58%	200±138%
Total Goose Hunter Days Afield ^b	15,300±20%	17,500±19%	25,300±15%	28,700±22%	3,300±90%	1,100±151%
Seasonal Goose Harvest Per Hunter ^b	6.7±25%	6.8±31%	5.1±25%	6.1±27%	3.8±106%	1.5±239%
<hr/>						
Sample Sizes						
Duck Wings	399	282	695	672	1,571	1,719
Goose Tails	515	453	290	302	0	0
Federal Duck Stamps Sold	6,055	5,774	7,468	7,340	18,708	18,787

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Georgia		Maine		Maryland	
	2003	2004	2003	2004	2003	2004
Mallard	15,013	10,200	12,025	12,218	77,441	69,754
Domestic Mallard	2,475	179	51	106	3,866	2,598
Black Duck	495	0	5,045	5,765	15,837	15,977
Mallard x Black Duck Hybrid	0	179	510	317	998	1,689
Mottled Duck	165	0	0	0	0	0
Gadwall	5,774	3,400	51	159	4,739	2,208
Wigeon	825	895	306	264	5,736	1,169
Green-winged Teal	4,619	3,758	5,248	2,750	16,336	22,732
Blue-winged/Cinnamon Teal	3,795	3,758	459	0	1,247	1,039
Northern Shoveler	990	1,074	0	0	624	390
Northern Pintail	495	0	357	159	3,242	1,169
Wood Duck	74,076	51,537	3,822	4,231	14,840	11,821
Redhead	165	0	0	0	624	909
Canvasback	165	0	0	0	2,619	7,534
Greater Scaup	165	0	0	0	3,741	2,338
Lesser Scaup	2,310	358	0	0	10,350	14,808
Ring-necked Duck	11,879	3,579	459	529	2,868	4,936
Goldeneyes	165	0	357	1,745	125	1,039
Bufflehead	495	537	764	1,798	10,226	8,703
Ruddy Duck	0	0	0	53	748	649
Long-tailed Duck	0	0	2,612	1,754	2,092	1,511
Eiders	0	0	28,967	14,736	0	151
Scoters	0	0	14,721	4,210	16,608	18,738
Hooded Merganser	3,135	2,147	764	740	1,122	1,948
Other Mergansers	0	0	1,783	264	1,372	1,689
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	127,200±56%	81,600±37%	78,300±32%	51,800±34%	197,400±14%	195,500±15%
Total Active Duck Hunters ^a	18,500±38%	13,200±24%	6,100±31%	5,700±26%	19,700±8%	20,600±9%
Total Duck Hunter Days Afield ^a	113,100±58%	67,500±29%	27,500±26%	26,600±30%	112,400±11%	110,900±12%
Seasonal Duck Harvest Per Hunter ^a	6.9±68%	6.2±44%	5.2±44%	5.5±42%	9.1±16%	8.5±17%
<hr/>						
Goose Species Composition						
Canada Goose	25,300	21,200	9,637	7,000	131,431	141,974
Snow Goose	0	0	463	0	4,818	5,426
Blue Goose	0	0	0	0	452	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	0	0	0	0	1,700	800
Other Geese	0	0	0	0	0	0
Total Goose Harvest	25,300±45%	21,200±39%	10,100±49%	7,000±34%	138,400±13%	148,200±11%
Total Active Goose Hunters ^b	12,000±40%	6,600±31%	4,700±37%	3,900±28%	23,400±7%	24,600±7%
Total Goose Hunter Days Afield ^b	47,600±51%	32,000±41%	14,000±42%	14,700±32%	149,000±9%	136,300±10%
Seasonal Goose Harvest Per Hunter ^b	2.1±60%	3.2±50%	2.1±61%	1.8±44%	5.8±14%	6.0±13%
<hr/>						
Sample Sizes						
Duck Wings	771	456	823	824	1,576	1,483
Goose Tails	127	219	131	97	931	1,151
Federal Duck Stamps Sold	24,651	23,129	10,037	9,236	34,626	35,302

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Massachusetts		New Hampshire		New Jersey	
	2003	2004	2003	2004	2003	2004
Mallard	7,375	9,245	7,050	5,185	13,683	15,789
Domestic Mallard	80	50	95	0	230	319
Black Duck	2,711	1,809	2,572	1,131	12,820	8,187
Mallard x Black Duck Hybrid	159	201	222	141	747	851
Mottled Duck	0	0	0	0	0	0
Gadwall	80	0	32	47	632	691
Wigeon	319	50	0	71	575	585
Green-winged Teal	2,033	1,156	1,207	754	9,946	7,708
Blue-winged/Cinnamon Teal	0	0	0	0	57	0
Northern Shoveler	40	50	0	0	517	266
Northern Pintail	40	0	95	24	632	532
Wood Duck	2,711	3,165	3,779	2,805	4,599	3,562
Redhead	0	0	0	0	0	213
Canvasback	0	0	0	0	0	53
Greater Scaup	80	0	0	0	3,564	6,167
Lesser Scaup	0	0	32	0	805	1,010
Ring-necked Duck	199	301	127	71	172	159
Goldeneyes	239	452	191	71	172	159
Bufflehead	837	2,110	127	24	8,394	6,539
Ruddy Duck	0	0	0	0	287	159
Long-tailed Duck	127	539	130	46	1,371	2,014
Eiders	3,097	5,717	618	162	229	0
Scoters	3,776	3,344	1,853	92	1,600	886
Hooded Merganser	598	352	254	236	4,714	1,435
Other Mergansers	399	1,558	318	141	1,150	1,116
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	24,900±14%	30,100±18%	18,700±19%	11,000±27%	66,900±21%	58,400±14%
Total Active Duck Hunters ^a	3,300±11%	3,100±10%	3,000±16%	1,900±14%	6,800±9%	6,400±9%
Total Duck Hunter Days Afield ^a	19,200±15%	18,900±15%	19,600±18%	12,400±18%	42,400±16%	35,700±14%
Seasonal Duck Harvest Per Hunter ^a	5.4±18%	6.6±21%	5.4±25%	5.6±30%	9.4±22%	8.7±17%
<hr/>						
Goose Species Composition						
Canada Goose	12,874	15,200	5,257	3,200	26,046	24,559
Snow Goose	26	0	21	0	4,354	2,941
Blue Goose	0	0	21	0	0	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	1,600	300	100	100	9,900	5,000
Other Geese	0	0	0	0	0	0
Total Goose Harvest	14,500±19%	15,500±56%	5,400±26%	3,300±25%	40,300±20%	32,500±19%
Total Active Goose Hunters ^b	2,400±12%	2,400±11%	2,100±18%	1,400±17%	4,500±11%	3,900±12%
Total Goose Hunter Days Afield ^b	14,900±15%	14,300±20%	13,800±30%	7,800±21%	23,200±16%	19,500±15%
Seasonal Goose Harvest Per Hunter ^b	5.4±22%	6.3±57%	2.5±32%	2.3±30%	6.8±22%	7.1±23%
<hr/>						
Sample Sizes						
Duck Wings	614	497	587	480	1,122	1,080
Goose Tails	503	358	247	130	679	622
<hr/>						
Federal Duck Stamps Sold	9,470	7,969	4,762	4,580	12,764	12,318

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	New York		North Carolina		Pennsylvania	
	2003	2004	2003	2004	2003	2004
Mallard	88,900	85,379	25,329	47,648	60,298	71,594
Domestic Mallard	853	870	1,262	1,417	556	1,454
Black Duck	19,985	15,438	4,852	3,735	7,039	5,572
Mallard x Black Duck Hybrid	1,280	2,174	291	386	278	485
Mottled Duck	0	0	0	129	0	0
Gadwall	2,062	1,522	9,899	9,014	2,501	848
Wigeon	3,272	2,609	12,810	6,310	463	363
Green-winged Teal	14,153	10,654	22,126	14,037	7,132	4,967
Blue-winged/Cinnamon Teal	996	1,087	2,135	2,576	741	121
Northern Shoveler	711	290	1,359	3,348	185	0
Northern Pintail	2,631	1,884	4,367	2,704	185	485
Wood Duck	21,265	20,439	55,607	49,708	27,416	27,741
Redhead	356	870	1,553	1,803	370	242
Canvasback	569	580	97	515	93	0
Greater Scaup	6,330	2,392	970	1,159	834	2,786
Lesser Scaup	4,267	1,957	22,514	31,164	4,539	3,150
Ring-necked Duck	4,338	4,856	16,304	8,886	926	2,181
Goldeneyes	9,743	5,581	0	258	370	1,211
Bufflehead	13,442	8,118	5,240	5,795	2,964	5,209
Ruddy Duck	71	145	485	1,545	278	969
Long-tailed Duck	3,157	6,195	0	0	93	121
Eiders	585	0	0	0	0	0
Scoters	3,858	4,905	9,413	6,439	185	969
Hooded Merganser	3,129	2,029	3,008	4,894	2,130	3,634
Other Mergansers	5,547	5,726	582	1,030	4,724	3,998
Other Ducks	0	0	97	0	0	0
Total Duck Harvest	211,500±11%	185,700±8%	200,300±24%	204,500±47%	124,300±25%	138,100±22%
Total Active Duck Hunters ^a	19,600±6%	19,500±6%	20,900±27%	17,500±34%	32,100±17%	23,500±14%
Total Duck Hunter Days Afield ^a	123,800±9%	123,200±8%	138,200±29%	115,600±43%	158,200±25%	138,900±20%
Seasonal Duck Harvest Per Hunter ^a	10.4±12%	9.0±11%	9.6±36%	11.7±58%	3.9±30%	5.9±26%
<hr/>						
Goose Species Composition						
Canada Goose	96,750	109,305	41,859	28,129	188,183	167,600
Snow Goose	3,712	4,460	370	0	5,672	3,575
Blue Goose	237	0	185	0	0	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	10,400	5,834	6,500	1,100	145	825
Other Geese	0	0	185	471	0	0
Total Goose Harvest	111,100±10%	119,600±11%	49,100±62%	29,700±57%	194,000±26%	172,000±17%
Total Active Goose Hunters ^b	15,700±6%	16,900±6%	14,000±32%	10,200±46%	41,300±12%	32,500±11%
Total Goose Hunter Days Afield ^b	94,500±9%	95,000±8%	55,300±56%	26,500±41%	260,900±20%	180,800±14%
Seasonal Goose Harvest Per Hunter ^b	6.4±12%	6.9±12%	3.0±69%	2.8±73%	4.7±29%	5.3±20%
<hr/>						
Sample Sizes						
Duck Wings	2,932	2,452	2,064	1,588	1,342	1,140
Goose Tails	1,350	1,511	245	243	1,334	1,251
Federal Duck Stamps Sold	39,424	39,571	34,490	37,858	49,692	55,570

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Rhode Island		South Carolina		Vermont	
	2003	2004	2003	2004	2003	2004
Mallard	2,099	1,409	32,488	22,480	6,819	10,882
Domestic Mallard	0	0	1,896	1,911	30	82
Black Duck	1,215	1,075	506	674	1,794	1,923
Mallard x Black Duck Hybrid	110	185	379	112	120	0
Mottled Duck	0	0	1,770	112	0	0
Gadwall	295	223	2,402	2,248	60	205
Wigeon	221	371	2,149	2,136	299	245
Green-winged Teal	331	74	12,515	17,422	2,123	2,495
Blue-winged/Cinnamon Teal	0	0	4,804	8,542	30	245
Northern Shoveler	0	0	2,528	899	60	82
Northern Pintail	37	37	1,391	337	150	450
Wood Duck	700	371	89,375	68,226	1,824	4,336
Redhead	0	0	885	337	0	0
Canvasback	37	37	0	112	0	0
Greater Scaup	442	111	0	112	30	82
Lesser Scaup	74	74	2,781	2,810	90	123
Ring-necked Duck	0	74	20,226	6,070	538	695
Goldeneyes	295	371	0	0	867	1,432
Bufflehead	1,105	297	1,643	562	239	123
Ruddy Duck	0	0	0	0	0	0
Long-tailed Duck	0	48	253	0	150	41
Eiders	1,143	820	0	0	0	0
Scoters	1,257	932	506	0	239	41
Hooded Merganser	295	148	3,666	3,147	60	245
Other Mergansers	1,546	742	1,011	0	778	573
Other Ducks	0	0	126	450	0	0
Total Duck Harvest	11,200±38%	7,400±17%	183,300±45%	138,700±15%	16,300±18%	24,300±29%
Total Active Duck Hunters ^a	900±23%	800±15%	15,600±25%	15,400±18%	1,300±19%	2,600±24%
Total Duck Hunter Days Afield ^a	5,800±27%	5,400±17%	116,800±27%	89,300±13%	10,000±15%	17,100±25%
Seasonal Duck Harvest Per Hunter ^a	9.8±44%	7.0±23%	11.8±52%	9.0±24%	12.5±26%	9.3±38%
<hr/>						
Goose Species Composition						
Canada Goose	5,000	4,378	14,800	16,961	3,630	7,127
Snow Goose	0	22	0	170	3,330	1,740
Blue Goose	0	0	0	0	60	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	1,200	300	0	0	180	33
Other Geese	0	0	0	170	0	0
Total Goose Harvest	6,200±38%	4,700±28%	14,800±36%	17,300±36%	7,200±32%	8,900±28%
Total Active Goose Hunters ^b	900±27%	800±17%	900±27%	6,500±29%	1,700±23%	2,200±21%
Total Goose Hunter Days Afield ^b	5,400±32%	5,300±26%	5,400±32%	20,300±30%	10,000±33%	11,300±28%
Seasonal Goose Harvest Per Hunter ^b	5.6±46%	5.5±33%	16.4±46%	2.7±46%	4.2±39%	4.0±35%
<hr/>						
Sample Sizes						
Duck Wings	260	263	1,450	1,234	545	594
Goose Tails	189	208	72	102	240	266
Federal Duck Stamps Sold	1,712	1,692	24,559	24,289	5,241	4,764

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Virginia		West Virginia		Flyway Total	
	2003	2004	2003	2004	2003	2004
Mallard	42,988	41,054	2,485	3,104	427,301	439,216
Domestic Mallard	310	520	0	61	12,637	10,055
Black Duck	9,682	7,102	404	578	95,108	76,263
Mallard x Black Duck Hybrid	1,084	779	21	61	7,000	8,857
Mottled Duck	77	0	0	0	10,361	15,339
Gadwall	8,133	5,890	21	30	38,479	27,509
Wigeon	5,809	1,732	21	30	39,598	21,642
Green-winged Teal	10,921	11,606	85	122	137,155	120,014
Blue-winged/Cinnamon Teal	542	173	64	30	45,872	73,970
Northern Shoveler	465	606	0	0	12,748	11,069
Northern Pintail	1,317	866	21	0	18,134	11,226
Wood Duck	20,061	18,968	1,550	1,491	338,004	283,426
Redhead	1,239	953	21	0	5,570	5,844
Canvasback	929	1,126	21	0	4,738	9,957
Greater Scaup	465	1,126	0	0	17,344	17,254
Lesser Scaup	4,957	3,378	21	0	60,939	66,091
Ring-necked Duck	16,885	10,826	0	30	112,806	77,542
Goldeneyes	155	433	42	0	13,439	13,129
Bufflehead	7,668	12,212	21	0	54,571	54,348
Ruddy Duck	155	953	0	30	2,474	4,862
Long-tailed Duck	3,371	3,912	0	0	17,627	20,909
Eiders	0	0	0	0	34,638	21,585
Scoters	8,429	7,388	0	0	63,174	50,617
Hooded Merganser	4,492	3,205	0	30	29,181	27,450
Other Mergansers	2,866	1,992	0	0	22,824	20,099
Other Ducks	0	0	0	0	1,579	3,124
Total Duck Harvest	153,000±10%	136,800±17%	4,800±48%	5,600±31%	1,623,400±9%	1,491,400±9%
Total Active Duck Hunters ^a	14,300±7%	16,900±11%	900±31%	1,100±27%		
Total Duck Hunter Days Afield ^a	91,000±9%	88,600±13%	3,900±32%	5,200±34%	1,106,900±9%	980,000±7%
Seasonal Duck Harvest Per Hunter ^a	9.9±13%	7.4±20%	5.3±58%	5.1±42%		
<hr/>						
Goose Species Composition						
Canada Goose	62,578	54,983	4,200	7,400	657,910	643,419
Snow Goose	148	817	0	0	35,067	31,548
Blue Goose	0	0	0	0	1,038	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	9,200	2,800	0	0	44,925	18,693
Other Geese	74	0	0	0	259	640
Total Goose Harvest	72,000±13%	58,600±16%	4,200±37%	7,400±60%	743,200±9% ^c	694,600±6% ^d
Total Active Goose Hunters ^b	12,700±8%	12,900±11%	900±32%	1,100±30%		
Total Goose Hunter Days Afield ^b	69,200±11%	63,400±14%	5,200±42%	7,100±46%	830,800±9%	681,600±5%
Seasonal Goose Harvest Per Hunter ^b	4.9±16%	4.3±19%	4.7±49%	6.7±67%		
<hr/>						
Sample Sizes						
Duck Wings	1,872	1,475	226	184	18,849	16,423
Goose Tails	916	780	162	234	7,931	7,927
Federal Duck Stamps Sold	25,715	28,092	2,025	1,673	311,399	317,944

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Alabama		Arkansas		Illinois	
	2003	2004	2003	2004	2003	2004
Mallard	34,895	29,404	510,620	556,533	284,256	194,135
Domestic Mallard	0	684	262	0	565	562
Black Duck	1,237	1,710	262	319	2,635	2,059
Mallard x Black Duck Hybrid	0	0	0	0	376	0
Mottled Duck	495	0	262	319	0	0
Gadwall	33,410	25,643	246,939	177,759	44,992	23,214
Wigeon	2,227	684	21,973	24,530	9,036	4,306
Green-winged Teal	4,702	5,129	109,867	147,814	35,014	16,662
Blue-winged/Cinnamon Teal	2,475	6,496	36,622	18,158	16,001	7,114
Northern Shoveler	5,445	2,393	56,241	59,253	11,295	7,676
Northern Pintail	0	0	17,526	16,565	10,165	3,931
Wood Duck	46,031	75,903	80,831	91,747	32,002	28,268
Redhead	495	342	1,570	1,593	2,447	1,498
Canvasback	0	0	262	0	565	936
Greater Scaup	247	2,051	2,093	2,230	188	2,434
Lesser Scaup	4,455	5,812	16,480	8,283	5,271	5,429
Ring-necked Duck	12,127	13,676	17,526	16,247	10,354	14,228
Goldeneyes	495	684	1,308	0	565	2,621
Bufflehead	1,237	3,419	2,354	956	2,635	1,685
Ruddy Duck	0	684	262	0	188	374
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	565	1,310
Hooded Merganser	2,227	4,787	5,493	4,460	1,882	1,685
Other Mergansers	0	0	785	0	0	374
Other Ducks	0	0	262	637	0	0
Total Duck Harvest	152,200±37%	179,500±45%	1,129,800±18%	1,127,400±12%	471,000±19%	320,500±12%
Total Active Duck Hunters	12,400±29%	12,400±24%	72,300±9%	67,800±8%	33,400±10%	37,300±8%
Total Duck Hunter Days Afield	103,600±36%	96,600±32%	595,500±13%	538,000±11%	330,100±12%	314,100±11%
Seasonal Duck Harvest Per Hunter	12.3±47%	14.5±51%	15.6±20%	16.6±15%	14.1±21%	8.6±14%
<hr/>						
Goose Species Composition						
Canada Goose	16,903	22,500	16,399	10,127	133,185	101,362
Snow Goose	497	0	70,517	44,241	2,180	793
Blue Goose	0	0	41,545	28,783	2,180	476
Ross's Goose	0	0	13,119	533	0	0
White-fronted Goose	0	0	21,319	29,316	1,454	1,269
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	17,400±59%	22,500±59%	162,900±38%	113,000±27%	139,000±21%	103,900±17%
Total Active Goose Hunters	7,300±32%	5,500±33%	22,800±16%	22,800±15%	22,800±16%	27,900±10%
Total Goose Hunter Days Afield	23,400±56%	19,700±38%	127,200±28%	85,800±19%	127,200±28%	217,700±14%
Seasonal Goose Harvest Per Hunter	2.4±67%	4.1±67%	7.1±41%	5.0±31%	6.1±41%	3.7±19%
<hr/>						
Sample Sizes						
Duck Wings	615	525	4,319	3,539	2,502	1,712
Goose Tails	35	11	298	212	765	655
Federal Duck Stamps Sold	16,585	15,060	59,065	56,039	52,695	52,743

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Indiana		Iowa		Kentucky	
	2003	2004	2003	2004	2003	2004
Mallard	76,668	71,569	101,654	54,700	138,187	130,324
Domestic Mallard	685	0	436	224	877	878
Black Duck	856	1,961	0	224	5,264	5,266
Mallard x Black Duck Hybrid	0	163	0	224	439	0
Mottled Duck	0	0	0	0	0	0
Gadwall	4,278	2,778	21,378	10,761	19,741	8,337
Wigeon	1,027	1,634	4,581	4,484	3,071	3,510
Green-winged Teal	9,070	3,922	29,449	16,814	5,703	7,021
Blue-winged/Cinnamon Teal	5,305	2,451	30,104	28,471	439	2,194
Northern Shoveler	2,225	654	5,017	3,811	2,193	1,755
Northern Pintail	1,540	654	5,235	3,139	1,755	4,388
Wood Duck	15,060	14,379	38,611	52,906	24,128	17,113
Redhead	171	490	654	897	1,316	1,755
Canvasback	171	0	436	448	0	878
Greater Scaup	0	163	0	448	439	1,316
Lesser Scaup	513	490	2,836	1,345	1,755	5,704
Ring-necked Duck	3,936	1,307	4,799	5,380	877	2,633
Goldeneyes	513	163	654	0	439	0
Bufflehead	1,027	2,941	873	224	0	3,510
Ruddy Duck	0	0	436	0	0	0
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	1,091	0	0	0
Hooded Merganser	1,711	980	654	0	877	878
Other Mergansers	342	0	0	0	0	439
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	125,100±36%	106,700±18%	248,900±12%	184,500±13%	207,500±27%	197,900±33%
Total Active Duck Hunters	14,500±15%	13,000±11%	22,500±9%	20,400±10%	16,600±16%	12,100±19%
Total Duck Hunter Days Afield	113,100±23%	102,000±18%	187,100±14%	203,000±19%	148,000±19%	151,200±37%
Seasonal Duck Harvest Per Hunter	8.6±39%	8.2±21%	11.1±15%	9.0±17%	12.5±31%	16.4±38%
<hr/>						
Goose Species Composition						
Canada Goose	71,842	69,900	55,497	70,257	38,504	45,031
Snow Goose	258	0	9,437	348	2,817	495
Blue Goose	0	0	5,168	696	1,878	495
Ross's Goose	0	0	449	0	0	0
White-fronted Goose	0	0	0	0	0	1,979
Brant	0	0	0	0	0	0
Other Geese	0	0	449	0	0	0
Total Goose Harvest	72,100±43%	69,900±22%	71,000±15%	71,300±26%	43,200±52%	48,000±47%
Total Active Goose Hunters	15,400±12%	14,900±10%	17,500±9%	15,000±11%	13,200±17%	11,200±20%
Total Goose Hunter Days Afield	113,700±22%	111,300±14%	117,600±15%	118,300±19%	95,800±28%	106,500±34%
Seasonal Goose Harvest Per Hunter	4.7±44%	4.7±24%	4.1±18%	4.8±29%	3.3±55%	4.3±51%
<hr/>						
Sample Sizes						
Duck Wings	731	653	1,141	823	473	451
Goose Tails	279	350	316	205	46	97
Federal Duck Stamps Sold	28,767	21,006	30,206	28,649	18,524	16,613

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Louisiana		Michigan		Minnesota	
	2003	2004	2003	2004	2003	2004
Mallard	133,137	80,355	183,018	158,927	303,995	179,277
Domestic Mallard	0	0	426	1,098	1,666	838
Black Duck	636	365	9,162	9,659	833	279
Mallard x Black Duck Hybrid	0	183	1,278	1,098	416	558
Mottled Duck	41,128	34,699	0	0	0	0
Gadwall	266,273	183,904	4,474	5,707	47,057	31,276
Wigeon	28,408	27,577	3,835	6,366	15,408	24,574
Green-winged Teal	233,625	116,333	42,186	22,829	100,776	44,959
Blue-winged/Cinnamon Teal	333,902	157,971	5,113	2,634	92,448	106,114
Northern Shoveler	65,932	33,968	1,704	439	18,323	17,313
Northern Pintail	27,348	15,523	8,948	9,878	18,323	14,242
Wood Duck	116,813	77,981	32,598	39,732	129,926	127,616
Redhead	4,028	3,287	2,344	3,293	11,660	9,494
Canvasback	212	1,461	1,065	0	2,915	4,747
Greater Scaup	1,272	1,644	4,900	7,683	416	3,072
Lesser Scaup	34,556	26,116	13,849	12,951	34,147	12,008
Ring-necked Duck	43,036	52,414	12,997	8,561	72,459	75,118
Goldeneyes	0	183	5,540	11,195	9,578	9,494
Bufflehead	1,060	1,278	23,863	21,073	10,411	8,936
Ruddy Duck	0	0	1,704	220	833	1,955
Long-tailed Duck	0	0	639	1,098	0	558
Eiders	0	0	0	0	0	0
Scoters	0	0	639	1,098	833	838
Hooded Merganser	9,752	3,835	3,835	4,171	9,578	9,215
Other Mergansers	1,272	731	2,983	3,293	2,499	1,117
Other Ducks	1,908	2,192	0	0	0	0
Total Duck Harvest	1,344,300±14%	822,000±13%	367,100±24%	333,000±15%	884,500±10%	683,600±10%
Total Active Duck Hunters	65,800±9%	52,200±10%	50,900±11%	43,100±9%	87,900±7%	89,600±7%
Total Duck Hunter Days Afield	581,300±12%	449,500±14%	292,000±14%	270,600±10%	548,300±8%	595,600±12%
Seasonal Duck Harvest Per Hunter	20.4±17%	15.7±16%	7.2±26%	7.7±17%	10.1±12%	7.6±13%
<hr/>						
Goose Species Composition						
Canada Goose	2,289	0	191,460	130,000	282,495	234,062
Snow Goose	35,485	29,351	240	0	1,614	360
Blue Goose	41,208	38,093	0	0	2,690	1,079
Ross's Goose	6,868	624	0	0	0	0
White-fronted Goose	85,850	51,832	0	0	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	171,700±22%	119,900±36%	191,700±20%	130,000±15%	286,800±14%	235,500±13%
Total Active Goose Hunters	22,000±13%	17,000±16%	45,800±10%	34,300±9%	70,000±8%	72,100±7%
Total Goose Hunter Days Afield	125,700±17%	96,000±23%	247,700±12%	177,200±12%	431,700±10%	470,600±11%
Seasonal Goose Harvest Per Hunter	7.8±26%	7.1±39%	4.2±22%	3.8±17%	4.1±16%	3.3±15%
<hr/>						
Sample Sizes						
Duck Wings	6,341	4,501	1,723	1,517	2,124	2,448
Goose Tails	150	192	800	540	533	655
Federal Duck Stamps Sold	96,280	77,271	60,450	61,712	139,667	133,883

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Mississippi		Missouri		Ohio	
	2003	2004	2003	2004	2003	2004
Mallard	95,047	127,029	250,756	175,545	76,379	77,507
Domestic Mallard	0	0	0	193	476	212
Black Duck	257	507	0	0	5,473	2,973
Mallard x Black Duck Hybrid	128	0	0	0	1,190	425
Mottled Duck	128	0	0	0	0	0
Gadwall	39,891	50,203	57,428	59,030	9,518	1,911
Wigeon	8,594	9,128	11,210	11,189	1,428	1,911
Green-winged Teal	16,418	19,777	37,761	25,850	8,804	11,892
Blue-winged/Cinnamon Teal	10,518	1,521	37,171	6,173	6,900	4,459
Northern Shoveler	7,696	11,410	22,617	12,539	1,904	1,911
Northern Pintail	5,002	3,550	6,097	4,051	3,093	849
Wood Duck	44,124	40,314	20,454	18,326	28,315	26,968
Redhead	128	761	1,573	386	476	1,062
Canvasback	385	254	197	0	0	0
Greater Scaup	128	254	197	0	476	1,062
Lesser Scaup	5,387	11,156	4,130	2,315	3,569	1,486
Ring-necked Duck	5,259	5,832	19,470	9,645	952	1,486
Goldeneyes	0	0	393	193	476	849
Bufflehead	128	1,014	590	193	5,949	1,062
Ruddy Duck	0	507	787	386	1,904	637
Long-tailed Duck	0	0	0	0	238	0
Eiders	0	0	0	0	0	0
Scoters	128	0	0	386	1,190	0
Hooded Merganser	2,052	6,085	1,573	1,929	2,617	1,699
Other Mergansers	0	0	0	772	476	637
Other Ducks	0	0	197	0	0	0
Total Duck Harvest	241,400±30%	289,300±19%	472,600±33%	329,100±19%	161,800±17%	141,000±17%
Total Active Duck Hunters	12,400±19%	19,200±14%	33,000±15%	28,500±13%	23,000±17%	21,500±17%
Total Duck Hunter Days Afield	101,700±23%	130,600±14%	238,900±23%	213,600±18%	146,500±17%	134,600±19%
Seasonal Duck Harvest Per Hunter	19.5±37%	15.1±24%	14.3±37%	11.5±23%	7.0±24%	6.6±24%
<hr/>						
Goose Species Composition						
Canada Goose	2,045	8,707	18,542	8,774	87,946	96,000
Snow Goose	7,073	5,378	31,047	25,544	0	0
Blue Goose	5,880	4,354	18,434	11,772	0	0
Ross's Goose	852	1,024	6,037	2,777	254	0
White-fronted Goose	1,449	1,537	539	333	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	17,300±52%	21,000±29%	74,600±31%	49,200±44%	88,200±18%	96,000±17%
Total Active Goose Hunters	4,200±33%	6,500±25%	16,600±18%	13,100±18%	25,500±14%	27,000±14%
Total Goose Hunter Days Afield	15,500±50%	31,800±40%	89,700±23%	59,900±24%	159,000±16%	160,000±18%
Seasonal Goose Harvest Per Hunter	4.1±62%	3.2±38%	4.5±36%	3.8±47%	3.5±23%	3.6±22%
<hr/>						
Sample Sizes						
Duck Wings	1,882	1,141	2,403	1,706	680	664
Goose Tails	203	82	692	443	347	270
Federal Duck Stamps Sold	23,589	22,293	38,759	37,779	33,795	28,070

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Tennessee		Wisconsin		Flyway Total	
	2003	2004	2003	2004	2003	2004
Mallard	130,815	191,225	163,935	173,400	2,483,361	2,199,931
Domestic Mallard	626	0	0	327	6,018	5,015
Black Duck	5,007	7,426	1,529	2,945	33,150	35,692
Mallard x Black Duck Hybrid	313	0	764	0	4,905	2,651
Mottled Duck	0	0	0	0	42,013	35,018
Gadwall	42,562	56,625	13,375	17,340	851,315	654,488
Wigeon	3,443	14,852	6,496	15,050	120,737	149,793
Green-winged Teal	16,274	14,852	48,913	44,168	698,563	498,019
Blue-winged/Cinnamon Teal	1,878	464	21,017	21,266	599,893	365,488
Northern Shoveler	2,817	1,857	4,203	3,926	207,613	158,905
Northern Pintail	5,946	2,321	8,025	11,451	119,005	90,542
Wood Duck	46,630	38,524	80,630	79,829	736,154	729,608
Redhead	1,565	5,570	6,114	4,908	34,542	35,334
Canvasback	939	464	2,675	1,636	9,821	10,824
Greater Scaup	0	464	2,675	5,235	13,032	28,056
Lesser Scaup	3,755	4,641	14,903	10,797	145,607	108,534
Ring-necked Duck	8,450	17,637	17,960	9,815	230,202	233,979
Goldeneyes	313	0	8,025	4,908	28,299	30,290
Bufflehead	939	1,392	24,839	12,105	75,904	59,789
Ruddy Duck	626	464	4,203	0	10,943	5,227
Long-tailed Duck	0	0	1,146	3,272	2,024	4,928
Eiders	0	0	0	0	0	0
Scoters	0	0	382	654	4,828	4,286
Hooded Merganser	2,191	1,857	7,261	5,889	51,706	47,469
Other Mergansers	313	464	764	982	9,434	8,808
Other Ducks	0	0	764	0	3,131	2,829
Total Duck Harvest	275,400±33%	361,100±41%	440,600±13%	429,900±10%	6,522,200±6%	5,505,500±5%
Total Active Duck Hunters	28,500±52%	21,500±29%	69,600±9%	67,400±8%		
Total Duck Hunter Days Afield	179,100±31%	210,700±35%	468,200±13%	447,100±9%	4,033,400±4%	3,857,300±4%
Seasonal Duck Harvest Per Hunter	9.7±62%	16.8±50%	6.3±16%	6.4±13%		
<hr/>						
Goose Species Composition						
Canada Goose	36,794	58,100	149,977	97,300	1,103,880	952,120
Snow Goose	4,906	0	815	0	166,887	106,509
Blue Goose	0	0	408	0	119,392	85,747
Ross's Goose	0	0	0	0	27,580	4,958
White-fronted Goose	0	0	0	0	110,611	86,266
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	449	0
Total Goose Harvest	41,700±77%	58,100±52%	151,200±12%	97,300±16%	1,528,800±7%	1,235,600±7%
Total Active Goose Hunters	16,800±52%	17,800±29%	65,700±7%	51,100±9%		
Total Goose Hunter Days Afield	154,300±113%	117,700±38%	425,500±12%	314,400±12%	2,360,700±9%	2,086,800±5%
Seasonal Goose Harvest Per Hunter	2.5±93%	3.3±60%	2.3±14%	1.9±18%		
<hr/>						
Sample Sizes						
Duck Wings	880	778	1,153	1,314	26,967	21,772
Goose Tails	34	32	371	289	4,869	4,033
Federal Duck Stamps Sold	35,492	34,730	71,104	68,032	704,978	653,880

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Colorado		Kansas		Nebraska	
	2003	2004	2003	2004	2003	2004
Mallard	71,366	65,582	95,711	133,582	127,992	95,874
Domestic Mallard	0	0	0	0	330	121
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	10,615	9,038	41,063	41,374	20,928	12,848
Wigeon	9,848	11,008	15,513	13,371	13,328	11,272
Green-winged Teal	20,463	11,239	33,560	31,913	25,775	22,787
Blue-winged/Cinnamon Teal	7,418	11,935	25,651	25,985	20,488	10,666
Northern Shoveler	4,732	3,128	4,258	5,298	5,618	2,424
Northern Pintail	2,174	1,390	4,157	3,280	2,974	3,030
Wood Duck	2,046	2,781	3,751	3,027	3,084	3,273
Redhead	1,151	579	1,217	2,018	2,203	970
Canvasback	128	0	101	252	551	0
Greater Scaup	0	116	0	126	110	0
Lesser Scaup	895	927	913	1,766	2,644	848
Ring-necked Duck	1,279	1,390	4,765	4,793	2,533	1,333
Goldeneyes	4,476	2,665	913	1,514	1,101	364
Bufflehead	639	348	608	1,009	771	485
Ruddy Duck	0	0	406	126	110	121
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	126	110	0
Hooded Merganser	128	116	913	1,388	330	485
Other Mergansers	639	1,159	101	126	110	0
Other Ducks	0	0	0	126	110	0
Total Duck Harvest	138,000±24%	123,400±16%	233,600±18%	271,200±21%	231,200±12%	166,900±12%
Total Active Duck Hunters	13,400±13%	13,600±11%	15,100±13%	19,200±13%	18,500±10%	16,800±10%
Total Duck Hunter Days Afield	86,000±17%	85,400±14%	107,600±15%	124,000±15%	135,000±14%	129,100±10%
Seasonal Duck Harvest Per Hunter	10.3±27%	9.1±20%	15.5±22%	14.1±25%	12.5±16%	9.9±15%
<hr/>						
Goose Species Composition						
Canada Goose	97,439	64,395	123,866	80,218	104,141	62,672
Snow Goose	16,208	9,199	15,328	11,231	5,268	4,242
Blue Goose	1,929	242	4,971	3,646	1,593	2,893
Ross's Goose	3,666	2,542	5,800	2,917	1,470	1,350
White-fronted Goose	1,158	121	9,735	5,688	2,205	1,543
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	123	0
Total Goose Harvest	120,400±25%	76,500±16%	159,700±20%	103,700±19%	114,800±17%	72,700±16%
Total Active Goose Hunters	15,900±12%	14,700±11%	16,100±12%	15,500±14%	18,300±9%	15,100±10%
Total Goose Hunter Days Afield	111,400±15%	92,200±13%	116,200±16%	98,000±19%	137,500±12%	117,500±12%
Seasonal Goose Harvest Per Hunter	7.6±27%	5.2±19%	9.9±24%	6.7±23%	6.3±20%	4.8±18%
<hr/>						
Sample Sizes						
Duck Wings	1,079	1,065	2,304	2,150	2,099	1,377
Goose Tails	624	632	771	711	937	377
Federal Duck Stamps Sold	30,243	35,402	27,019	23,332	31,787	34,373

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	New Mexico		North Dakota		Oklahoma	
	2003	2004	2003	2004	2003	2004
Mallard	28,415	17,068	231,335	223,924	110,031	186,755
Domestic Mallard	215	32	0	117	0	173
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	0	0	148	117	0	0
Mottled Duck	0	0	0	0	0	0
Gadwall	7,867	4,396	96,155	125,440	40,657	69,687
Wigeon	7,050	4,041	23,742	44,458	11,322	23,171
Green-winged Teal	5,674	2,586	26,116	31,389	22,130	25,592
Blue-winged/Cinnamon Teal	2,364	550	37,097	25,205	13,998	3,285
Northern Shoveler	2,063	2,004	19,290	22,404	4,838	7,781
Northern Pintail	2,106	743	17,806	21,004	1,132	5,706
Wood Duck	559	485	2,226	2,217	7,823	8,300
Redhead	344	97	12,168	7,935	926	2,248
Canvasback	43	65	2,671	4,784	823	346
Greater Scaup	43	0	0	350	103	346
Lesser Scaup	172	0	17,065	20,187	1,647	1,383
Ring-necked Duck	989	743	3,413	8,168	7,720	11,413
Goldeneyes	172	226	890	467	721	1,902
Bufflehead	215	162	4,452	2,684	103	173
Ruddy Duck	0	129	742	117	0	173
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	117	0	0
Hooded Merganser	86	65	1,039	817	618	865
Other Mergansers	129	453	297	0	206	0
Other Ducks	2,493	1,455	148	0	103	0
Total Duck Harvest	61,000±36%	35,300±30%	496,800±7%	541,900±8%	224,900±31%	349,300±22%
Total Active Duck Hunters	3,900±22%	3,300±18%	37,100±5%	36,900±5%	13,800±30%	15,300±13%
Total Duck Hunter Days Afield	30,900±32%	25,600±35%	197,700±7%	194,200±8%	103,500±33%	130,300±18%
Seasonal Duck Harvest Per Hunter	15.6±42%	10.7±35%	13.4±9%	14.7±9%	16.3±43%	22.8±25%
<hr/>						
Goose Species Composition						
Canada Goose	6,139	5,510	124,452	118,427	36,698	41,630
Snow Goose	2,624	1,017	10,117	9,568	1,125	2,140
Blue Goose	50	0	14,686	8,079	422	389
Ross's Goose	1,188	2,373	109	213	703	1,167
White-fronted Goose	0	0	435	1,914	2,953	4,280
Brant	0	0	0	0	0	195
Other Geese	0	0	0	0	0	0
Total Goose Harvest	10,000±64%	8,900±59%	149,800±9%	138,200±13%	41,900±45%	49,800±27%
Total Active Goose Hunters	2,500±28%	2,300±23%	27,600±6%	24,700±6%	8,500±31%	10,000±14%
Total Goose Hunter Days Afield	13,300±39%	11,400±37%	128,900±7%	123,100±9%	44,100±40%	44,500±17%
Seasonal Goose Harvest Per Hunter	4.0±70%	3.9±63%	5.4±10%	5.6±14%	4.9±55%	5.0±31%
<hr/>						
Sample Sizes						
Duck Wings	1,419	1,092	3,348	4,644	2,185	2,020
Goose Tails	202	105	1,377	1,300	298	256
Federal Duck Stamps Sold	5,048	4,412	31,709	27,436	21,702	18,800

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	South Dakota		Texas		Wyoming	
	2003	2004	2003	2004	2003	2004
Mallard	124,593	93,993	130,070	117,021	22,685	24,975
Domestic Mallard	134	0	520	1,979	0	0
Black Duck	134	0	0	0	0	0
Mallard x Black Duck Hybrid	0	194	0	0	0	0
Mottled Duck	0	0	10,752	14,133	0	0
Gadwall	37,432	35,867	163,195	178,924	3,699	4,290
Wigeon	15,374	17,593	52,028	97,800	3,896	3,241
Green-winged Teal	24,063	17,982	125,908	124,653	3,797	4,861
Blue-winged/Cinnamon Teal	16,844	14,289	137,528	134,264	1,134	1,716
Northern Shoveler	9,759	9,331	36,593	51,444	493	953
Northern Pintail	6,149	4,763	18,383	22,330	197	477
Wood Duck	6,149	3,791	49,600	50,031	247	95
Redhead	3,208	2,236	12,487	18,373	444	95
Canvasback	936	583	2,601	2,827	0	0
Greater Scaup	134	583	867	2,261	0	0
Lesser Scaup	3,208	8,068	17,863	33,071	444	477
Ring-necked Duck	2,139	2,138	39,715	37,311	197	477
Goldeneyes	1,471	583	694	283	1,775	667
Bufflehead	936	2,236	1,387	6,219	395	191
Ruddy Duck	267	778	173	565	49	0
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	173	0	49	0
Hooded Merganser	802	194	3,295	1,979	49	95
Other Mergansers	401	97	347	1,696	49	191
Other Ducks	267	0	11,620	12,437	0	0
Total Duck Harvest	254,400±19%	215,300±17%	815,800±46%	909,600±40%	39,600±19%	42,800±22%
Total Active Duck Hunters	18,200±11%	18,800±10%	61,100±28%	84,900±20%	4,300±19%	3,400±19%
Total Duck Hunter Days Afield	119,400±15%	110,200±16%	379,200±41%	497,000±42%	23,000±19%	31,300±42%
Seasonal Duck Harvest Per Hunter	14.0±22%	11.5±20%	13.4±54%	10.7±45%	9.2±27%	12.6±29%
<hr/>						
Goose Species Composition						
Canada Goose	154,867	96,663	62,525	43,489	24,275	22,602
Snow Goose	18,078	16,719	123,848	114,069	325	198
Blue Goose	10,646	13,207	20,441	19,249	0	0
Ross's Goose	603	1,264	30,661	34,221	0	0
White-fronted Goose	1,607	1,545	61,924	37,072	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	185,800±19%	129,400±15%	299,400±40%	248,100±27%	24,600±42%	22,800±23%
Total Active Goose Hunters	20,100±9%	19,200±9%	47,000±28%	47,400±23%	4,300±17%	3,600±17%
Total Goose Hunter Days Afield	146,700±13%	122,600±13%	149,700±38%	140,600±25%	24,600±24%	24,800±30%
Seasonal Goose Harvest Per Hunter	9.2±21%	6.7±18%	6.4±49%	5.2±36%	5.7±45%	6.3±29%
<hr/>						
Sample Sizes						
Duck Wings	1,903	2,215	4,704	3,218	803	449
Goose Tails	925	921	498	348	227	115
Federal Duck Stamps Sold	31,438	28,178	129,717	133,423	8,786	9,001

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Flyway Total	
	2003	2004
Mallard	942,199	958,774
Domestic Mallard	1,199	2,422
Black Duck	134	0
Mallard x Black Duck Hybrid	148	311
Mottled Duck	10,752	14,133
Gadwall	421,610	481,863
Wigeon	152,100	225,956
Green-winged Teal	287,486	273,004
Blue-winged/Cinnamon Teal	262,522	227,893
Northern Shoveler	87,645	104,769
Northern Pintail	55,080	62,724
Wood Duck	75,485	74,000
Redhead	34,148	34,551
Canvasback	7,855	8,857
Greater Scaup	1,257	3,782
Lesser Scaup	44,850	66,727
Ring-necked Duck	62,750	67,768
Goldeneyes	12,213	8,671
Bufflehead	9,506	13,505
Ruddy Duck	1,748	2,009
Long-tailed Duck	0	0
Eiders	0	0
Scoters	333	243
Hooded Merganser	7,260	6,003
Other Mergansers	2,280	3,721
Other Ducks	14,742	14,018
Total Duck Harvest	2,495,500±16%	2,655,700±15%
Total Active Duck Hunters		
Total Duck Hunter Days Afield	1,182,200±14%	1,327,000±16%
Seasonal Duck Harvest Per Hunter		

Goose Species Composition		
Canada Goose	734,402	535,606
Snow Goose	192,921	168,384
Blue Goose	54,738	47,705
Ross's Goose	44,200	46,047
White-fronted Goose	80,017	52,163
Brant	0	195
Other Geese	123	0
Total Goose Harvest	1,106,200±12%	850,200±9%
Total Active Goose Hunters		
Total Goose Hunter Days Afield	872,400±9%	774,700±6%
Seasonal Goose Harvest Per Hunter		

Sample Sizes		
Duck Wings	19,844	18,230
Goose Tails	5,859	4,765

Federal Duck Stamps Sold	317,449	314,357

Table 1D. Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Arizona		California		Idaho	
	2003	2004	2003	2004	2003	2004
Mallard	10,697	11,295	288,094	359,723	195,916	122,102
Domestic Mallard	85	54	477	1,394	136	97
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	3,196	3,480	79,774	132,566	6,399	6,125
Wigeon	6,648	3,854	112,805	196,846	20,150	18,860
Green-winged Teal	7,884	4,871	218,097	348,748	15,248	14,485
Blue-winged/Cinnamon Teal	2,046	2,302	46,267	57,312	817	1,555
Northern Shoveler	2,429	2,248	96,230	147,722	2,859	2,625
Northern Pintail	1,151	535	79,297	98,771	5,854	3,403
Wood Duck	341	0	25,280	22,472	2,723	1,847
Redhead	341	910	8,228	9,581	2,451	2,042
Canvasback	256	54	7,035	11,497	408	194
Greater Scaup	85	161	4,412	10,278	136	389
Lesser Scaup	213	268	12,998	25,956	1,634	2,430
Ring-necked Duck	2,983	2,891	15,502	31,356	545	3,305
Goldeneyes	341	642	4,054	4,703	4,629	5,930
Bufflehead	256	107	9,897	15,852	1,089	1,847
Ruddy Duck	426	161	2,743	3,484	272	194
Long-tailed Duck	0	0	0	0	136	97
Eiders	0	0	0	0	0	0
Scoters	43	0	119	523	0	0
Hooded Merganser	128	54	835	1,219	681	292
Other Mergansers	298	0	715	697	681	681
Other Ducks	852	214	238	0	136	0
Total Duck Harvest	40,700±26%	34,100±20%	1,013,100±12%	1,480,700±21%	262,900±24%	188,500±16%
Total Active Duck Hunters	3,400±14%	3,700±15%	43,100±12%	52,900±11%	18,200±12%	17,100±12%
Total Duck Hunter Days Afield	20,900±21%	21,100±18%	406,900±11%	554,600±16%	125,300±16%	105,700±16%
Seasonal Duck Harvest Per Hunter	12.0±30%	9.2±25%	23.5±17%	28.0±23%	14.4±27%	11.0±20%
<hr/>						
Goose Species Composition						
Canada Goose	1,950	1,200	41,946	44,492	83,749	62,327
Snow Goose	300	1,200	32,851	35,355	451	124
Blue Goose	0	0	186	0	0	0
Ross's Goose	50	0	16,333	10,329	0	249
White-fronted Goose	0	0	24,685	39,924	0	0
Brant	0	0	2,300	800	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	2,300±55%	2,400±51%	118,300±19%	130,900±14%	84,200±24%	62,700±20%
Total Active Goose Hunters	1,000±31%	1,300±28%	38,000±14%	38,200±11%	15,400±12%	13,300±12%
Total Goose Hunter Days Afield	4,700±39%	8,300±44%	241,400±19%	273,000±15%	100,100±22%	87,300±18%
Seasonal Goose Harvest Per Hunter	2.3±63%	1.8±58%	3.1±24%	3.4±18%	5.5±27%	4.7±24%
<hr/>						
Sample Sizes						
Duck Wings	955	637	8,496	8,500	1,931	1,939
Goose Tails	46	18	627	668	560	504
<hr/>						
Federal Duck Stamps Sold	5,792	4,423	71,667	73,590	21,097	20,157

Table 1D. Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Montana		Nevada		Oregon	
	2003	2004	2003	2004	2003	2004
Mallard	106,759	88,042	17,771	12,367	121,104	89,792
Domestic Mallard	201	94	0	46	213	129
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	4,423	4,701	7,904	7,087	9,458	10,450
Wigeon	5,730	8,414	3,784	2,501	38,969	36,833
Green-winged Teal	3,468	6,628	7,425	5,743	37,689	41,155
Blue-winged/Cinnamon Teal	1,659	2,068	287	556	640	645
Northern Shoveler	1,558	1,645	6,946	4,400	10,098	14,643
Northern Pintail	1,860	1,833	1,820	834	15,716	16,643
Wood Duck	854	752	575	139	9,031	7,612
Redhead	1,357	1,034	719	1,204	213	0
Canvasback	452	235	335	324	498	323
Greater Scaup	0	47	96	0	6,187	5,677
Lesser Scaup	905	1,504	240	232	6,969	7,934
Ring-necked Duck	452	705	671	695	5,973	6,580
Goldeneyes	2,815	1,880	479	556	1,564	1,290
Bufflehead	402	517	431	278	9,600	14,578
Ruddy Duck	201	188	383	93	213	258
Long-tailed Duck	0	47	0	0	71	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	71	452
Hooded Merganser	302	141	192	46	782	839
Other Mergansers	201	423	144	0	996	968
Other Ducks	0	0	0	0	142	0
Total Duck Harvest	133,600±16%	120,900±13%	50,200±27%	37,100±16%	276,200±13%	256,800±21%
Total Active Duck Hunters	14,200±13%	14,400±12%	4,200±18%	3,500±19%	19,200±7%	18,500±17%
Total Duck Hunter Days Afield	70,600±16%	71,500±13%	24,400±21%	19,900±25%	135,400±10%	124,900±17%
Seasonal Duck Harvest Per Hunter	9.4±20%	8.4±18%	12.0±32%	10.6±25%	14.4±15%	13.9±27%
<hr/>						
Goose Species Composition						
Canada Goose	65,600	43,859	8,180	5,235	53,526	67,610
Snow Goose	712	1,302	315	183	5,186	945
Blue Goose	194	0	0	0	0	0
Ross's Goose	194	340	105	0	256	73
White-fronted Goose	0	0	0	183	832	1,672
Brant	0	0	0	0	100	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	66,700±25%	45,500±15%	8,600±33%	5,600±27%	59,900±21%	70,300±23%
Total Active Goose Hunters	14,000±12%	12,800±13%	2,500±20%	2,400±21%	11,400±10%	13,300±16%
Total Goose Hunter Days Afield	65,200±17%	61,900±22%	12,200±27%	10,500±28%	70,600±15%	82,400±25%
Seasonal Goose Harvest Per Hunter	4.8±28%	3.6±19%	3.4±38%	2.3±34%	5.3±23%	5.3±28%
<hr/>						
Sample Sizes						
Duck Wings	2,658	2,572	1,048	801	3,884	3,981
Goose Tails	1,031	804	82	92	934	967
Federal Duck Stamps Sold	20,890	20,056	6,698	5,399	29,292	28,086

Table 1D. Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2003 and 2004 hunting seasons.

Duck Species Composition	Utah		Washington		Flyway Total	
	2003	2004	2003	2004	2003	2004
Mallard	123,368	67,935	189,704	178,118	1,053,412	929,374
Domestic Mallard	247	75	225	168	1,585	2,057
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	30,821	25,898	12,807	12,081	154,782	202,387
Wigeon	21,179	16,740	64,483	62,840	273,749	346,888
Green-winged Teal	38,980	28,825	28,085	29,113	356,877	479,569
Blue-winged/Cinnamon Teal	6,016	7,582	300	503	58,031	72,523
Northern Shoveler	28,431	19,667	7,939	10,739	156,490	203,689
Northern Pintail	18,789	10,209	11,009	9,313	135,497	141,540
Wood Duck	165	75	2,546	3,440	41,515	36,337
Redhead	7,911	4,804	1,797	3,104	23,017	22,679
Canvasback	1,566	976	824	1,342	11,375	14,945
Greater Scaup	82	450	4,419	5,034	15,417	22,035
Lesser Scaup	10,054	2,552	5,317	10,655	38,329	51,531
Ring-necked Duck	2,307	2,252	6,591	8,138	35,024	55,922
Goldeneyes	24,805	5,930	3,146	4,866	41,833	25,798
Bufflehead	6,181	1,727	8,163	8,977	36,020	43,883
Ruddy Duck	1,319	1,802	75	168	5,632	6,347
Long-tailed Duck	0	0	225	252	432	396
Eiders	0	0	0	0	0	0
Scoters	0	0	749	2,265	982	3,239
Hooded Merganser	494	75	1,947	1,426	5,360	4,092
Other Mergansers	2,884	1,126	374	671	6,294	4,565
Other Ducks	0	0	75	84	1,444	298
Total Duck Harvest	325,600±44%	198,700±14%	350,800±17%	353,300±14%	2,453,100±9%	2,670,200±12%
Total Active Duck Hunters	15,900±13%	16,400±11%	24,700±10%	22,400±10%		
Total Duck Hunter Days Afield	135,200±26%	116,600±15%	173,000±15%	163,200±13%	1,091,700±6%	1,177,200±8%
Seasonal Duck Harvest Per Hunter	20.5±46%	12.1±18%	14.2±20%	15.8±17%		
<hr/>						
Goose Species Composition						
Canada Goose	29,218	20,940	69,008	72,147	353,176	317,810
Snow Goose	95	80	2,641	1,535	42,551	40,724
Blue Goose	0	0	0	0	380	0
Ross's Goose	95	80	0	0	17,033	11,070
White-fronted Goose	191	0	352	118	26,060	41,897
Brant	0	0	1,500	500	3,900	1,300
Other Geese	0	0	0	0	0	0
Total Goose Harvest	29,600±18%	21,100±17%	73,500±15%	74,300±17%	439,100±9%	412,800±8%
Total Active Goose Hunters	10,800±11%	10,800±11%	15,400±11%	13,200±12%		
Total Goose Hunter Days Afield	76,400±16%	69,000±17%	75,600±14%	66,400±14%	646,200±9%	658,800±8%
Seasonal Goose Harvest Per Hunter	2.7±21%	2.0±20%	4.7±18%	5.6±21%		
<hr/>						
Sample Sizes						
Duck Wings	3,951	2,647	4,684	4,211	27,607	25,288
Goose Tails	310	264	830	635	4,420	3,952
Federal Duck Stamps Sold	38,675	44,380	31,434	28,174	225,545	224,265

Table 1E. Preliminary estimates of waterfowl harvest and hunter activity in Alaska and the entire US during the 2003 and 2004 hunting seasons.

Duck Species Composition	Alaska		United States Total	
	2003	2004	2003	2004
Mallard	24,824	21,479	4,931,097	4,548,774
Domestic Mallard	0	0	21,439	19,548
Black Duck	0	0	128,392	111,954
Mallard x Black Duck Hybrid	0	0	12,054	11,819
Mottled Duck	0	0	63,126	64,489
Gadwall	392	969	1,466,578	1,367,215
Wigeon	9,554	8,559	595,738	752,838
Green-winged Teal	9,632	7,994	1,489,713	1,378,600
Blue-winged/Cinnamon Teal	0	0	966,318	739,874
Northern Shoveler	1,879	2,180	466,375	480,612
Northern Pintail	9,084	6,056	336,800	312,087
Wood Duck	0	0	1,191,158	1,123,371
Redhead	157	81	97,433	98,490
Canvasback	157	81	33,945	44,664
Greater Scaup	705	807	47,754	71,934
Lesser Scaup	861	888	290,587	293,772
Ring-necked Duck	1,018	1,776	441,800	436,987
Goldeneyes	4,933	3,634	100,717	81,522
Bufflehead	705	1,615	176,706	173,140
Ruddy Duck	0	81	20,797	18,526
Long-tailed Duck	811	124	20,893	26,356
Eiders	0	0	34,638	21,585
Scoters	2,433	2,102	71,750	60,487
Hooded Merganser	0	0	93,507	85,014
Other Mergansers	3,244	2,349	44,075	39,542
Other Ducks	811	2,225	21,707	22,494
Total Duck Harvest	71,200±10%	63,000±10%	13,165,500±5%	12,385,700±5%
Total Active Duck Hunters ^a	5,700±5%	4,800±5%		
Total Duck Hunter Days Afield ^a	26,800±9%	26,300±11%	7,444,000±4%	7,367,700±4%
Seasonal Duck Harvest Per Hunter ^a	11.2±11%	11.7±11%		

<u>Goose Species Composition</u>				
Canada Goose	6,207	4,519	2,855,576	2,453,474
Snow Goose	0	0	437,426	347,164
Blue Goose	0	0	175,547	133,453
Ross's Goose	0	0	88,814	62,075
White-fronted Goose	93	2,181	216,781	182,507
Brant	600	600	49,425	20,787
Other Geese	0	0	831	640
Total Goose Harvest	6,900±22%	7,300±22%	3,828,200±5% ^c	3,200,400±4% ^d
Total Active Goose Hunters ^b	2,200±10%	2,000±10%		
Total Goose Hunter Days Afield ^b	10,000±17%	9,500±16%	4,720,100±5%	4,211,486±3%
Seasonal Goose Harvest Per Hunter ^b	2.9±24%	3.4±24%		

<u>Sample Sizes</u>				
Duck Wings	843	751	94,110	82,464
Goose Tails	78	45	23,157	20,722
Federal Duck Stamps Sold	9,952	9,751	1,569,333	1,520,197

^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 coastal states with 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 3,800 geese harvested in Florida for which there were no species composition estimates from the Parts Collection Survey.

^d Harvest estimate contains 300 geese harvested in Florida for which there were no species composition estimates from the Parts Collection Survey.

Table 2. Flyway-specific point estimates of duck and goose harvest in Colorado, Montana, New Mexico, and Wyoming during the 2003 and 2004 hunting seasons.

	2003		2004	
	Central Flyway	Pacific Flyway	Central Flyway	Pacific Flyway
Duck Harvest				
Colorado	121,000	17,000	98,400	25,000
Montana	46,500	87,100	42,800	78,100
New Mexico	55,300	5,700	33,200	2,100
Wyoming	35,700	3,900	39,700	3,100
Goose Harvest				
Colorado	111,500	5,400	72,500	4,000
Montana	37,700	29,000	27,400	18,100
New Mexico	6,600	3,400	4,700	4,200
Wyoming	23,400	1,200	20,600	2,200

Table 3. Preliminary estimates of sea duck harvest and hunter activity for states with special sea duck seasons during the 2003 and 2004 hunting seasons.

State / Flyway	Sea Duck Harvest ^a		Active Sea Duck Hunters		Sea Duck Hunter Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Connecticut	4,400 ± 48%	6,500 ± 59%	1,000 ± 33%	800 ± 33%	4,700 ± 42%	4,000 ± 49%	4.4 ± 58%	8.0 ± 68%
Delaware	600 ± 55%	900 ± 52%	300 ± 52%	200 ± 48%	900 ± 82%	500 ± 46%	2.4 ± 75%	4.0 ± 71%
Maine	46,300 ± 68%	20,700 ± 53%	2,800 ± 53%	2,200 ± 39%	11,100 ± 61%	7,100 ± 40%	16.5 ± 86%	10.0 ± 66%
Maryland	18,700 ± 31%	20,400 ± 35%	3,100 ± 21%	3,400 ± 21%	7,600 ± 26%	8,300 ± 33%	6.1 ± 38%	6.0 ± 41%
Massachusetts	7,000 ± 26%	9,600 ± 24%	1,000 ± 21%	1,300 ± 18%	3,200 ± 27%	4,200 ± 23%	6.7 ± 34%	8.0 ± 30%
New Hampshire	2,600 ± 54%	300 ± 71%	300 ± 51%	100 ± 72%	1,200 ± 55%	300 ± 83%	8.8 ± 74%	2.0 ± 101%
New Jersey	3,200 ± 69%	2,900 ± 48%	800 ± 34%	700 ± 36%	1,900 ± 51%	1,800 ± 41%	4.3 ± 77%	4.0 ± 60%
New York	7,600 ± 34%	11,100 ± 32%	1,500 ± 25%	1,700 ± 23%	5,000 ± 27%	7,900 ± 45%	5.0 ± 42%	6.0 ± 40%
Rhode Island	2,400 ± 78%	1,800 ± 36%	300 ± 41%	200 ± 26%	1,200 ± 50%	900 ± 36%	9.3 ± 89%	8.0 ± 45%
Virginia	11,800 ± 36%	11,300 ± 34%	2,600 ± 25%	2,700 ± 25%	6,800 ± 31%	6,200 ± 30%	4.6 ± 44%	4.0 ± 42%
Atlantic Flyway Total	104,800 ± 31%	85,500 ± 17%			43,700 ± 18%	41,300 ± 15%		
Alaska	7,300 ± 24% ^b	6,800 ± 36% ^b	1,200 ± 18%	900 ± 20%	4,600 ± 21%	4,100 ± 22%	6.3 ± 30%	7.0 ± 41%
U.S. Total	112,100 ± 29%	92,300 ± 16%			48,300 ± 17%	45,300 ± 14%		

^a Sea ducks include Long-tailed Ducks, Common Eiders, King Eiders, Black Scoters, Whited-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 4. Preliminary estimates of Brant harvest and hunter activity along the Atlantic and Pacific coasts during the 2003 and 2004 hunting seasons.

State / Flyway	Brant Harvest		Active Brant Hunters		Brant Hunter Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Connecticut	2,500 ± 57%	1,000 ± 86%	800 ± 38%	300 ± 57%	2,400 ± 53%	1,800 ± 76%	3.4 ± 69%	3.0 ± 103%
Delaware	1,500 ± 52%	600 ± 60%	500 ± 38%	200 ± 42%	1,300 ± 46%	1,000 ± 66%	3.4 ± 64%	2.0 ± 73%
Maryland	1,700 ± 66%	800 ± 80%	500 ± 51%	300 ± 65%	1,600 ± 65%	3,500 ± 151%	3.5 ± 83%	2.0 ± 103%
Massachusetts	1,600 ± 99%	300 ± 47%	300 ± 37%	300 ± 37%	1,200 ± 52%	900 ± 48%	4.8 ± 16%	1.0 ± 60%
New Hampshire	100 ± 104%	100 ± 190%	100 ± 87%	<50 ± 117%	500 ± 109%	100 ± 122%	1.1 ± 136%	2.0 ± 223%
New Jersey	9,900 ± 25%	5,000 ± 23%	1,900 ± 19%	1,600 ± 20%	7,000 ± 24%	6,100 ± 25%	5.3 ± 32%	3.0 ± 30%
New York	10,400 ± 25%	3,800 ± 26%	1,900 ± 18%	1,400 ± 21%	11,000 ± 24%	5,400 ± 22%	5.3 ± 31%	3.0 ± 34%
North Carolina	6,500 ± 78%	1,100 ± 138%	1,600 ± 71%	600 ± 138%	3,500 ± 73%	1,100 ± 138%	4.0 ± 16%	2.0 ± 195%
Rhode Island	1,200 ± 77%	300 ± 55%	300 ± 70%	100 ± 30%	2,000 ± 103%	800 ± 42%	3.8 ± 14%	2.0 ± 63%
Virginia	9,200 ± 41%	2,800 ± 40%	2,300 ± 25%	1,400 ± 33%	8,800 ± 37%	4,800 ± 49%	4.0 ± 47%	2.0 ± 52%
Atlantic Flyway Total	44,700 ± 17%	15,800 ± 17%			39,400 ± 15%	25,500 ± 25%		
California	2,300 ± 115%	800 ± 81%	700 ± 94%	400 ± 90%	3,900 ± 106%	1,200 ± 79%	3.0 ± 149%	2.0 ± 121%
Oregon	<50 ± 190%	0	100 ± 132%	<50 ± 184%	200 ± 119%	<50 ± 184%	0.1 ± 231%	0
Washington	1,500 ± 92%	500 ± 108%	500 ± 64%	400 ± 73%	2,100 ± 92%	700 ± 85%	2.8 ± 112%	1.0 ± 131%
Pacific Flyway Total	3,800 ± 78%	1,300 ± 65%			6,100 ± 74%	1,900 ± 57%		
Alaska	600 ± 35%	600 ± 41%	300 ± 29%	200 ± 29%	1,000 ± 42%	1,100 ± 35%	2.0 ± 45%	2.0 ± 51%
U.S. Total	49,100 ± 17%	17,700 ± 16%			46,600 ± 16%	28,500 ± 23%		

Table 5. Preliminary harvest estimates for special September teal/duck seasons for 2003 and 2004 hunting seasons.

State	Harvest Estimates										Number of	
	Green-winged Teal		Blue-winged/Cinnamon Teal		Wood Duck		Other Ducks		Total Duck Harvest		Wings Received	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
September Teal Season												
Delaware	1,760	815	371	0	0	0	0	0	2,131	815	23	12
Georgia	0	0	2,805	1,789	0	0	0	0	2,805	1,789	17	10
Maryland	873	1,169	873	130	0	0	0	0	1,746	1,299	14	10
North Carolina	194	0	1,067	773	0	0	0	0	1,262	773	13	6
South Carolina	126	0	506	1,686	0	0	0	0	632	1,686	5	15
Virginia	232	346	232	0	0	0	0	87	465	433	6	5
Subtotal	3,186	2,331	5,854	4,378	0	0	0	87	9,040	6,795	78	58
Alabama	0	342	2,227	5,812	0	0	0	0	2,227	6,154	9	18
Arkansas	3,924	1,593	36,099	14,654	0	0	0	0	40,023	16,247	153	51
Illinois	1,694	2,059	13,366	5,429	0	0	0	0	15,060	7,488	80	40
Indiana	685	490	3,594	490	0	0	0	0	4,278	980	25	6
Louisiana	14,416	3,105	189,741	68,850	0	0	636	365	204,793	72,320	966	396
Mississippi	898	254	10,261	254	0	0	0	0	11,159	507	87	2
Missouri	4,130	1,350	33,827	5,016	0	0	983	0	38,941	6,366	198	33
Ohio	1,428	3,610	5,949	3,610	0	0	0	0	7,376	7,220	31	34
Subtotal	27,174	12,803	295,064	104,115	0	0	1,619	365	323,858	117,283	1,549	580
Colorado	1,791	695	3,581	4,287	256	0	0	232	5,627	5,214	44	45
Kansas	9,024	2,901	21,393	19,173	0	0	0	0	30,417	22,075	300	175
Nebraska	3,635	2,061	13,108	6,060	0	0	0	0	16,742	8,121	152	67
New Mexico	1,032	194	1,891	517	0	0	43	162	2,966	873	69	27
Oklahoma	3,500	173	13,792	2,767	0	346	103	0	17,395	3,285	169	19
Texas	12,660	5,088	99,894	63,033	0	0	0	0	112,554	68,121	649	241
Subtotal	31,641	11,112	153,660	95,838	256	346	146	393	185,702	107,689	1,383	574
Total	62,001	26,245	454,578	204,331	256	346	1,765	845	518,600	231,767	3,010	1,212
September Duck Season												
Florida	0	0	5,066	2,588	1,070	1,122	0	0	6,137	3,710	86	43
Kentucky	0	439	439	2,194	8,774	11,848	0	0	9,212	14,480	21	33
Tennessee	0	0	1,252	0	15,961	20,422	0	0	17,213	20,422	55	44
Total	0	439	6,757	4,782	25,805	33,391	0	0	32,562	38,612	162	120
U.S. Total	62,001	26,684	461,334	209,113	26,061	33,737	1,765	845	551,161	270,379	3,172	1,332

Table 6. Preliminary estimates of the number of Canada geese harvested during the special September, regular, and special late seasons during the 2003 and 2004 hunting seasons.

State / Flyway	September		Regular		Late		Total	
	2003	2004	2003	2004	2003	2004	2003	2004
Connecticut	4,200	5,300	14,000	14,300	500	800	18,700	20,400
Delaware	2,900	3,300	8,800	10,700	---	---	11,700	14,000
Florida	---	0	3,800	300	---	---	3,800	300
Georgia	6,400	6,600	18,900	14,600	---	---	25,300	21,200
Maine	3,300	2,500	6,300	4,500	---	---	9,600	7,000
Maryland	11,600	18,600	119,800	123,400	---	---	131,400	142,000
Massachusetts	3,800	4,100	5,200	7,100	3,900	4,000	12,900	15,200
New Hampshire	1,400	500	3,800	2,700	---	---	5,300	3,200
New Jersey	7,600	9,800	16,300	12,800	2,000	2,000	26,000	24,600
New York	32,100	35,800	64,700	73,500	0	0	96,800	109,300
North Carolina	19,300	11,100	22,600	17,000	---	---	41,900	28,100
Pennsylvania	69,400	65,900	93,700	80,300	25,200	21,400	188,200	167,600
Rhode Island	800	700	3,400	3,500	800	200	5,000	4,400
South Carolina	1,000	3,100	13,800	13,900	---	---	14,800	17,000
Vermont	1,500	3,900	2,200	3,200	---	---	3,600	7,100
Virginia	14,800	17,000	30,800	23,900	17,000	14,100	62,600	55,000
West Virginia	1,100	2,300	3,100	5,100	---	---	4,200	7,400
Atlantic Flyway Total	181,200	190,500	431,200	410,800	49,400	42,500	661,800	643,800
Alabama	9,900	8,200	7,000	14,300	---	---	16,900	22,500
Arkansas	---	---	16,400	10,100	---	---	16,400	10,100
Illinois	8,500	7,300	124,600	94,100	---	---	133,200	101,400
Indiana	22,000	29,600	49,900	40,300	---	---	71,800	69,900
Iowa	1,300	12,200	54,100	58,100	---	---	55,500	70,300
Kentucky	6,600	6,400	31,800	38,600	---	---	38,500	45,000
Louisiana	---	---	2,300	0	---	---	2,300	0
Michigan	50,600	42,600	128,700	80,200	12,200	7,200	191,500	130,000
Minnesota	125,400	115,800	152,300	101,000	4,800	17,300	282,500	234,100
Mississippi	500	3,800	1,500	4,900	---	---	2,000	8,700
Missouri	---	---	18,500	8,800	---	---	18,500	8,800
Ohio	37,600	29,900	46,500	61,500	3,800	4,600	87,800	96,000
Tennessee	15,900	12,700	20,900	45,400	---	---	36,800	58,100
Wisconsin	11,000	23,200	139,000	74,100	---	---	150,000	97,300
Mississippi Flyway Total	289,300	291,700	793,500	631,400	20,800	29,100	1,103,800	952,200
Kansas	0	100	123,900	80,100	---	---	123,900	80,200
Nebraska	---	400	104,100	62,300	---	---	104,100	62,700
North Dakota	42,200	41,500	82,200	76,900	---	---	124,500	118,400
Oklahoma	1,300	400	35,400	41,200	---	---	36,700	41,600
South Dakota	45,800	22,300	109,100	74,400	---	---	154,900	96,700
Colorado	600	200	4,800	3,800	---	---	5,400	14,200
Oregon	4,700	3,200	48,900	64,400	---	---	53,500	170,000
Washington	5,700	2,700	62,800	68,800	400	600	69,000	204,300
Wyoming	0	0	1,200	2,200	---	---	1,200	4,600

Table 7. Waterfowl harvest estimates in Canada during the 2003 and 2004 hunting seasons (estimates courtesy of the Canadian Wildlife Service).

Duck Species Composition	Newfoundland		Prince Edward Isl.		Nova Scotia		New Brunswick		Quebec		Ontario		Manitoba	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
Mallard	696	1,985	804	1,100	4,711	5,245	6,511	5,228	58,873	65,284	138,099	132,188	66,403	75,970
Black Duck	10,175	12,888	7,229	4,828	26,010	16,971	15,219	9,776	35,078	30,590	15,178	16,711	0	0
Gadwall	42	0	0	0	31	116	190	206	2,502	1,357	2,301	2,405	8,109	8,289
Wigeon	0	714	0	135	916	176	1,698	1,349	2,929	1,365	5,049	4,328	6,068	4,708
Green-winged Teal	3,968	3,536	4,571	2,275	7,250	6,562	5,992	4,281	24,291	21,651	28,678	15,015	6,084	8,373
Blue-winged/Cinnamon Teal	114	78	76	256	624	235	2,260	962	1,843	1,627	6,199	3,820	6,933	5,947
Northern Shoveler	0	0	0	0	21	0	135	43	1,016	746	2,034	731	3,186	4,327
Northern Pintail	572	30	598	317	228	129	1,270	702	6,795	6,394	10,422	5,208	8,999	12,624
Wood Duck	84	428	0	54	1,284	1,027	2,649	2,002	11,993	11,538	41,255	47,969	594	965
Redhead	130	0	0	0	0	0	0	0	0	186	1,838	3,695	11,294	2,022
Canvasback	0	0	0	0	0	0	0	0	0	58	973	1,837	5,962	2,027
Greater Scaup	577	966	366	39	525	90	338	504	2,101	3,042	5,483	7,030	0	286
Lesser Scaup	683	816	183	0	434	28	265	188	8,604	3,619	11,997	9,859	2,377	7,362
Ring-necked Duck	3,605	5,925	357	440	1,238	1,457	2,881	3,394	5,999	6,282	17,250	17,540	1,395	8,536
Goldeneyes	3,234	3,995	0	334	2,288	2,075	3,338	2,321	4,010	5,715	10,517	6,197	193	1,127
Bufflehead	0	0	0	16	968	1,215	96	198	939	226	7,292	6,349	799	2,739
Ruddy Duck	0	0	0	0	0	0	0	0	0	70	1,852	1,704	0	156
Long-tailed Duck	1,919	800	0	0	364	768	76	0	1,020	1,356	535	773	0	0
Eiders	7,691	4,696	177	0	3,321	5,668	334	330	2,266	1,947	0	435	65	0
Scoters	1,653	216	0	0	3,047	3,714	133	37	2,082	3,971	670	695	0	0
Hooded Merganser	187	106	0	27	744	337	734	560	2,336	1,897	4,817	4,216	86	636
Other Mergansers	6,319	7,092	275	124	1,784	1,957	491	226	3,204	2,697	1,290	973	0	0
Other Ducks	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Duck Harvest	41,649	44,271	14,636	9,945	55,788	47,770	44,610	32,307	177,881	171,618	313,729	289,678	128,547	146,094
<hr/>														
Goose Species Composition														
Canada Goose	5,004	4,481	20,983	15,028	4,915	5,996	11,245	6,100	111,883	75,316	160,321	148,893	88,720	92,512
Snow Goose	0	0	0	0	0	0	0	433	89,738	66,326	915	1,757	6,829	12,427
Blue Goose	0	0	0	0	0	0	0	0	1,151	82	0	279	21,525	10,731
Ross's Goose	0	0	0	0	0	0	0	0	0	0	94	109	1,397	1,794
White-fronted Goose	0	0	0	0	0	0	0	0	0	0	76	0	0	238
Brant	0	0	0	0	0	0	0	0	393	0	183	0	0	0
Total Goose Harvest	5,004	4,481	20,983	15,028	4,915	5,996	11,245	6,533	203,165	141,724	161,589	151,038	118,471	117,702
<hr/>														
Migratory Bird Permits Sold	15,626	14,810	2,316	1,724	5,926	5,727	6,065	5,705	29,376	28,872	56,911	55,523	15,124	14,244

Table 7. Waterfowl harvest estimates in Canada during the 2003 and 2004 hunting seasons (estimates courtesy of the Canadian Wildlife Service).

Duck Species Composition	Saskatchewan		Alberta		British Columbia		Nunavut		Northwest Terr.		Yukon Territory		Canada Total	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
Mallard	126,397	129,630	73,088	78,270	35,384	28,516			410	275	110	37	511,486	523,728
Black Duck	334	0	0	0	0	0			0	0	0	0	109,223	91,764
Gadwall	14,822	18,203	11,390	11,357	1,619	578			0	0	0	0	41,006	42,511
Wigeon	2,808	5,608	6,669	9,739	7,203	6,817			644	275	0	0	33,984	35,214
Green-winged Teal	3,007	2,060	3,121	5,503	3,781	2,189			176	275	0	0	90,919	71,720
Blue-winged/Cinnamon Teal	10,689	9,779	6,909	7,328	28	92			0	0	0	0	35,675	30,124
Northern Shoveler	12,570	3,403	5,421	6,464	544	1,143			0	0	0	0	24,927	16,857
Northern Pintail	8,688	23,803	8,205	8,380	1,948	2,363			234	0	0	0	47,959	59,950
Wood Duck	67	0	0	0	40	182			0	0	0	0	57,966	64,165
Redhead	301	0	1,920	2,827	38	0			0	0	0	0	15,521	8,730
Canvasback	1,327	429	956	146	55	0			0	0	0	0	9,273	4,497
Greater Scaup	0	0	173	161	0	26			0	0	0	0	9,563	12,144
Lesser Scaup	3,980	922	2,313	1,593	176	293			117	0	0	0	31,129	24,680
Ring-necked Duck	0	1,078	1,016	1,479	57	151			0	0	0	0	33,798	46,282
Goldeneyes	0	0	1,818	2,194	372	517			0	0	0	147	25,770	24,622
Bufflehead	139	144	847	263	747	472			0	1,101	438	0	12,265	12,723
Ruddy Duck	326	0	249	161	0	0			0	0	0	0	2,427	2,091
Long-tailed Duck	0	0	0	0	0	0			0	0	0	0	3,914	3,697
Eiders	0	0	0	0	0	0			234	0	0	0	14,088	13,076
Scoters	0	0	173	0	0	0			0	0	0	0	7,758	8,633
Hooded Merganser	0	0	0	199	0	33			0	0	0	0	8,904	8,011
Other Mergansers	0	0	103	0	0	59			0	0	0	0	13,466	13,128
Other Ducks	0	0	0	0	0	0			0	0	0	0	0	0
Total Duck Harvest	185,455	195,059	124,371	136,064	51,992	43,431	710	0	1,815	1,926	548	184	1,141,731	1,118,347
<hr/>														
Goose Species Composition														
Canada Goose	136,933	135,759	117,139	134,551	13,659	8,165							670,802	626,801
Snow Goose	66,239	53,110	9,452	3,654	1,982	1,188							175,155	138,895
Blue Goose	41,209	25,209	728	83	0	0							64,613	36,384
Ross's Goose	27,563	19,174	1,567	1,015	0	0							30,621	22,092
White-fronted Goose	48,990	54,419	15,294	9,956	182	0							64,542	64,613
Brant	0	0	0	0	0	0							576	0
Total Goose Harvest	320,934	287,671	144,180	149,259	15,823	9,353	5,325	0	25	33	171	142	1,011,830	888,785
<hr/>														
Migratory Bird Permits Sold	18,155	18,273	18,372	18,768	6,509	6,402	12	19	243	192	159	180	174,794	170,439

Table 8. Preliminary age ratios of mallards in state harvests during the 2000-2004 hunting seasons as determined from Waterfowl Parts Collection Survey.

State and Flyway	Immatures per Adult ^a				
	2000	2001	2002	2003	2004
Connecticut	0.8	0.8	1.2	1.0	1.4
Delaware	1.0	1.1	0.9	1.9	1.8
Florida	---	---	---	---	---
Georgia	0.4	0.9	0.6	0.9	1.1
Maine	1.5	1.4	1.1	1.6	1.3
Maryland	0.9	1.0	0.9	1.5	1.7
Massachusetts	1.3	1.7	1.2	1.0	1.2
New Hampshire	1.2	1.7	1.0	1.4	1.9
New Jersey	0.7	1.1	1.0	1.2	1.3
New York	1.2	1.4	1.2	1.4	1.5
North Carolina	1.0	1.0	1.0	1.1	1.5
Pennsylvania	0.9	1.2	0.9	1.0	1.0
Rhode Island	0.8	1.0	0.8	0.7	0.7
South Carolina	1.4	1.6	1.1	1.3	1.7
Vermont	1.6	1.7	1.2	2.1	3.9
Virginia	0.6	0.7	0.7	0.9	0.9
West Virginia	1.2	1.0	0.7	1.1	0.8
Atlantic Flyway Total ^b	0.95	1.14	0.95	1.26	1.37
Alabama	0.6	0.8	0.7	0.9	1.0
Arkansas	0.5	1.0	0.5	0.8	0.8
Illinois	0.7	1.7	1.1	1.9	1.2
Indiana	0.6	1.3	1.2	1.4	1.6
Iowa	1.2	2.6	1.3	2.0	0.9
Kentucky	0.9	1.1	0.8	1.3	0.9
Louisiana	0.5	0.8	0.4	1.0	0.6
Michigan	1.0	2.0	1.7	2.1	1.6
Minnesota	1.8	2.6	1.5	2.8	1.5
Mississippi	0.4	1.0	0.4	0.8	0.5
Missouri	0.6	1.1	0.8	1.7	1.0
Ohio	1.0	1.3	1.4	1.8	1.4
Tennessee	0.7	1.0	0.7	0.9	1.0
Wisconsin	1.3	3.0	1.7	1.8	1.8
Mississippi Flyway Total ^b	0.68	1.33	0.90	1.41	1.03

Table 8. Preliminary age ratios of mallards in state harvests during the 2000-2004 hunting seasons as determined from Waterfowl Parts Collection Survey.

State and Flyway	Immatures per Adult ^a				
	2000	2001	2002	2003	2004
Colorado	0.6	0.7	0.5	0.9	0.7
Kansas	0.4	0.6	0.5	0.7	0.6
Montana	0.4	0.6	0.6	0.8	0.6
Nebraska	0.7	0.7	0.7	0.8	0.5
New Mexico	0.6	1.0	0.9	1.1	1.2
North Dakota	0.9	1.3	0.9	1.4	1.2
Oklahoma	0.2	0.4	0.3	0.5	0.6
South Dakota	0.8	0.7	1.0	1.3	1.2
Texas	0.5	0.5	0.3	0.4	0.5
Wyoming	0.5	0.5	0.4	0.9	0.6
Central Flyway Total ^b	0.54	0.70	0.60	0.87	0.74
Arizona	0.8	1.4	0.8	1.4	1.1
California	1.8	1.7	1.5	2.4	1.9
Colorado	1.1	0.9	1.1	1.2	1.6
Idaho	0.8	1.0	1.0	1.4	1.2
Montana	0.7	0.8	0.7	0.9	0.8
Nevada	1.2	1.1	1.6	1.8	1.5
New Mexico	0.4	0.8	0.7	1.0	1.6
Oregon	1.0	1.4	1.4	1.4	1.3
Utah	0.9	1.2	1.2	1.5	1.6
Washington	0.9	1.0	1.0	1.1	1.2
Wyoming	0.6	1.4	1.3	1.8	1.3
Pacific Flyway Total ^b	1.04	1.22	1.18	1.51	1.43
Alaska	2.4	4.6	3.0	4.1	4.8
U.S. Total ^b	0.74	1.13	0.88	1.29	1.06

^a Ratio not shown if based on a sample of less than 20 wings.

^b In estimating Flyway and U.S. ratios, the ratio for each state was weighted in proportion to the estimated harvest in that state as determined from the Harvest Information Program Waterfowl Harvest Survey.

Table 9. Preliminary weighted age ratios of ducks harvest during during the 2000-2004 hunting seasons, by species and Flyway.

Species and Flyway	Immatures per Adult ^{a,b}				
	2000	2001	2002	2003	2004
Mallard					
Atlantic	0.95	1.14	0.95	1.26	1.37
Mississippi	0.68	1.33	0.90	1.41	1.03
Central	0.54	0.70	0.60	0.87	0.74
Pacific	1.04	1.22	1.18	1.51	1.43
U.S. Total	0.74	1.13	0.88	1.29	1.06
Black duck					
Atlantic	0.82	0.93	1.07	1.12	0.87
Mississippi	0.63	1.76	1.04	1.13	1.20
U.S. Total	0.76	1.09	1.06	1.12	0.97
Mottled duck					
Atlantic	0.74	1.26	1.00	1.31	1.18
Mississippi	0.93	1.19	0.88	1.63	0.92
Central	0.38	1.63	1.00	1.82	1.40
U.S. Total	0.73	1.30	0.93	1.60	1.07
Gadwall					
Atlantic	0.79	0.83	0.51	0.86	0.73
Mississippi	0.71	1.33	0.68	1.24	0.93
Central	0.55	0.99	0.82	1.62	0.92
Pacific	0.93	0.78	0.99	1.41	0.96
U.S. Total	0.67	1.14	0.75	1.34	0.93
American wigeon					
Atlantic	0.50	1.01	0.92	0.90	0.75
Mississippi	0.59	1.16	1.32	1.35	1.30
Central	0.44	0.76	0.90	1.34	0.80
Pacific	0.94	1.02	1.64	1.11	1.23
U.S. Total	0.66	0.98	1.30	1.21	1.09
Green-winged teal					
Atlantic	1.20	1.15	1.88	1.83	1.30
Mississippi	1.06	1.98	2.16	1.97	1.07
Central	1.51	1.79	1.81	2.10	1.82
Pacific	1.20	1.03	1.36	1.14	1.28
U.S. Total	1.20	1.56	1.80	1.74	1.29
Blue-winged/Cinnamon teal					
Atlantic	0.73	1.34	0.83	1.29	0.88
Mississippi	1.39	2.43	2.00	1.97	1.34
Central	1.74	2.25	1.94	2.69	1.57
Pacific	0.95	1.20	1.09	1.50	0.87
U.S. Total	1.40	2.22	1.78	2.06	1.29

Table 9. Preliminary weighted age ratios of ducks harvest during during the 2000-2004 hunting seasons, by species and Flyway.

Species and Flyway	Immatures per Adult ^{a,b}				
	2000	2001	2002	2003	2004
Northern shoveler					
Atlantic	0.68	1.35	0.86	1.30	0.83
Mississippi	1.01	1.90	1.06	1.75	1.15
Central	0.69	1.85	1.58	3.07	1.37
Pacific	0.58	0.66	0.82	1.11	1.09
U.S. Total	0.79	1.38	1.05	1.63	1.16
Northern pintail					
Atlantic	0.57	1.02	1.32	2.29	0.76
Mississippi	0.90	1.40	1.81	2.58	1.03
Central	0.51	0.86	1.08	1.53	1.06
Pacific	0.80	0.63	0.91	0.97	0.69
U.S. Total	0.76	0.92	1.25	1.57	0.89
Wood duck					
Atlantic	1.22	1.20	1.15	1.59	1.28
Mississippi	0.99	2.05	1.67	1.66	1.53
Central	0.63	1.32	1.05	1.07	1.36
Pacific	2.19	1.29	1.24	1.57	2.39
U.S. Total	1.04	1.61	1.43	1.60	1.47
Redhead					
Atlantic	0.42	0.47	0.10	0.54	0.29
Mississippi	0.71	1.97	0.21	1.58	0.80
Central	0.42	0.70	0.24	1.64	0.81
Pacific	0.72	0.44	1.11	1.69	1.54
U.S. Total	0.52	0.92	0.31	1.53	0.89
Canvasback					
Atlantic	0.38	---	---	0.56	0.36
Mississippi	0.58	1.43	---	1.32	0.31
Central	0.53	0.76	---	1.51	0.73
Pacific	0.75	1.23	---	1.02	0.65
U.S. Total	0.57	0.99	---	1.13	0.50
Greater scaup					
Atlantic	0.77	1.54	1.66	0.98	2.06
Mississippi	1.54	2.30	2.83	1.37	3.05
Central	---	---	3.41	---	8.65
Pacific	1.27	0.48	0.97	0.72	1.71
U.S. Total	1.23	0.91	1.83	0.97	2.39

Table 9. Preliminary weighted age ratios of ducks harvest during during the 2000-2004 hunting seasons, by species and Flyway.

Species and Flyway	Immatures per Adult ^{a,b}				
	2000	2001	2002	2003	2004
Lesser scaup					
Atlantic	0.34	0.63	0.46	0.77	0.37
Mississippi	0.36	0.59	0.86	1.35	0.89
Central	0.42	1.05	1.33	0.95	1.16
Pacific	1.20	1.64	1.60	1.58	1.74
U.S. Total	0.42	0.74	0.88	1.17	0.92
Ring-necked duck					
Atlantic	0.73	1.19	1.11	1.17	1.02
Mississippi	1.27	1.82	1.47	2.09	1.44
Central	0.75	1.08	0.83	0.82	1.70
Pacific	1.52	1.41	1.24	1.44	1.46
U.S. Total	1.03	1.49	1.26	1.53	1.40
Common goldeneye					
Atlantic	0.61	0.40	0.91	0.67	0.71
Mississippi	0.27	1.18	0.99	1.18	0.60
Central	0.46	1.15	1.01	0.66	0.62
Pacific	0.56	0.74	1.14	0.71	0.78
U.S. Total	0.48	0.91	1.08	0.82	0.71
Bufflehead					
Atlantic	0.47	0.86	1.29	0.78	0.68
Mississippi	0.67	1.44	0.98	1.56	1.27
Central	0.44	0.53	0.82	0.29	1.09
Pacific	0.67	1.30	1.11	0.93	1.18
U.S. Total	0.57	1.11	1.09	1.06	1.01
Ruddy duck					
Atlantic	0.61	0.51	0.27	1.49	1.33
Mississippi	1.84	---	---	1.29	2.19
Central	1.54	5.43	---	---	---
Pacific	0.84	0.65	0.57	1.10	0.64
U.S. Total	1.00	1.35	0.52	1.32	1.23
Hooded merganser					
Atlantic	0.71	1.15	0.81	0.77	0.92
Mississippi	0.59	1.24	0.76	1.11	1.05
Central	0.39	0.81	0.71	1.17	0.46
Pacific	1.22	2.07	1.58	2.54	1.05
U.S. Total	0.64	1.18	0.79	1.04	0.95

Table 9. Preliminary weighted age ratios of ducks harvest during during the 2000-2004 hunting seasons, by species and Flyway.

Species and Flyway	Immatures per Adult ^{a,b}				
	2000	2001	2002	2003	2004
Common merganser					
Atlantic	0.82	1.94	1.40	1.76	1.23
Mississippi	---	---	0.71	---	---
Central	---	---	0.63	---	0.77
Pacific	0.76	1.90	0.80	0.78	0.84
U.S. Total	0.94	1.26	0.97	1.56	1.31
Red-breasted merganser					
Atlantic	0.41	0.81	0.89	1.06	0.46
U.S. Total	0.29	1.13	0.90	1.09	0.31
Long-tailed duck					
Atlantic	0.42	0.11	0.50	0.53	0.30
U.S. Total	0.49	0.11	0.53	0.69	0.56
Common eider					
Atlantic	0.13	0.30	0.25	0.26	0.18
U.S. Total	0.13	0.30	0.39	0.26	0.18
Black scoter					
Atlantic	0.19	1.08	0.74	0.92	0.31
U.S. Total	0.44	1.37	0.87	1.05	0.46
White-winged scoter					
Atlantic	0.11	0.99	1.56	2.55	0.13
U.S. Total	0.10	2.02	1.71	2.36	0.67
Surf scoter					
Atlantic	0.14	0.35	0.79	1.13	0.24
U.S. Total	0.14	0.40	0.90	1.21	0.31

^a Ratio not shown if based on a sample of less than 20 wings.

^b In estimating Flyway and U.S. ratios, the ratio for each state was weighted in proportion to the estimated harvest in that state as determined from the Harvest Information Program Waterfowl Harvest Survey.

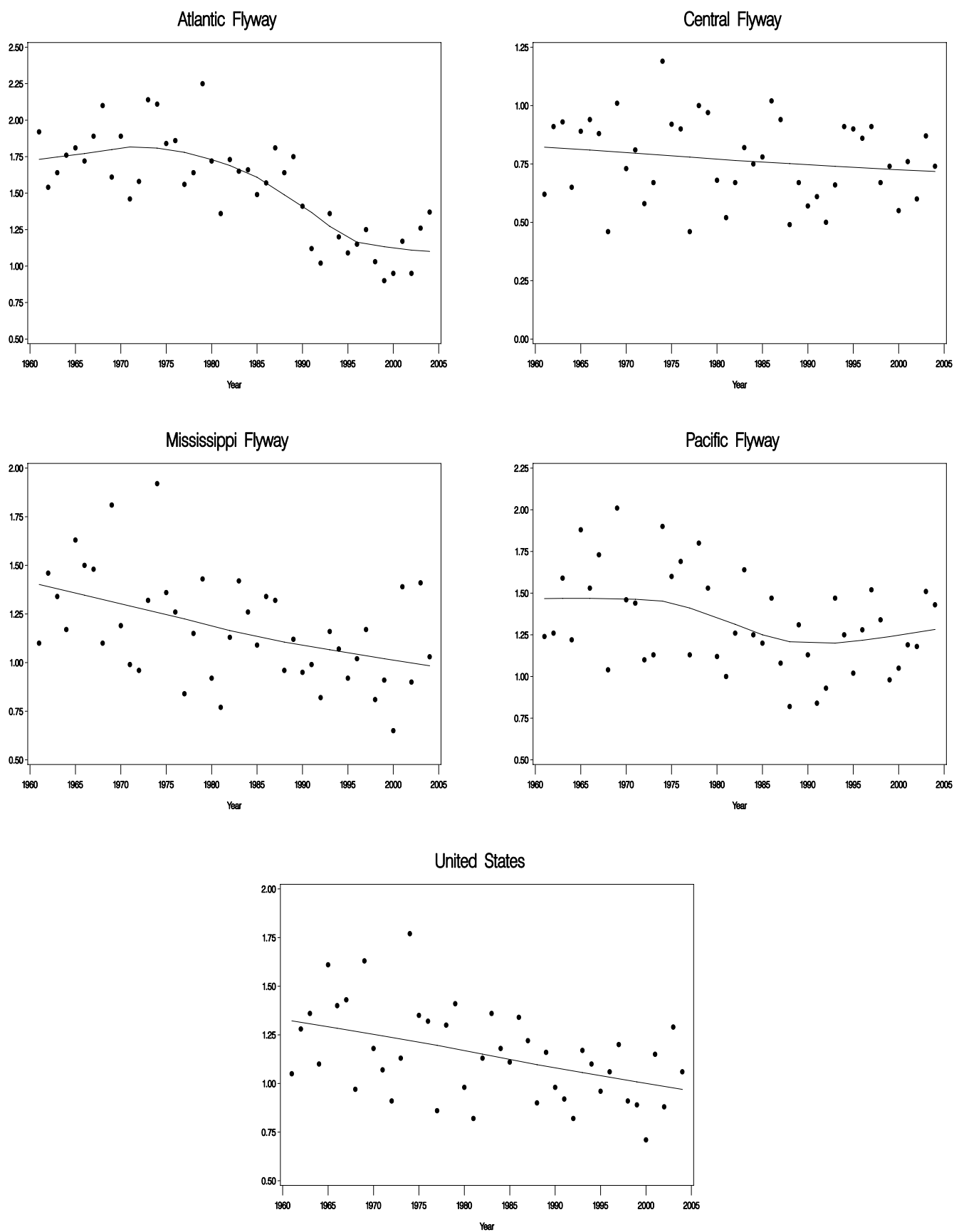


Figure 4. Age ratios of mallards harvested in the United States, 1961-2004.

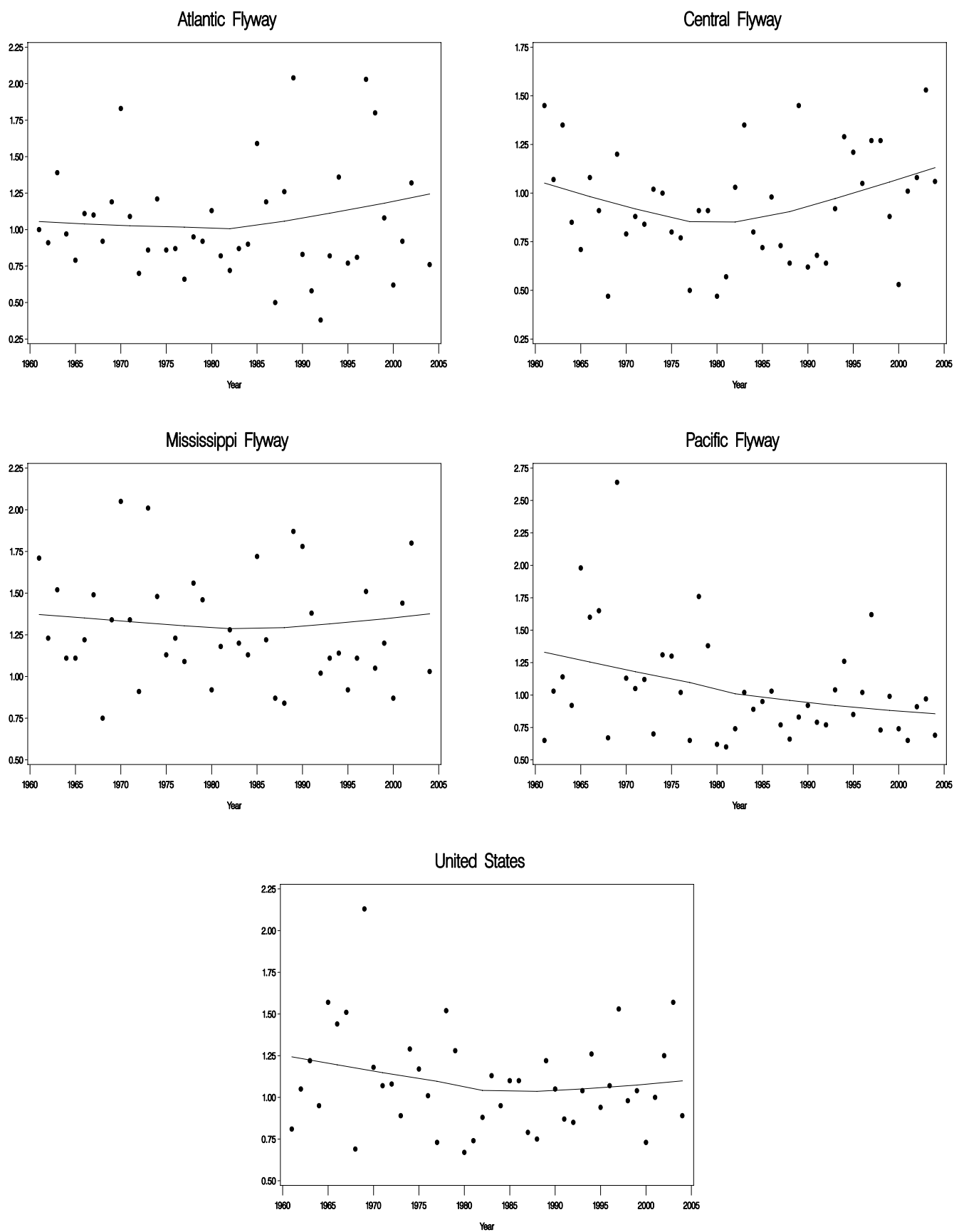


Figure 5. Age ratios of Northern pintails harvested in the United States, 1961-2004.

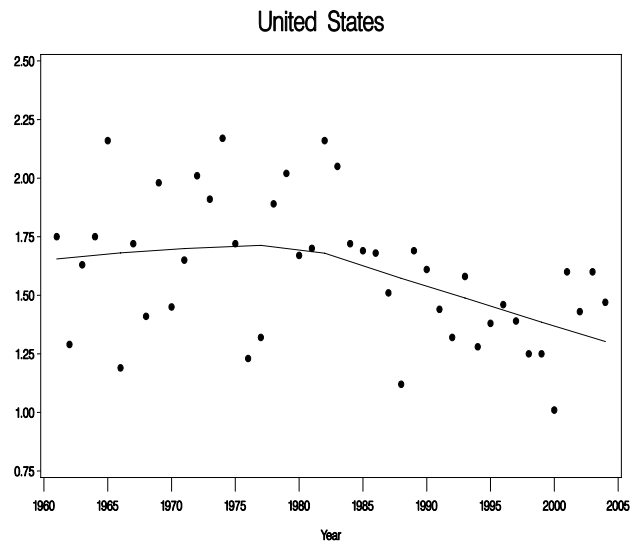
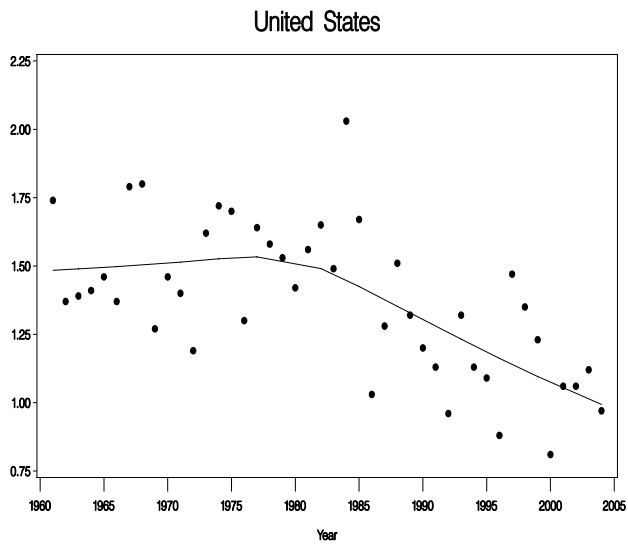
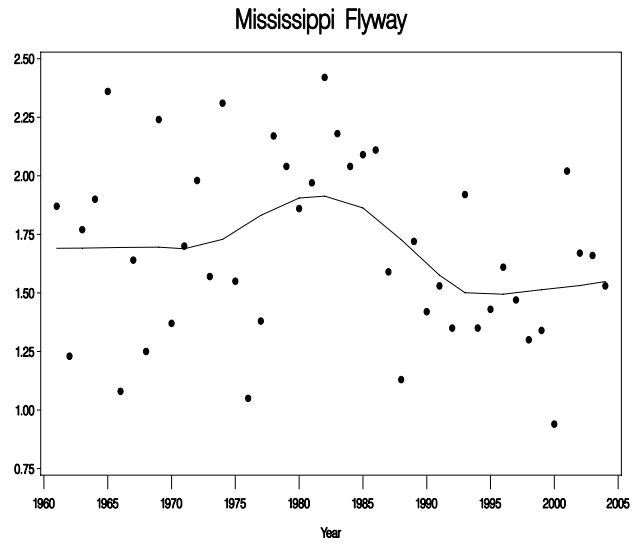
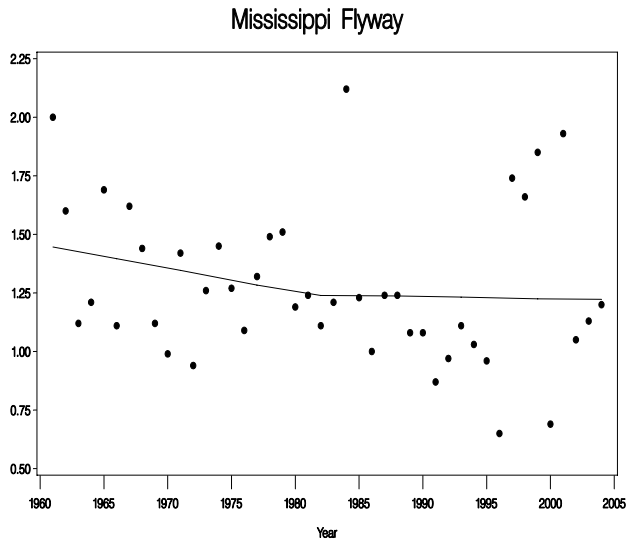
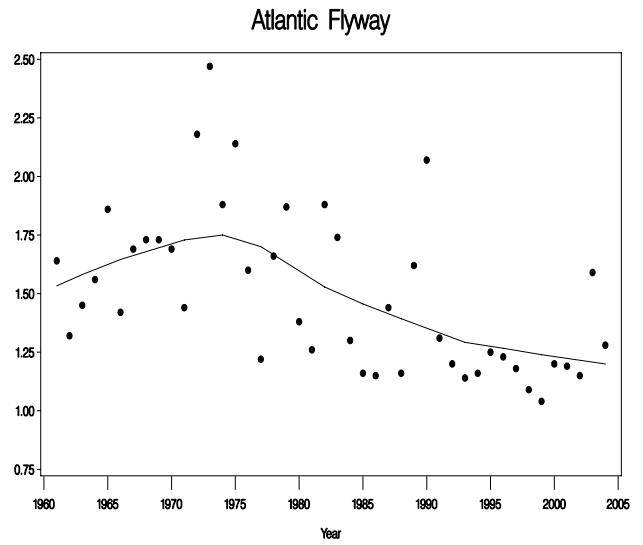
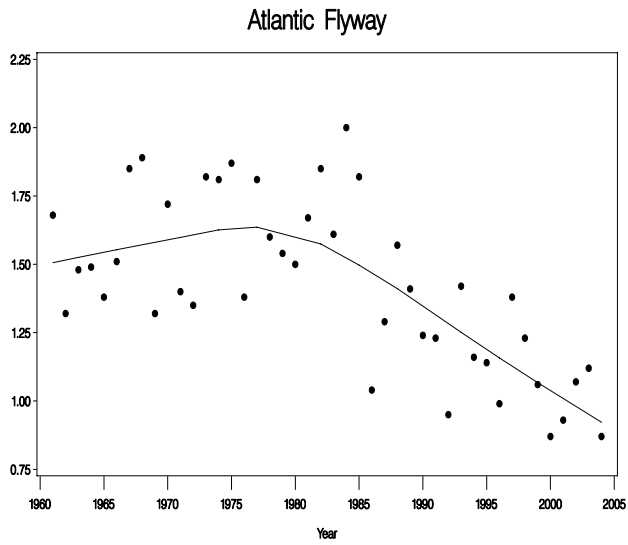


Figure 6. Age ratios of American black ducks (left column) and wood ducks (right column) harvested in the United States, 1961-2004.

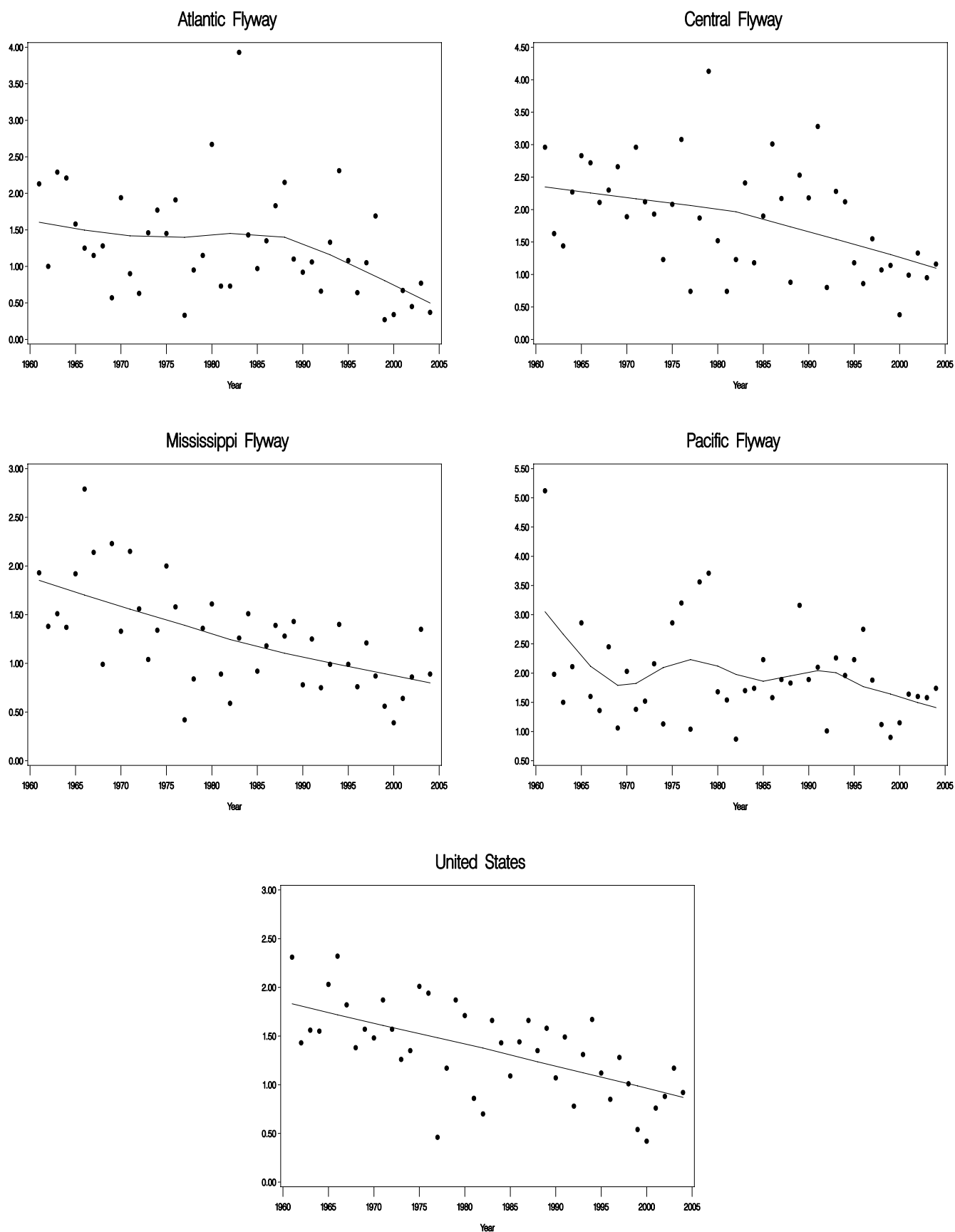


Figure 7. Age ratios of lesser scaup harvested in the United States, 1961-2004.

Table 10. Preliminary sex ratios of mallards in state harvests during the 2000-2004 hunting seasons as determined from Waterfowl Parts Collection Survey.

State and Flyway	Males per Female ^a				
	2000	2001	2002	2003	2004
Connecticut	1.7	1.8	2.7	2.5	2.1
Delaware	1.5	1.3	1.6	1.6	1.5
Florida	---	---	---	---	---
Georgia	1.8	2.4	2.4	1.6	1.6
Maine	1.9	1.7	1.6	1.7	1.6
Maryland	1.7	2.1	2.2	2.1	2.0
Massachusetts	1.8	1.9	1.5	2.4	1.9
New Hampshire	1.4	1.5	1.6	1.4	1.6
New Jersey	1.5	2.2	2.1	2.1	1.8
New York	1.8	1.7	2.0	1.9	1.9
North Carolina	1.7	1.9	1.8	1.9	1.7
Pennsylvania	2.4	1.9	2.3	2.2	2.0
Rhode Island	1.2	1.5	2.4	2.8	2.5
South Carolina	1.9	1.9	2.5	2.3	2.2
Vermont	1.4	1.6	1.6	2.2	1.3
Virginia	1.9	2.4	1.9	2.0	2.2
West Virginia	2.2	2.7	2.6	2.8	2.5
Atlantic Flyway Total ^b	1.83	1.91	2.04	2.02	1.91
Alabama	2.6	2.4	1.7	1.9	2.6
Arkansas	2.7	2.3	2.9	3.2	3.3
Illinois	2.5	2.1	3.0	2.8	2.7
Indiana	2.3	2.5	2.0	2.0	1.6
Iowa	1.9	1.7	1.9	2.4	3.1
Kentucky	2.5	1.9	2.0	2.1	2.4
Louisiana	2.3	2.0	2.3	2.1	2.5
Michigan	1.9	2.1	1.8	2.0	2.1
Minnesota	1.5	1.6	1.7	1.7	1.5
Mississippi	2.9	2.5	2.5	2.7	3.2
Missouri	2.8	2.7	2.9	2.3	2.7
Ohio	2.0	2.2	1.8	1.6	2.2
Tennessee	2.3	2.7	2.4	2.2	2.6
Wisconsin	1.9	1.7	1.6	1.5	2.0
Mississippi Flyway Total ^b	2.35	2.17	2.20	2.22	2.51

Table 10. Preliminary sex ratios of mallards in state harvests during the 2000-2004 hunting seasons as determined from Waterfowl Parts Collection Survey.

State and Flyway	Males per Female ^a				
	2000	2001	2002	2003	2004
Colorado	3.1	3.6	3.0	3.3	3.0
Kansas	4.7	5.2	6.1	6.4	5.8
Montana	4.3	3.0	3.7	4.4	3.4
Nebraska	4.0	4.0	4.1	4.3	4.3
New Mexico	2.5	1.7	2.2	2.2	2.4
North Dakota	2.8	2.8	2.5	2.6	2.5
Oklahoma	4.0	3.9	3.4	3.2	4.0
South Dakota	3.5	4.2	3.1	3.3	3.8
Texas	2.5	2.3	2.8	2.7	3.1
Wyoming	4.1	4.1	4.2	4.8	7.0
Central Flyway Total ^b	3.20	3.12	3.13	3.30	3.51
Arizona	1.0	2.1	1.7	1.1	1.4
California	2.2	2.3	2.4	2.0	2.7
Colorado	3.3	2.4	3.6	5.8	3.0
Idaho	2.2	2.5	2.3	2.6	3.5
Montana	3.0	3.1	2.4	3.1	3.4
Nevada	1.9	2.3	2.1	1.8	2.0
New Mexico	2.1	4.2	2.0	2.4	2.9
Oregon	2.0	1.7	1.9	2.0	1.8
Utah	2.0	1.8	1.8	1.9	2.1
Washington	2.3	2.2	2.2	2.4	2.6
Wyoming	3.5	2.6	2.0	1.8	1.6
Pacific Flyway Total ^b	2.21	2.19	2.20	2.23	2.60
Alaska	1.3	1.4	1.2	1.1	0.9
U.S. Total ^b	2.38	2.31	2.33	2.35	2.62

^a Ratio not shown if based on a sample of less than 20 wings.

^b In estimating Flyway and U.S. ratios, the ratio for each state was weighted in proportion to the estimated harvest in that state as determined from the Harvest Information Program Waterfowl Harvest Survey.

Table 11. Preliminary weighted sex ratios of ducks harvested during the 2000-2004 hunting seasons, by species and Flyway.

Species and Flyway	Males per Female ^{a,b}				
	2000	2001	2002	2003	2004
Mallard					
Atlantic	1.83	1.91	2.04	2.02	1.91
Mississippi	2.35	2.17	2.20	2.22	2.51
Central	3.20	3.12	3.13	3.30	3.51
Pacific	2.21	2.19	2.20	2.23	2.60
U.S. Total	2.38	2.31	2.33	2.35	2.62
Black duck					
Atlantic	0.99	0.99	1.06	0.99	1.21
Mississippi	0.86	0.77	1.10	1.24	1.82
U.S. Total	0.94	0.93	1.07	1.05	1.37
Mottled duck					
Atlantic	0.89	1.01	0.79	0.63	0.85
Mississippi	0.94	0.96	0.84	0.73	0.64
Central	1.05	0.83	1.00	1.15	1.27
U.S. Total	0.95	0.93	0.85	0.77	0.80
Gadwall					
Atlantic	1.38	1.80	1.67	1.91	1.81
Mississippi	2.03	1.65	1.67	1.83	1.72
Central	1.79	1.62	1.55	1.52	1.65
Pacific	1.79	2.35	1.71	1.72	1.97
U.S. Total	1.92	1.69	1.63	1.72	1.73
American wigeon					
Atlantic	2.06	1.46	1.76	1.73	1.64
Mississippi	1.76	1.62	1.58	1.51	1.27
Central	1.90	1.88	1.70	1.52	1.79
Pacific	1.59	1.73	1.47	1.66	1.70
U.S. Total	1.72	1.71	1.56	1.59	1.61
Green-winged teal					
Atlantic	1.16	1.43	1.19	1.24	1.26
Mississippi	1.82	1.73	1.49	1.59	1.70
Central	1.70	1.82	1.45	1.61	1.56
Pacific	1.65	1.86	1.74	1.74	1.63
U.S. Total	1.65	1.73	1.50	1.58	1.59
Blue-winged/Cinnamon teal					
Atlantic	1.31	1.26	1.40	1.41	1.60
Mississippi	1.21	1.41	1.04	1.08	1.14
Central	1.14	1.36	1.15	1.15	1.31
Pacific	1.48	1.26	1.25	1.27	1.88
U.S. Total	1.20	1.38	1.11	1.12	1.29

Table 11. Preliminary weighted sex ratios of ducks harvested during the 2000-2004 hunting seasons, by species and Flyway.

Species and Flyway	Males per Female ^{a,b}				
	2000	2001	2002	2003	2004
Northern shoveler					
Atlantic	1.46	1.59	1.65	1.43	1.72
Mississippi	1.89	1.46	1.95	1.51	1.69
Central	1.62	1.46	1.29	1.24	1.53
Pacific	2.04	2.23	1.98	1.84	1.85
U.S. Total	1.84	1.64	1.75	1.54	1.72
Northern pintail					
Atlantic	1.04	1.80	1.35	1.36	1.31
Mississippi	2.23	2.07	1.78	1.68	2.05
Central	2.31	2.04	2.17	1.63	2.09
Pacific	2.02	2.56	2.79	2.57	3.62
U.S. Total	2.01	2.13	2.11	1.91	2.53
Wood duck					
Atlantic	1.84	1.80	1.86	1.92	1.84
Mississippi	1.78	1.60	1.55	1.77	1.72
Central	2.02	2.07	2.03	1.78	2.17
Pacific	1.43	1.71	1.44	1.35	1.46
U.S. Total	1.80	1.71	1.66	1.79	1.76
Redhead					
Atlantic	1.53	1.19	1.04	1.96	1.59
Mississippi	1.90	1.37	1.54	1.17	1.33
Central	2.29	2.15	1.46	1.28	2.23
Pacific	1.36	2.11	0.94	1.51	1.85
U.S. Total	2.00	1.81	1.37	1.31	1.73
Canvasback					
Atlantic	2.21	---	---	1.66	3.21
Mississippi	2.10	0.80	---	2.05	1.03
Central	1.28	1.20	---	0.84	1.11
Pacific	1.67	0.80	---	1.45	1.42
U.S. Total	1.80	0.97	---	1.44	1.46
Greater scaup					
Atlantic	1.25	0.97	1.09	1.23	0.91
Mississippi	1.24	0.80	1.21	1.27	0.79
Central	---	---	1.51	---	1.06
Pacific	1.89	1.88	1.75	1.28	1.67
U.S. Total	1.44	1.35	1.31	1.25	1.05

Table 11. Preliminary weighted sex ratios of ducks harvested during the 2000-2004 hunting seasons, by species and Flyway.

Species and Flyway	Males per Female ^{a,b}				
	2000	2001	2002	2003	2004
Lesser scaup					
Atlantic	2.07	2.26	2.39	2.01	2.35
Mississippi	1.59	2.14	1.72	1.79	1.64
Central	1.71	2.20	1.60	1.21	1.71
Pacific	1.60	1.29	1.43	1.37	1.48
U.S. Total	1.66	2.09	1.77	1.66	1.73
Ring-necked duck					
Atlantic	1.73	2.03	1.72	2.14	1.67
Mississippi	1.90	1.74	2.12	1.57	2.05
Central	2.34	2.14	2.71	2.49	1.62
Pacific	1.87	2.26	1.38	1.69	1.38
U.S. Total	1.95	1.90	2.02	1.81	1.81
Common goldeneye					
Atlantic	1.12	2.84	1.24	1.11	1.08
Mississippi	1.58	1.81	1.04	1.48	2.09
Central	1.84	2.28	1.81	2.00	1.17
Pacific	4.89	1.10	1.73	1.19	1.62
U.S. Total	1.88	1.67	1.32	1.33	1.58
Bufflehead					
Atlantic	2.47	2.39	1.45	1.58	2.26
Mississippi	1.28	1.09	1.39	1.12	1.35
Central	2.29	1.48	1.47	1.49	0.92
Pacific	1.22	0.84	1.23	1.57	1.17
U.S. Total	1.70	1.32	1.38	1.33	1.46
Hooded merganser					
Atlantic	2.14	2.28	2.13	2.01	1.74
Mississippi	3.06	2.56	3.38	2.39	1.42
Central	2.95	2.07	1.63	3.14	1.16
Pacific	3.21	1.30	0.81	1.14	2.17
U.S. Total	2.67	2.33	2.61	2.23	1.51
Common merganser					
Atlantic	0.75	0.65	0.81	0.81	0.70
Mississippi	---	---	0.70	1.02	---
Central	---	---	1.03	1.73	0.63
Pacific	1.06	1.00	1.38	1.10	1.53
U.S. Total	0.91	0.83	0.85	1.03	0.86

Table 11. Preliminary weighted sex ratios of ducks harvested during the 2000-2004 hunting seasons, by species and Flyway.

Species and Flyway	Male per Female ^{a,b}				
	2000	2001	2002	2003	2004
Red-breasted merganser					
Atlantic	1.54	1.71	1.35	1.18	1.72
U.S. Total	0.76	2.22	0.85	1.11	1.20
Long-tailed duck					
Atlantic	6.32	11.39	1.88	4.61	2.08
U.S. Total	6.32	11.39	1.86	3.99	1.84
Common eider					
Atlantic	1.48	2.65	2.79	1.93	2.33
U.S. Total	1.48	2.65	2.62	1.93	2.33
Black scoter					
Atlantic	1.60	1.74	2.38	1.23	2.84
U.S. Total	1.50	2.13	2.22	1.29	2.92
White-winged scoter					
Atlantic	3.01	2.06	1.23	1.07	2.64
U.S. Total	3.87	2.89	1.24	1.02	1.62
Surf scoter					
Atlantic	1.50	2.38	1.45	1.05	1.44
U.S. Total	1.39	2.41	1.37	1.04	1.37

^a Ratio not shown if based on a sample of less than 20 wings.

^b In estimating Flyway and U.S. ratios, the ratio for each state was weighted in proportion to the estimated harvest in that state as determined from the Harvest Information Program Waterfowl Harvest Survey.

Table 12. Preliminary weighted age ratios of geese harvested during the 2000-2004 hunting seasons, by species and Flyway.

Species and Flyway	Immatures per Adult ^{a,b}				
	2000	2001	2002	2003	2004
Canada goose					
Atlantic	0.39	0.45	0.40	0.56	0.46
Mississippi	0.48	0.55	0.61	0.55	0.38
Central	0.51	0.57	0.45	0.53	0.40
Pacific	0.58	0.54	0.51	0.71	0.61
U.S. Total	0.48	0.51	0.49	0.56	0.43
Snow goose					
Atlantic	1.76	1.51	0.27	1.13	1.02
Mississippi	0.39	0.74	0.32	0.72	0.15
Central	0.29	0.49	0.32	0.43	0.20
Pacific	0.39	0.30	0.37	0.86	0.51
U.S. Total	0.43	0.64	0.32	0.62	0.26
Blue goose					
Mississippi	0.44	0.71	0.21	0.86	0.31
Central	0.53	0.72	0.38	0.58	0.17
U.S. Total	0.48	0.72	0.28	0.76	0.26
Ross' goose					
Central	1.04	1.99	0.99	2.22	0.34
Pacific	0.52	0.72	0.69	1.25	0.24
U.S. Total	0.98	1.96	0.95	1.93	0.35
Greater white-fronted goose					
Mississippi	0.43	0.66	0.49	0.82	0.44
Central	0.57	0.46	0.49	1.27	0.65
Pacific	0.80	0.65	0.32	0.53	0.72
U.S. Total	0.54	0.57	0.46	0.92	0.55
Brant					
Atlantic	1.15	0.51	0.11	0.54	0.32
Pacific	---	0.21	---	---	1.28

^a Ratio not shown if based on a sample of less than 20 tails/wings.

^b In estimating Flyway and U.S. ratios, the ratio for each state was weighted in proportion to the estimated harvest in that state as determined from the Harvest Information Program Waterfowl Harvest Survey.

Table 13. Preliminary estimates of mourning dove harvest and hunter activity during the 2003 and 2004 hunting seasons.

State and Management Unit	Mourning Dove Harvest		Active Hunters		Mourning Dove Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Alabama	977,400 ± 17%	724,900 ± 14%	49,000 ± 10%	43,800 ± 8%	138,900 ± 15%	124,800 ± 28%	20.0 ± 20%	16.6 ± 16%
Delaware	38,800 ± 25%	54,900 ± 25%	2,200 ± 24%	3,000 ± 19%	6,600 ± 25%	11,700 ± 40%	17.3 ± 35%	18.4 ± 32%
Florida	333,300 ± 28%	255,000 ± 21%	18,100 ± 16%	15,500 ± 17%	65,200 ± 22%	55,200 ± 27%	18.4 ± 32%	16.4 ± 27%
Georgia	730,800 ± 24%	963,400 ± 21%	41,200 ± 21%	47,300 ± 11%	131,300 ± 28%	146,600 ± 17%	17.7 ± 32%	20.4 ± 24%
Illinois	877,100 ± 18%	890,600 ± 11%	35,300 ± 13%	39,400 ± 8%	114,900 ± 16%	123,900 ± 11%	24.8 ± 22%	22.6 ± 13%
Indiana	361,500 ± 18%	291,700 ± 14%	15,400 ± 15%	14,100 ± 15%	57,000 ± 17%	46,400 ± 14%	23.5 ± 24%	20.8 ± 21%
Kentucky	555,700 ± 15%	593,500 ± 25%	33,500 ± 15%	27,500 ± 18%	79,600 ± 16%	78,400 ± 25%	16.6 ± 21%	21.6 ± 31%
Louisiana	767,300 ± 41%	388,600 ± 23%	41,300 ± 16%	26,700 ± 18%	149,800 ± 31%	82,400 ± 28%	18.6 ± 44%	14.6 ± 29%
Maryland	172,100 ± 33%	176,400 ± 25%	12,100 ± 22%	11,100 ± 19%	34,600 ± 40%	46,900 ± 46%	14.2 ± 40%	15.8 ± 32%
Mississippi	348,700 ± 29%	627,600 ± 17%	17,200 ± 20%	32,400 ± 10%	41,200 ± 25%	89,800 ± 16%	20.3 ± 35%	19.4 ± 20%
North Carolina	762,500 ± 26%	215,900 ± 25%	59,800 ± 18%	20,600 ± 27%	128,500 ± 21%	41,800 ± 28%	12.8 ± 32%	10.5 ± 37%
Ohio	308,000 ± 23%	325,400 ± 27%	20,900 ± 19%	17,000 ± 21%	73,000 ± 17%	74,900 ± 28%	14.7 ± 30%	19.2 ± 34%
Pennsylvania	306,600 ± 29%	296,100 ± 29%	28,400 ± 21%	26,000 ± 16%	104,700 ± 29%	112,100 ± 39%	10.8 ± 36%	11.4 ± 33%
Rhode Island	2,100 ± 157%	3,100 ± 60%	200 ± 107%	300 ± 54%	1,000 ± 103%	900 ± 47%	10.3 ± 190%	10.8 ± 81%
South Carolina	526,000 ± 15%	663,700 ± 19%	30,900 ± 17%	32,200 ± 16%	100,500 ± 19%	107,100 ± 21%	17.0 ± 23%	20.6 ± 25%
Tennessee	737,300 ± 64%	780,800 ± 38%	38,600 ± 37%	35,000 ± 28%	173,700 ± 83%	90,400 ± 31%	19.1 ± 74%	22.3 ± 48%
Virginia	255,400 ± 12%	347,700 ± 16%	21,200 ± 11%	22,700 ± 11%	52,200 ± 11%	58,000 ± 12%	12.0 ± 16%	15.3 ± 19%
West Virginia	17,900 ± 40%	15,300 ± 37%	1,400 ± 27%	1,400 ± 30%	4,100 ± 40%	4,600 ± 44%	12.6 ± 48%	11.1 ± 47%
Wisconsin	119,600 ± 39%	97,300 ± 41%	15,000 ± 18%	17,700 ± 34%	63,000 ± 29%	77,500 ± 42%	8.0 ± 43%	5.5 ± 53%
Eastern Unit Total	8,198,100 ± 9%	7,712,000 ± 6%			1,519,900 ± 12%	1,373,300 ± 7%		
Arkansas	595,600 ± 18%	740,600 ± 19%	32,800 ± 16%	37,900 ± 13%	89,000 ± 20%	114,000 ± 21%	18.2 ± 24%	19.5 ± 23%
Colorado	262,000 ± 15%	299,900 ± 16%	19,100 ± 9%	19,400 ± 8%	51,200 ± 15%	54,800 ± 19%	13.7 ± 18%	15.4 ± 18%
Kansas	853,600 ± 15%	689,400 ± 13%	38,100 ± 8%	35,800 ± 10%	135,100 ± 11%	119,300 ± 13%	22.4 ± 17%	19.3 ± 16%
Minnesota	---	107,000 ± 42%	---	13,700 ± 20%	---	61,100 ± 50%	---	7.8 ± 46%
Missouri	732,900 ± 19%	775,900 ± 30%	40,600 ± 12%	41,600 ± 9%	124,800 ± 17%	128,800 ± 17%	18.1 ± 22%	18.6 ± 31%
Montana	19,100 ± 47%	20,900 ± 44%	1,600 ± 48%	2,600 ± 31%	4,900 ± 72%	11,300 ± 99%	11.7 ± 68%	7.9 ± 54%
Nebraska	354,900 ± 11%	365,900 ± 15%	19,000 ± 10%	19,100 ± 11%	62,900 ± 12%	71,400 ± 14%	18.7 ± 15%	19.2 ± 18%
New Mexico	154,400 ± 30%	302,800 ± 23%	7,100 ± 24%	9,900 ± 15%	32,900 ± 35%	42,000 ± 19%	21.9 ± 39%	30.7 ± 28%
North Dakota	77,800 ± 20%	57,500 ± 32%	5,700 ± 23%	4,500 ± 25%	17,300 ± 20%	13,000 ± 24%	13.6 ± 31%	12.9 ± 41%
Oklahoma	515,600 ± 27%	555,300 ± 14%	20,100 ± 19%	27,100 ± 9%	73,800 ± 27%	94,000 ± 11%	25.7 ± 33%	20.5 ± 17%
South Dakota	199,900 ± 25%	184,100 ± 26%	10,900 ± 18%	10,000 ± 16%	40,400 ± 24%	36,700 ± 21%	18.3 ± 30%	18.4 ± 31%
Texas	3,909,000 ± 16%	5,664,600 ± 14%	217,700 ± 13%	287,700 ± 9%	802,800 ± 18%	1,089,200 ± 13%	18.0 ± 20%	19.7 ± 17%
Wyoming	39,600 ± 76%	43,700 ± 46%	3,000 ± 40%	3,200 ± 27%	7,400 ± 49%	8,700 ± 34%	13.1 ± 86%	13.7 ± 53%
Central Unit Total	7,714,600 ± 9%	9,807,700 ± 8%			1,442,600 ± 11%	1,844,300 ± 8%		
Arizona	872,700 ± 14%	978,200 ± 12%	40,800 ± 9%	42,500 ± 6%	138,100 ± 12%	150,100 ± 12%	21.4 ± 17%	23.0 ± 13%
California	1,168,300 ± 11%	1,060,500 ± 10%	71,000 ± 7%	67,900 ± 8%	216,000 ± 10%	202,500 ± 12%	16.5 ± 13%	15.6 ± 13%
Idaho	124,800 ± 24%	132,500 ± 21%	10,800 ± 18%	11,700 ± 17%	33,800 ± 28%	38,800 ± 20%	11.6 ± 30%	11.3 ± 27%
Nevada	42,100 ± 24%	36,500 ± 26%	4,700 ± 17%	3,800 ± 20%	10,800 ± 18%	8,800 ± 20%	9.0 ± 30%	9.5 ± 33%
Oregon	66,900 ± 22%	72,600 ± 30%	6,400 ± 14%	6,200 ± 18%	20,500 ± 24%	20,900 ± 26%	10.5 ± 26%	11.6 ± 36%
Utah	68,900 ± 19%	119,700 ± 20%	9,300 ± 18%	12,000 ± 14%	23,200 ± 24%	37,600 ± 22%	7.4 ± 26%	9.9 ± 24%
Washington	76,300 ± 22%	70,500 ± 20%	7,600 ± 22%	6,400 ± 24%	17,300 ± 22%	17,500 ± 28%	10.0 ± 31%	10.9 ± 31%
Western Unit Total	2,420,100 ± 8%	2,470,600 ± 7%			459,700 ± 7%	476,200 ± 7%		
U.S. Total	18,332,800 ± 5%	19,990,200 ± 5%			3,422,100 ± 7%	3,693,800 ± 5%		

Table 14. Preliminary estimates of white-winged dove harvest and hunter activity during the 2003 and 2004 hunting seasons.

State and Management Unit	White-winged Dove Harvest		Active Hunters		White-winged Dove Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Florida	12,900 ± 52%	4,700 ± 50%	3,600 ± 41%	1,600 ± 52%	15,500 ± 57%	5,900 ± 41%	3.6 ± 66%	3.0 ± 3%
Eastern Unit Total	12,900 ± 52%	4,700 ± 50%			15,500 ± 57%	5,900 ± 42%		
Kansas	1,000 ± 83%	800 ± 164%	400 ± 62%	400 ± 83%	1,800 ± 92%	900 ± 103%	2.4 ± 104%	2.1 ± 184%
Missouri	1,000 ± 119%	1,900 ± 78%	1,800 ± 91%	900 ± 74%	4,100 ± 99%	4,300 ± 91%	0.6 ± 150%	2.3 ± 108%
Nebraska	---	1,600 ± 177%	---	100 ± 111%	---	600 ± 120%	---	20.0 ± 209%
New Mexico	40,400 ± 63%	46,500 ± 48%	3,300 ± 40%	3,400 ± 30%	15,000 ± 50%	13,400 ± 29%	12.2 ± 74%	13.8 ± 56%
Oklahoma	4,700 ± 196%	3,500 ± 76%	300 ± 196%	700 ± 39%	1,000 ± 196%	3,400 ± 47%	18.0 ± 277%	5.0 ± 86%
Texas	778,200 ± 28%	1,066,300 ± 28%	77,200 ± 24%	106,400 ± 17%	357,000 ± 33%	383,300 ± 19%	10.1 ± 36%	10.0 ± 33%
Central Unit Total	825,100 ± 27%	1,120,700 ± 27%			379,000 ± 31%	405,800 ± 18%		
Arizona	112,300 ± 25%	120,300 ± 19%	23,000 ± 15%	24,200 ± 12%	75,500 ± 20%	81,200 ± 19%	4.9 ± 29%	5.0 ± 23%
California	46,800 ± 40%	50,500 ± 40%	10,400 ± 28%	11,700 ± 27%	25,600 ± 35%	30,800 ± 27%	4.5 ± 49%	4.3 ± 48%
Nevada	800 ± 107%	600 ± 180%	200 ± 117%	300 ± 105%	400 ± 110%	500 ± 93%	3.4 ± 158%	2.1 ± 209%
Western Unit Total	159,900 ± 21%	171,400 ± 18%			101,500 ± 18%	112,500 ± 16%		
U.S. Total	997,900 ± 22%	1,296,800 ± 23%			496,000 ± 24%	524,100 ± 14%		

Table 15. Preliminary estimates of band-tailed pigeon harvest and hunter activity during the 2003 and 2004 hunting seasons.

State and Management Unit	Band-tailed Pigeon Harvest		Active Hunters		Band-tailed Pigeon Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Arizona	1,400 ± 126%	1,400 ± 120%	1,500 ± 61%	900 ± 56%	3,700 ± 77%	2,300 ± 80%	1.0 ± 140%	1.5 ± 133%
Colorado	900 ± 97%	500 ± 57%	400 ± 71%	300 ± 29%	2,100 ± 89%	700 ± 35%	2.3 ± 120%	1.6 ± 64%
New Mexico	400 ± 65%	700 ± 115%	400 ± 67%	100 ± 103%	1,400 ± 75%	300 ± 92%	1.1 ± 93%	4.9 ± 155%
Utah	100 ± 132%	200 ± 136%	300 ± 81%	50 ± 92%	600 ± 136%	100 ± 72%	0.5 ± 155%	3.8 ± 165%
Four Corners Total	2,900 ± 70%	2,800 ± 68%			7,900 ± 47%	3,400 ± 55%		
California	8,000 ± 50%	14,300 ± 45%	4,600 ± 38%	4,700 ± 37%	11,500 ± 52%	9,700 ± 36%	1.8 ± 63%	3.1 ± 59%
Oregon	4,900 ± 33%	3,300 ± 44%	1,800 ± 24%	1,500 ± 36%	5,100 ± 29%	3,400 ± 35%	2.8 ± 41%	2.2 ± 57%
Washington	1,500 ± 78%	300 ± 160%	1,000 ± 23%	500 ± 64%	1,600 ± 58%	800 ± 83%	1.5 ± 204%	0.6 ± 173%
Pacific Coast Total	14,400 ± 31%	17,900 ± 37%			18,300 ± 34%	13,900 ± 27%		
U.S. Total	17,200 ± 28%	20,700 ± 33%			26,200 ± 28%	17,300 ± 24%		

Table 16. Preliminary estimates of woodcock harvest and hunter activity during the 2003 and 2004 hunting seasons.

State and Management Unit	Woodcock Harvest		Active Hunters		Woodcock Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Connecticut	2,400 ± 43%	2,100 ± 167%	1,400 ± 34%	900 ± 107%	6,300 ± 36%	5,000 ± 113%	1.6 ± 54%	2.3 ± 199%
Delaware	400 ± 163%	500 ± 99%	400 ± 77%	400 ± 56%	1,600 ± 85%	2,200 ± 102%	1.1 ± 181%	1.3 ± 114%
Florida	900 ± 80%	1,100 ± 62%	800 ± 43%	1,000 ± 111%	2,500 ± 60%	3,100 ± 112%	1.1 ± 90%	1.1 ± 127%
Georgia	1,900 ± 158%	1,600 ± 109%	400 ± 95%	2,600 ± 103%	1,500 ± 119%	7,100 ± 110%	5.0 ± 184%	0.6 ± 150%
Maine	31,000 ± 81%	15,600 ± 58%	6,600 ± 47%	4,300 ± 39%	21,400 ± 41%	27,000 ± 62%	4.7 ± 93%	3.6 ± 70%
Maryland	3,500 ± 107%	700 ± 84%	1,600 ± 79%	700 ± 107%	3,000 ± 84%	2,500 ± 108%	2.2 ± 133%	1.0 ± 136%
Massachusetts	4,000 ± 34%	2,600 ± 31%	1,200 ± 25%	1,000 ± 25%	6,100 ± 27%	6,600 ± 35%	3.3 ± 42%	2.7 ± 40%
New Hampshire	3,900 ± 48%	4,100 ± 30%	1,900 ± 49%	1,500 ± 31%	5,400 ± 32%	9,700 ± 39%	2.0 ± 69%	2.7 ± 43%
New Jersey	4,000 ± 78%	2,200 ± 54%	1,000 ± 44%	1,100 ± 35%	4,000 ± 51%	3,400 ± 41%	3.8 ± 90%	2.1 ± 64%
New York	14,500 ± 55%	9,400 ± 29%	5,700 ± 29%	4,400 ± 23%	21,400 ± 31%	17,500 ± 23%	2.5 ± 62%	2.1 ± 37%
North Carolina	4,700 ± 135%	700 ± 151%	900 ± 68%	200 ± 112%	4,000 ± 100%	700 ± 126%	5.3 ± 151%	3.7 ± 188%
Pennsylvania	8,400 ± 35%	12,500 ± 60%	9,500 ± 35%	9,000 ± 29%	48,400 ± 56%	37,000 ± 36%	0.9 ± 49%	1.4 ± 67%
Rhode Island	100 ± 167%	200 ± 79%	100 ± 129%	200 ± 73%	700 ± 153%	1,300 ± 97%	0.9 ± 211%	1.0 ± 107%
South Carolina	1,800 ± 72%	1,300 ± 82%	2,100 ± 97%	1,700 ± 95%	14,100 ± 123%	2,500 ± 68%	0.9 ± 121%	0.8 ± 125%
Vermont	2,700 ± 31%	4,000 ± 35%	800 ± 36%	800 ± 37%	4,100 ± 29%	4,200 ± 24%	3.4 ± 47%	4.9 ± 50%
Virginia	4,700 ± 93%	2,000 ± 38%	3,000 ± 58%	2,000 ± 63%	7,200 ± 64%	4,500 ± 58%	1.6 ± 110%	1.0 ± 74%
West Virginia	400 ± 56%	800 ± 26%	200 ± 89%	400 ± 61%	500 ± 71%	1,300 ± 49%	1.6 ± 105%	2.3 ± 67%
Eastern Unit Total	89,200 ± 32%	61,500 ± 21%			152,300 ± 23%	135,400 ± 18%		
Alabama	4,200 ± 95%	2,200 ± 143%	4,000 ± 62%	600 ± 167%	14,300 ± 79%	1,000 ± 112%	1.1 ± 114%	3.5 ± 220%
Arkansas	600 ± 118%	2,800 ± 114%	1,800 ± 124%	3,600 ± 85%	4,600 ± 123%	20,100 ± 138%	0.3 ± 171%	0.8 ± 142%
Illinois	2,200 ± 90%	1,900 ± 96%	2,400 ± 79%	1,200 ± 74%	12,200 ± 112%	3,500 ± 78%	0.9 ± 120%	1.6 ± 121%
Indiana	1,800 ± 31%	7,900 ± 145%	700 ± 97%	1,100 ± 104%	6,000 ± 134%	5,300 ± 124%	2.6 ± 102%	7.1 ± 178%
Iowa	900 ± 145%	1,700 ± 103%	1,500 ± 71%	1,800 ± 83%	4,200 ± 91%	8,800 ± 102%	0.6 ± 161%	1.0 ± 132%
Kansas	200 ± 195%	100 ± 94%	100 ± 195%	<50 ± 65%	600 ± 195%	200 ± 83%	3.0 ± 275%	2.6 ± 115%
Kentucky	2,600 ± 148%	1,900 ± 142%	1,500 ± 122%	900 ± 154%	2,000 ± 91%	1,300 ± 110%	1.8 ± 192%	2.2 ± 210%
Louisiana	10,400 ± 119%	20,200 ± 124%	1,600 ± 129%	3,600 ± 75%	7,400 ± 136%	14,100 ± 95%	6.6 ± 175%	5.6 ± 145%
Michigan	121,500 ± 30%	102,500 ± 21%	35,100 ± 14%	31,200 ± 13%	159,000 ± 18%	147,000 ± 14%	3.5 ± 33%	3.3 ± 25%
Minnesota	29,900 ± 84%	38,500 ± 53%	14,300 ± 38%	14,500 ± 27%	48,700 ± 43%	67,000 ± 33%	2.1 ± 92%	2.7 ± 59%
Mississippi	400 ± 53%	900 ± 117%	2,000 ± 92%	1,100 ± 127%	3,400 ± 93%	3,600 ± 143%	0.2 ± 106%	0.8 ± 173%
Missouri	2,100 ± 145%	900 ± 113%	1,700 ± 87%	2,500 ± 183%	8,000 ± 105%	3,700 ± 130%	1.2 ± 169%	0.4 ± 215%
Nebraska	100 ± 79%	<50 ± 178%	400 ± 184%	<50 ± 86%	900 ± 165%	100 ± 122%	0.2 ± 200%	1.8 ± 197%
Ohio	2,500 ± 78%	4,600 ± 101%	3,400 ± 88%	2,600 ± 82%	10,300 ± 86%	18,200 ± 126%	0.7 ± 117%	1.8 ± 130%
Oklahoma	2,800 ± 176%	200 ± 54%	1,300 ± 182%	500 ± 168%	15,400 ± 191%	2,800 ± 160%	2.1 ± 254%	0.4 ± 177%
Tennessee	1,000 ± 144%	400 ± 92%	100 ± 136%	200 ± 71%	1,200 ± 165%	1,700 ± 106%	7.5 ± 198%	1.7 ± 116%
Texas	0	800 ± 131%	5,900 ± 192%	6,200 ± 190%	6,000 ± 189%	6,600 ± 179%	<0.1 ± 238%	0.1 ± 231%
Wisconsin	30,300 ± 35%	47,300 ± 50%	16,100 ± 30%	15,700 ± 30%	65,600 ± 33%	61,100 ± 30%	1.9 ± 46%	3.0 ± 58%
Central Unit Total	213,500 ± 23%	234,800 ± 20%			369,900 ± 16%	366,100 ± 15%		
U.S. Total	302,600 ± 18%	296,300 ± 17%			522,200 ± 13%	501,500 ± 12%		

Table 17. Preliminary estimates of snipe harvest and hunter activity during the 2003 and 2004 hunting seasons.

State / Flyway	Snipe Harvest		Active Hunters		Snipe Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Connecticut	100 ± 127%	<50 ± 166%	300 ± 90%	<50 ± 166%	1,000 ± 101%	<50 ± 166%	0.4 ± 156%	3.0 ± 235%
Delaware	0	0	0	0	0	0	0	0
Florida	17,600 ± 54%	22,600 ± 52%	4,100 ± 57%	2,100 ± 75%	8,300 ± 52%	5,800 ± 49%	4.3 ± 79%	10.8 ± 91%
Georgia	0	2,300 ± 142%	0	200 ± 111%	0	700 ± 153%	0	14.7 ± 180%
Maine	9,300 ± 196%	100 ± 191%	900 ± 196%	<50 ± 191%	3,700 ± 196%	100 ± 191%	10.0 ± 277%	6.0 ± 270%
Maryland	<50 ± 185%	500 ± 172%	400 ± 188%	400 ± 192%	500 ± 175%	1,700 ± 193%	0.1 ± 264%	1.1 ± 258%
Massachusetts	100 ± 81%	100 ± 112%	<50 ± 60%	100 ± 161%	100 ± 70%	200 ± 120%	4.5 ± 101%	1.6 ± 196%
New Hampshire	200 ± 195%	<50 ± 174%	100 ± 173%	<50 ± 73%	100 ± 161%	100 ± 86%	1.8 ± 260%	0.4 ± 189%
New Jersey	300 ± 140%	2,300 ± 187%	200 ± 122%	100 ± 172%	400 ± 81%	200 ± 113%	1.4 ± 186%	18.3 ± 254%
New York	<50 ± 138%	100 ± 133%	400 ± 184%	400 ± 155%	1,000 ± 192%	1,500 ± 133%	0.1 ± 230%	0.2 ± 205%
North Carolina	200 ± 155%	6,800 ± 196%	<50 ± 130%	300 ± 196%	100 ± 130%	2,600 ± 196%	5.0 ± 202%	26.0 ± 277%
Pennsylvania	<50 ± 129%	100 ± 192%	<50 ± 105%	100 ± 109%	100 ± 124%	400 ± 138%	0.7 ± 166%	1.0 ± 221%
Rhode Island	0	<50 ± 178%	0	100 ± 153%	0	200 ± 173%	0	0.5 ± 235%
South Carolina	6,900 ± 116%	9,800 ± 78%	1,900 ± 94%	3,100 ± 70%	2,800 ± 107%	5,000 ± 75%	3.7 ± 150%	3.2 ± 105%
Vermont	100 ± 194%	<50 ± 122%	100 ± 137%	<50 ± 122%	100 ± 137%	<50 ± 122%	0.5 ± 238%	2.0 ± 173%
Virginia	<50 ± 188%	800 ± 160%	600 ± 182%	1,400 ± 130%	3,100 ± 193%	1,700 ± 115%	<0.1 ± 262%	0.6 ± 206%
West Virginia	100 ± 158%	<50 ± 153%	100 ± 176%	<50 ± 87%	100 ± 140%	<50 ± 112%	1.1 ± 237%	4.0 ± 176%
Atlantic Flyway Total	35,000 ± 63%	45,700 ± 44%			21,400 ± 52%	20,300 ± 41%		
Alabama	900 ± 148%	1,200 ± 161%	<50 ± 132%	1,000 ± 194%	100 ± 145%	2,000 ± 187%	38.0 ± 198%	1.2 ± 252%
Arkansas	0	3,200 ± 188%	0	100 ± 137%	0	500 ± 176%	0	29.5 ± 232%
Illinois	100 ± 112%	700 ± 61%	100 ± 73%	100 ± 42%	100 ± 89%	400 ± 56%	2.0 ± 134%	6.1 ± 74%
Indiana	300 ± 69%	100 ± 91%	100 ± 42%	100 ± 54%	400 ± 88%	200 ± 60%	2.8 ± 81%	1.9 ± 106%
Iowa	300 ± 103%	300 ± 116%	100 ± 68%	100 ± 73%	200 ± 83%	200 ± 107%	3.6 ± 124%	4.8 ± 137%
Kentucky	0	500 ± 93%	0	100 ± 80%	0	300 ± 92%	0	5.8 ± 122%
Louisiana	9,200 ± 120%	10,000 ± 86%	700 ± 79%	900 ± 72%	2,700 ± 102%	3,100 ± 83%	13.3 ± 144%	11.1 ± 112%
Michigan	800 ± 196%	1,000 ± 145%	1,900 ± 125%	1,400 ± 122%	3,800 ± 140%	9,000 ± 136%	0.4 ± 232%	0.7 ± 189%
Minnesota	1,200 ± 66%	6,300 ± 100%	300 ± 49%	3,800 ± 81%	1,500 ± 75%	6,900 ± 70%	4.0 ± 82%	1.6 ± 129%
Mississippi	100 ± 138%	2,500 ± 138%	500 ± 188%	1,000 ± 136%	600 ± 160%	4,500 ± 145%	0.1 ± 233%	2.5 ± 194%
Missouri	200 ± 122%	200 ± 129%	100 ± 83%	100 ± 109%	200 ± 94%	100 ± 126%	2.0 ± 148%	3.3 ± 169%
Ohio	100 ± 195%	2,100 ± 183%	100 ± 195%	1,100 ± 172%	100 ± 195%	6,100 ± 185%	1.0 ± 275%	1.9 ± 251%
Tennessee	0	400 ± 195%	0	100 ± 195%	0	100 ± 195%	0	5.0 ± 275%
Wisconsin	7,100 ± 164%	4,400 ± 126%	2,400 ± 134%	1,600 ± 163%	2,600 ± 126%	4,100 ± 130%	3.0 ± 211%	2.7 ± 206%
Mississippi Flyway Total	20,200 ± 80%	32,900 ± 44%			12,200 ± 57%	37,600 ± 53%		

Table 17. Preliminary estimates of snipe harvest and hunter activity during the 2003 and 2004 hunting seasons.

State / Flyway	Snipe Harvest		Active Hunters		Snipe Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Colorado	1,000 ± 108%	0	300 ± 86%	100 ± 194%	600 ± 98%	200 ± 194%	3.6 ± 138%	0
Kansas	0	200 ± 121%	<50 ± 185%	<50 ± 90%	<50 ± 185%	200 ± 106%	0	4.3 ± 151%
Nebraska	500 ± 81%	300 ± 51%	400 ± 173%	<50 ± 42%	500 ± 133%	200 ± 54%	1.2 ± 191%	5.2 ± 66%
New Mexico	1,800 ± 190%	<50 ± 137%	300 ± 187%	300 ± 189%	700 ± 161%	700 ± 182%	5.9 ± 267%	0.1 ± 233%
North Dakota	200 ± 74%	<50 ± 110%	500 ± 175%	<50 ± 78%	1,900 ± 184%	100 ± 86%	0.4 ± 190%	1.4 ± 135%
Oklahoma	0	300 ± 80%	0	100 ± 62%	0	300 ± 76%	0	3.1 ± 102%
South Dakota	1,000 ± 183%	900 ± 169%	500 ± 187%	400 ± 171%	500 ± 175%	500 ± 145%	2.0 ± 262%	2.0 ± 241%
Texas	200 ± 193%	3,900 ± 80%	7,800 ± 112%	6,100 ± 131%	39,200 ± 158%	7,700 ± 105%	<0.1 ± 223%	0.7 ± 154%
Wyoming	800 ± 143%	400 ± 68%	200 ± 92%	300 ± 74%	400 ± 92%	500 ± 66%	3.8 ± 170%	1.4 ± 101%
Central Flyway Total	5,500 ± 77%	6,100 ± 59%			43,900 ± 142%	10,300 ± 80%		
Arizona	900 ± 195%	0	900 ± 195%	0	1,900 ± 193%	0	1.0 ± 275%	0
California	6,600 ± 103%	11,000 ± 116%	700 ± 72%	3,900 ± 95%	2,100 ± 82%	9,800 ± 92%	9.9 ± 125%	2.8 ± 150%
Idaho	2,400 ± 188%	600 ± 150%	800 ± 130%	200 ± 78%	5,900 ± 136%	700 ± 106%	2.9 ± 229%	3.3 ± 169%
Montana	400 ± 106%	900 ± 107%	100 ± 70%	500 ± 171%	100 ± 79%	900 ± 167%	7.7 ± 127%	1.9 ± 202%
Nevada	100 ± 161%	<50 ± 83%	<50 ± 115%	<50 ± 69%	100 ± 145%	<50 ± 80%	20.0 ± 198%	2.2 ± 108%
Oregon	900 ± 80%	900 ± 92%	900 ± 107%	700 ± 114%	2,400 ± 108%	2,100 ± 83%	0.9 ± 133%	1.3 ± 147%
Utah	0	700 ± 129%	400 ± 196%	600 ± 135%	400 ± 196%	900 ± 108%	0	1.1 ± 186%
Washington	300 ± 88%	4,100 ± 123%	500 ± 158%	1,300 ± 100%	1,400 ± 153%	4,400 ± 113%	0.8 ± 181%	3.1 ± 159%
Pacific Flyway Total	11,700 ± 72%	18,100 ± 76%			14,300 ± 67%	18,900 ± 56%		
Alaska	1,400 ± 95%	600 ± 64%	200 ± 36%	200 ± 38%	700 ± 52%	1,000 ± 69%	5.9 ± 102%	3.4 ± 75%
U.S. Total	73,800 ± 39%	103,300 ± 28%			92,400 ± 70%	88,000 ± 29%		

Table 18. Preliminary estimates of coot harvest and hunter activity during the 2003 and 2004 hunting seasons.

State / Flyway	Coot Harvest		Active Hunters		Coot Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Connecticut	100 ± 176%	<50 ± 121%	200 ± 125%	<50 ± 114%	1,200 ± 166%	<50 ± 121%	0.6 ± 216%	1.5 ± 166%
Delaware	<50 ± 170%	0	100 ± 189%	0	100 ± 189%	0	<0.1 ± 254%	0
Florida	5,700 ± 178%	2,400 ± 75%	800 ± 134%	800 ± 131%	2,800 ± 168%	2,400 ± 93%	6.9 ± 223%	2.9 ± 151%
Georgia	0	1,100 ± 196%	0	1,100 ± 196%	0	1,100 ± 196%	0	1.0 ± 277%
Maine	0	400 ± 152%	0	<50 ± 135%	0	200 ± 135%	0	10.5 ± 203%
Maryland	500 ± 178%	100 ± 108%	400 ± 188%	<50 ± 105%	500 ± 178%	<50 ± 110%	1.1 ± 259%	2.3 ± 151%
Massachusetts	<50 ± 86%	100 ± 86%	100 ± 156%	<50 ± 56%	200 ± 145%	100 ± 81%	0.5 ± 178%	4.4 ± 102%
New Hampshire	<50 ± 176%	0	<50 ± 122%	0	<50 ± 157%	0	1.0 ± 214%	0
New Jersey	1,000 ± 185%	100 ± 187%	100 ± 155%	100 ± 179%	500 ± 116%	400 ± 172%	8.4 ± 241%	1.0 ± 258%
New York	100 ± 123%	500 ± 83%	100 ± 55%	100 ± 67%	400 ± 80%	1,100 ± 118%	1.0 ± 135%	5.3 ± 107%
North Carolina	200 ± 130%	3,100 ± 196%	<50 ± 130%	300 ± 196%	100 ± 138%	1,300 ± 196%	4.0 ± 184%	12.0 ± 277%
Pennsylvania	100 ± 169%	400 ± 156%	600 ± 188%	100 ± 83%	7,100 ± 192%	1,100 ± 98%	0.2 ± 253%	3.0 ± 176%
Rhode Island	<50 ± 186%	500 ± 190%	<50 ± 186%	100 ± 129%	100 ± 186%	1,000 ± 181%	1.0 ± 264%	3.9 ± 229%
South Carolina	4,500 ± 161%	3,900 ± 135%	1,300 ± 112%	1,700 ± 96%	1,800 ± 119%	4,800 ± 114%	3.3 ± 197%	2.3 ± 165%
Vermont	<50 ± 174%	<50 ± 178%	<50 ± 174%	<50 ± 178%	<50 ± 174%	<50 ± 178%	2.0 ± 246%	1.0 ± 252%
Virginia	600 ± 166%	400 ± 166%	500 ± 186%	100 ± 109%	800 ± 138%	700 ± 110%	1.1 ± 249%	7.3 ± 199%
West Virginia	0	<50 ± 153%	<50 ± 107%	<50 ± 153%	100 ± 152%	<50 ± 153%	0	3.0 ± 216%
Atlantic Flyway Total	12,800 ± 99%	13,100 ± 66%			15,800 ± 94%	14,000 ± 52%		
Alabama	100 ± 159%	4,800 ± 161%	<50 ± 92%	1,900 ± 138%	200 ± 153%	8,600 ± 145%	3.0 ± 184%	2.5 ± 212%
Arkansas	0	200 ± 194%	0	100 ± 137%	0	200 ± 144%	0	1.5 ± 237%
Illinois	400 ± 116%	400 ± 89%	<50 ± 91%	100 ± 58%	300 ± 136%	300 ± 95%	12.3 ± 147%	6.0 ± 106%
Indiana	800 ± 114%	100 ± 109%	100 ± 54%	100 ± 57%	400 ± 93%	200 ± 82%	13.1 ± 126%	2.1 ± 123%
Iowa	100 ± 126%	800 ± 114%	800 ± 128%	100 ± 81%	1,400 ± 118%	400 ± 86%	0.1 ± 180%	13.6 ± 140%
Kentucky	200 ± 178%	5,600 ± 72%	800 ± 188%	1,200 ± 165%	900 ± 165%	2,200 ± 97%	0.3 ± 258%	4.8 ± 180%
Louisiana	46,500 ± 79%	104,000 ± 135%	2,600 ± 96%	6,000 ± 77%	8,700 ± 99%	43,100 ± 112%	18.0 ± 124%	17.4 ± 155%
Michigan	0	100 ± 195%	1,800 ± 131%	100 ± 195%	5,200 ± 163%	100 ± 195%	0	1.0 ± 276%
Minnesota	3,200 ± 100%	4,500 ± 65%	1,600 ± 122%	2,500 ± 99%	7,400 ± 140%	6,000 ± 101%	1.9 ± 158%	1.8 ± 118%
Mississippi	300 ± 142%	1,600 ± 180%	<50 ± 131%	1,100 ± 131%	100 ± 168%	2,500 ± 138%	15.5 ± 193%	1.6 ± 222%
Missouri	0	800 ± 136%	800 ± 135%	500 ± 173%	1,200 ± 144%	600 ± 162%	0	1.4 ± 220%
Ohio	0	1,000 ± 196%	0	1,000 ± 196%	0	5,700 ± 196%	0	1.0 ± 277%
Tennessee	0	100 ± 195%	0	100 ± 195%	0	1,100 ± 195%	0	2.0 ± 275%
Wisconsin	3,000 ± 101%	1,600 ± 118%	2,600 ± 124%	300 ± 76%	6,800 ± 121%	1,200 ± 114%	1.2 ± 160%	6.0 ± 141%
Mississippi Flyway Total	54,800 ± 68%	125,600 ± 112%			32,600 ± 56%	72,300 ± 71%		

Table 18. Preliminary estimates of coot harvest and hunter activity during the 2003 and 2004 hunting seasons.

State / Flyway	Coot Harvest		Active Hunters		Coot Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Colorado	800 ± 182%	200 ± 144%	400 ± 171%	500 ± 152%	1,000 ± 142%	600 ± 133%	1.9 ± 250%	0.4 ± 209%
Kansas	0	100 ± 187%	0	<50 ± 187%	0	<50 ± 187%	0	11.0 ± 265%
Nebraska	200 ± 113%	2,400 ± 188%	<50 ± 71%	400 ± 187%	100 ± 85%	1,200 ± 183%	10.6 ± 133%	5.9 ± 265%
New Mexico	100 ± 114%	3,800 ± 195%	<50 ± 57%	600 ± 136%	200 ± 70%	1,300 ± 134%	3.0 ± 128%	6.0 ± 238%
North Dakota	5,000 ± 157%	100 ± 86%	1,800 ± 94%	<50 ± 65%	5,900 ± 104%	100 ± 83%	2.8 ± 183%	2.4 ± 108%
Oklahoma	0	1,200 ± 87%	0	400 ± 156%	0	900 ± 96%	0	3.0 ± 178%
South Dakota	100 ± 139%	9,700 ± 195%	500 ± 190%	400 ± 181%	1,100 ± 175%	800 ± 188%	0.3 ± 235%	23.2 ± 266%
Texas	0	2,200 ± 109%	<50 ± 193%	200 ± 78%	<50 ± 193%	1,000 ± 87%	0	13.5 ± 134%
Wyoming	200 ± 147%	200 ± 119%	200 ± 102%	100 ± 161%	400 ± 138%	100 ± 153%	1.3 ± 179%	2.9 ± 200%
Central Flyway Total	6,400 ± 125%	19,900 ± 106%			8,600 ± 76%	6,100 ± 58%		
Arizona	0	200 ± 195%	900 ± 196%	100 ± 195%	1,800 ± 196%	600 ± 195%	0	2.0 ± 276%
California	3,000 ± 121%	7,700 ± 97%	500 ± 86%	1,600 ± 136%	2,000 ± 91%	2,300 ± 101%	6.2 ± 148%	4.8 ± 167%
Idaho	4,700 ± 193%	800 ± 107%	400 ± 178%	600 ± 139%	2,800 ± 186%	1,200 ± 89%	11.1 ± 262%	1.4 ± 176%
Montana	0	800 ± 186%	<50 ± 185%	400 ± 192%	<50 ± 185%	400 ± 181%	0	2.1 ± 267%
Nevada	200 ± 92%	200 ± 75%	<50 ± 79%	<50 ± 43%	<50 ± 84%	300 ± 91%	12.0 ± 122%	5.5 ± 87%
Oregon	5,500 ± 181%	600 ± 105%	500 ± 140%	500 ± 149%	1,500 ± 142%	1,200 ± 86%	10.8 ± 228%	1.2 ± 182%
Utah	0	8,200 ± 74%	0	1,400 ± 85%	0	5,000 ± 76%	0	5.9 ± 112%
Washington	700 ± 57%	4,100 ± 125%	500 ± 155%	900 ± 122%	1,500 ± 147%	2,300 ± 136%	1.4 ± 165%	4.7 ± 175%
Pacific Flyway Total	14,000 ± 99%	22,700 ± 49%			9,700 ± 75%	13,400 ± 44%		
U.S. Total	88,000 ± 48%	181,300 ± 79%			66,600 ± 38%	105,800 ± 50%		

Table 19. Preliminary estimates of rail harvest and hunter activity during the 2003 and 2004 hunting seasons.

State / Flyway	Rail Harvest		Active Hunters		Rail Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Connecticut	900 ± 147%	100 ± 157%	300 ± 93%	<50 ± 107%	1,000 ± 91%	<50 ± 113%	2.7 ± 173%	11.5 ± 190%
Delaware	0	0	0	0	0	0	0	0
Florida	1,200 ± 177%	4,900 ± 108%	<50 ± 134%	600 ± 142%	100 ± 162%	5,000 ± 170%	32.5 ± 222%	8.2 ± 179%
Georgia	1,400 ± 196%	0	1,400 ± 196%	0	1,400 ± 196%	0	1.0 ± 277%	0
Maine	2,800 ± 196%	0	900 ± 196%	0	3,700 ± 196%	0	3.0 ± 277%	0
Maryland	0	100 ± 182%	<50 ± 183%	<50 ± 182%	<50 ± 183%	<50 ± 182%	0	20.0 ± 258%
Massachusetts	100 ± 111%	100 ± 105%	<50 ± 107%	100 ± 151%	<50 ± 113%	100 ± 111%	11.0 ± 154%	0.8 ± 184%
New Jersey	2,400 ± 35%	1,600 ± 47%	300 ± 118%	100 ± 27%	600 ± 63%	300 ± 38%	8.6 ± 123%	18.1 ± 54%
New York	0	<50 ± 185%	0	<50 ± 89%	0	200 ± 112%	0	0.3 ± 205%
North Carolina	0	1,900 ± 196%	0	200 ± 196%	0	700 ± 196%	0	8.0 ± 277%
Pennsylvania	<50 ± 162%	0	600 ± 195%	0	600 ± 195%	0	<0.1 ± 254%	0
Rhode Island	0	100 ± 177%	0	<50 ± 177%	0	<50 ± 177%	0	15.0 ± 250%
South Carolina	2,100 ± 58%	3,000 ± 35%	100 ± 40%	100 ± 26%	200 ± 53%	400 ± 31%	24.1 ± 70%	22.7 ± 44%
Virginia	1,300 ± 82%	4,300 ± 173%	100 ± 71%	700 ± 175%	200 ± 79%	700 ± 170%	13.7 ± 109%	6.1 ± 245%
West Virginia	100 ± 132%	100 ± 194%	100 ± 177%	100 ± 194%	100 ± 133%	100 ± 194%	1.8 ± 220%	2.0 ± 274%
Atlantic Flyway Total	12,200 ± 56%	16,200 ± 61%			8,000 ± 100%	7,500 ± 116%		
Alabama	0	1,000 ± 196%	0	1,000 ± 196%	0	1,000 ± 196%	0	1.0 ± 277%
Arkansas	0	0	1,900 ± 196%	0	3,700 ± 196%	0	0	0
Illinois	0	2,400 ± 174%	600 ± 194%	900 ± 132%	600 ± 191%	1,900 ± 139%	0	2.7 ± 218%
Indiana	600 ± 114%	2,200 ± 129%	700 ± 107%	1,000 ± 95%	1,100 ± 106%	3,900 ± 99%	0.8 ± 157%	2.1 ± 160%
Iowa	1,500 ± 141%	<50 ± 108%	600 ± 136%	<50 ± 79%	1,300 ± 148%	100 ± 91%	2.5 ± 195%	1.0 ± 134%
Kentucky	0	0	0	600 ± 189%	0	2,500 ± 194%	0	0
Louisiana	11,900 ± 170%	21,200 ± 147%	400 ± 97%	3,600 ± 105%	2,400 ± 128%	10,400 ± 109%	27.8 ± 195%	5.9 ± 180%
Michigan	0	0	0	900 ± 196%	0	6,100 ± 196%	0	0
Minnesota	200 ± 150%	1,900 ± 138%	100 ± 94%	1,200 ± 131%	100 ± 100%	6,800 ± 171%	3.3 ± 177%	1.5 ± 191%
Mississippi	100 ± 186%	100 ± 188%	<50 ± 186%	<50 ± 188%	100 ± 186%	0 ± 188%	6.0 ± 263%	4.0 ± 266%
Missouri	<50 ± 132%	0	<50 ± 107%	0	<50 ± 107%	0	0.7 ± 170%	0
Ohio	0	0	100 ± 195%	0	100 ± 195%	0	0	0
Tennessee	0	0	0	0	0	0	0	0
Wisconsin	0	2,100 ± 140%	0	1,300 ± 188%	0	3,300 ± 155%	0	1.6 ± 234%
Mississippi Flyway Total	14,300 ± 142%	30,900 ± 103%			9,300 ± 89%	35,900 ± 61%		
Colorado	800 ± 181%	0	100 ± 137%	100 ± 194%	300 ± 160%	200 ± 194%	7.5 ± 227%	0
Kansas	400 ± 196%	300 ± 105%	400 ± 196%	<50 ± 88%	400 ± 196%	100 ± 99%	1.0 ± 277%	8.0 ± 137%
Nebraska	1,400 ± 191%	2,600 ± 123%	300 ± 190%	1,000 ± 112%	900 ± 187%	2,900 ± 128%	5.0 ± 269%	2.7 ± 166%
New Mexico	0	0	300 ± 196%	300 ± 196%	800 ± 196%	600 ± 196%	0	0
Oklahoma	<50 ± 167%	200 ± 95%	<50 ± 167%	<50 ± 79%	<50 ± 167%	100 ± 86%	1.0 ± 236%	4.6 ± 123%
Texas	0	400 ± 130%	0	5,200 ± 136%	0	10,400 ± 136%	0	0.1 ± 188%
Wyoming	0	<50 ± 153%	0	<50 ± 153%	0	<50 ± 153%	0	1.0 ± 216%
Central Flyway Total	2,600 ± 123%	3,400 ± 95%			2,300 ± 104%	14,300 ± 103%		
U.S. Total	29,100 ± 74%	50,500 ± 66%			19,500 ± 60%	57,700 ± 48%		

Table 20. Preliminary estimates of gallinule harvest and hunter activity during the 2003 and 2004 hunting seasons.

State / Flyway	Gallinule Harvest		Active Hunters		Gallinule Days Afield		Seasonal Harvest Per Hunter	
	2003	2004	2003	2004	2003	2004	2003	2004
Delaware	0	0	0	0	0	0	0	0
Florida	800 ± 196%	0	400 ± 196%	<50 ± 191%	400 ± 196%	100 ± 191%	2.0 ± 277%	0
Georgia	0	0	0	0	0	0	0	0
Maine	0	0	0	0	0	0	0	0
New Jersey	<50 ± 162%	<50 ± 124%	<50 ± 92%	<50 ± 95%	100 ± 103%	<50 ± 97%	0.7 ± 187%	1.0 ± 156%
New York	0	<50 ± 185%	0	<50 ± 104%	0	100 ± 125%	0	0.3 ± 212%
North Carolina	0	0	0	0	0	0	0	0
Pennsylvania	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
South Carolina	0	0	<50 ± 176%	0	<50 ± 176%	0	0	0
Virginia	0	100 ± 191%	0	<50 ± 191%	0	<50 ± 191%	0	3.0 ± 270%
West Virginia	0	0	0	0	0	0	0	0
Atlantic Flyway Total	800 ± 194%	100 ± 145%			500 ± 170%	300 ± 85%		
Alabama	0	0	0	0	0	0	0	0
Arkansas	0	0	0	0	0	0	0	0
Indiana	<50 ± 152%	0	<50 ± 125%	0	0 ± 125%	0	3.0 ± 197%	0
Kentucky	0	0	0	0	0	0	0	0
Louisiana	27,400 ± 114%	30,500 ± 132%	900 ± 68%	4,200 ± 90%	5,000 ± 102%	14,400 ± 99%	32.0 ± 133%	7.3 ± 160%
Michigan	0	0	0	0	0	0	0	0
Minnesota	<50 ± 190%	<50 ± 191%	<50 ± 190%	<50 ± 135%	<50 ± 190%	200 ± 169%	1.0 ± 269%	1.0 ± 234%
Mississippi	300 ± 186%	<50 ± 188%	<50 ± 186%	<50 ± 188%	100 ± 186%	<50 ± 188%	31.0 ± 263%	1.0 ± 266%
Ohio	100 ± 195%	0	100 ± 195%	0	100 ± 195%	0	1.0 ± 275%	0
Tennessee	0	0	0	0	0	0	0	0
Wisconsin	0	900 ± 194%	0	100 ± 194%	0	800 ± 194%	0	16.0 ± 275%
Mississippi Flyway Total	27,900 ± 112%	31,400 ± 128%			5,200 ± 98%	15,500 ± 93%		
New Mexico	<50 ± 173%	0	<50 ± 173%	0	<50 ± 173%	0	1.0 ± 244%	0
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	700 ± 185%	0	100 ± 136%	0	100 ± 138%	0	14.0 ± 230%
Central Flyway Total	<50 ± 173%	700 ± 185%			<50 ± 173%	100 ± 138%		
Arizona	0	0	0	0	0	0	0	0
California	0	1,700 ± 196%	0	1,700 ± 138%	0	1,700 ± 138%	0	1.0 ± 240%
Idaho	0	0	300 ± 196%	0	300 ± 196%	0	0	0
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
Pacific Flyway Total	0	1,700 ± 196%			300 ± 196%	1,700 ± 138%		
U.S. Total	28,700 ± 109%	33,900 ± 119%			6,000 ± 87%	17,700 ± 83%		

Table 21. Preliminary estimates of rail harvest during the 2003 and 2004 hunting seasons. Species-specific estimates were derived from 5-year running averages of species composition estimates from the Migratory Bird Wing Collection Survey.

Flyway	Sora		Virginia		Clapper		King	
	2003	2004	2003	2004	2003	2004	2003	2004
Atlantic	6,500	7,800	100	200	5,600	8,200	<50	<50
Mississippi	13,400	30,200	500	700	0	0	400	0
Central	1,300	1,600	400	500	700	1,000	200	300
U.S. Total	21,200	39,600	1,000	1,400	6,300	9,200	600	300

Appendix A. Individuals who were responsible for getting the HIP sample frame for their state to the FWS.

Stacey Norris and Julie Perry, 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 and Kim Shepherd, California Department of Fish and Game
Lyn Stevens, Colorado Division of Wildlife
Min Huang, Connecticut Department of Environmental Protection
Carla Cassell-Carter, 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
Claire Moser, 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
Bill Swan, Maine Department of Inland Fisheries and Wildlife
Brent Evans, Maryland Department of Natural Resources
Rick Kennedy, Massachusetts Division of Fisheries and Wildlife
Lisa Winters, Michigan Department of Natural Resources
Margaret Dexter, Minnesota Department of Natural Resources
Curtis Thornhill, Mississippi Department of Wildlife, Fisheries and Parks
Tom Kulowiec, Missouri Department of Conservation
Kevin Kauska, Montana Department of Fish, Wildlife and Parks
Kit Hams and Laurie Hookham, Nebraska Game and Parks Commission
Patty Wagner, Nevada Department of Wildlife
Bryan Murray, 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
Mike Liddiard, Oklahoma Department of Wildlife Conservation
Valerie Finger, Oregon Department of Fish and Wildlife
Valerie Kazakavage and Terry Heckrote, Pennsylvania Game Commission
Margaret McGrath, Rhode Island Division of Fish and Wildlife Resources
Billy McTeer and Phoebe Carter, South Carolina Department of Natural Resources
Corey Huxoll, South Dakota Game, Fish and Parks Department
Gary Clouse, Tennessee Wildlife Resources Agency
Kevin Kraii, Texas Parks and Wildlife Department
Tom Aldrich, Utah Division of Wildlife Resources

Tom Merrifield, Vermont Fish and Wildlife Department
Bob Ellis, Virginia Department of Game and Inland Fisheries
Jim Rieck, Washington Department of Wildlife
Steve Wilson and Joyce Newcomer, West Virginia Department of Natural Resources
Brian Dhuey, Wisconsin Department of Natural Resources
Roxanne Hudson and Tom Graham, Wyoming Game and Fish Department

Appendix B. Participants at the 2005 wingbees.

Atlantic Flyway Wingbee
Patuxent Wildlife Research Center - Laurel, Maryland

U. S. Fish and Wildlife Service

Steve Barlow
Karen Bollinger
Ray Brown
Allan Dansie
Marilyn Eames
Carl Ferguson
Ronnie Jones
Dan Laber
Robert Mack
Woody Martin
Paul Padding
Jay Pape
Frank Polyak
Bob Raftovich
Ken Richkus
Becky Rosamond
Eva Savage
Howard Spriggs
Dorie Stolley
Arthur Straughn
Chris Wicker
Helen Woods

New York Department of Environmental
Conservation

Michael Clark
Robin Holevinski

Pennsylvania Game Commission

Chad Eyler

Volunteers

Malcolm Livingston
Steve Noyes

Florida Fish & Wildlife Conservation
Comm.

Jamie Feddersen
Eddie Harmon

Delaware Division of Fish and Wildlife

Tom Whittendale

Maryland Department of Natural Resources

Patricia Allen
Ian Hill
Josh Homyack

West Virginia Department of Natural
Resources

Michael Peters

Mississippi Flyway Wingbee
Southern Illinois University - Carbondale, Illinois

U.S. Fish and Wildlife Service

Tom Charles
Clayton Ferrell
Becky Foust
Dave Fronczak
Calvin Gehri
Milton Hubbard
Woody Martin
Sara Mason
Pam Mathias
Paul Padding
Ken Richkus
Elisa Royce
Howard Spriggs
Becky Weigt

Gerold Burnett
Robert Colvis
Scott Ferrell
Jack Sloan
Tim Stovall
Brett Zalla

Volunteers

Doug Benning
Al Novara

Illinois Department of Natural Resources

Tim Krumwiede
Richard Whitton

Iowa Department of Natural Resources

Dave Nicholson
Julie Tobias

Arkansas Game & Fish

Jeremy Whiley

Minnesota Department of Natural Resources

Rob Baden
Dave Rave

Tennessee Wildlife Resources Agency

Dan Fuqua

Missouri Department of Conservation

Rob Vinson

Louisiana Department of Wildlife &
Fisheries

David Breithaupt
John Hanks

Ohio Division of Wildlife

Brett Beatty
Ron Carter

Kentucky Department of Fish & Wildlife

Glen Bowman

Central Flyway Wingbee
Flint Hills National Wildlife Refuge - Hartford, Kansas

U.S. Fish and Wildlife Service

Lyle Hancock
Shane Kasson
Lisa Kennedy
Kammie Kruse
Chris Leeser
Woody Martin
Paul Padding
Ray Portwood
Ken Richkus
Clay Ronish
Jeffrey Sanchez
John Solberg
Howard Spriggs
Phil Thorpe
Dean Wyckoff

Volunteers

Rick Warhurst

North Dakota Game & Fish Department

Mike Johnson
Chris Knutson
Mike Szymanski
Jeremy Wentz

Wyoming Game & Fish Department

Larry Roberts

Kansas Department of Wildlife & Parks

Wade Abbott
Sam Allreid
Eric Deneault
Helen Hands
Matt Hanvey
Marvin Kraft
Jerry Ney
Brent Theede

Nebraska Game & Parks Commission

Jeffrey Jones
Nick Lyman
Sean McKeehan
Randy Stutheit

Oklahoma Dept of Wildlife Conservation

Jeff Neal
Mike O'Meilia
Kelvin Schoonover

South Dakota Game, Fish & Parks Dept.

Mark Grovijahn
Will Morlock
Spencer Vaa

Texas Parks and Wildlife Department

Bill Johnson
Corey Mason

New Mexico Department of Game & Fish

Tim Mitchusson

Pacific Flyway Wingbee
Coleman National Fish Hatchery - Anderson, California

U.S. Fish and Wildlife Service

Anthony Arendt
John Beckstrand
Chris Dau
Marty Drut
Jacqueline Ferrier
Eric Fozier
Bill Henry
Jennifer Isola
Shannon Ludwig
Woody Martin
Joyce Moore
Paul Padding
Ted Rentmeister
Ken Richkus
Howard Spriggs

Volunteers

Rich Finger
Shaun Oldenburger
Norman Saake
Jeremy Kwolek
James Laughlin

California Department of Fish & Game

Pete Figura
Greg Gerstenberg
Scott Hill
Richard Shinn
Melanie Weaver
Dan Yparraguirre

Idaho Department of Fish and Game

Carrie Chalcraft
Jeffrey Knetter

Oregon Department of Fish & Wildlife

Brad Bales
Mikal Cline
Tom Thornton

Washington Department of Fish and Wildlife

Ron Friesz
Matt Monda

Nevada Department of Wildlife

Kyle Neill