University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

US Fish & Wildlife Publications | US Fish & Wildlife Service

2012

Migratory Bird Hunting Activity and Harvest for the 2010 and 2011 Hunting Seasons- July 2012

Robert V. Raftovich
U.S. Fish and Wildlife Service, Robert_Raftovich@fws.gov

Khristi Wilkins
U.S. Fish and Wildlife Service, Khristi_Wilkins@fws.gov

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

Howard L. Spriggs
U.S. Fish and Wildlife Service, howard_spriggs@fws.gov

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

Raftovich, Robert V.; Wilkins, Khristi; Williams, Sheri S.; and Spriggs, Howard L., "Migratory Bird Hunting Activity and Harvest for the 2010 and 2011 Hunting Seasons- July 2012" (2012). *US Fish & Wildlife Publications*. 360.
https://digitalcommons.unl.edu/usfwspubs/360

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.

U.S. Fish & Wildlife Service

Migratory Bird Hunting Activity and Harvest for the 2010 and 2011 Hunting Seasons

July 2012

Hunter setting decoys USFWS/Milton Friend

Migratory Bird Hunting Activity and Harvest for the 2010 and 2011 Hunting Seasons

Suggested Citation

Raftovich, R.V., K.A. Wilkins, S.S Williams, and H.L. Spriggs. 2012. Migratory Bird Hunting Activity and Harvest during the 2010 and 2011 Hunting Seasons. U.S. Fish and Wildlife Service, Laurel, Maryland, USA.

All Division of Migratory Bird Management reports are available on our home page at:
http://www.fws.gov/migratorybirds/NewsPublicationsReports.html

Table of Contents

Abstract 1

Introduction 1

Design and Methods 2

Survey Results 4

Acknowledgements 5

References 6

Waterfowl harvest estimates
- Species, state, flyway 7
- Allocation of duck and goose harvests between Central and Pacific Flyways 27
- Special seasons 28
- Canada harvest 31
- Long-term trend graphs 33

Waterfowl age and sex ratios 35
- Long-term trend graphs 47

Dove and pigeon estimates 51

Woodcock estimates 53

Snipe, coot, gallinule, and rail estimates 54

Species-specific rail estimates 60

List of Appendices

Appendix A. Names of people who coordinate the Harvest Information Program or help provide hunter name and address data to the USFWS 61

Appendix B. Names of waterfowl wingbee participants 63

List of Tables

Table 1a: Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway 7
Table 1b: Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway 13
Table 1c: Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway 18
Table 1d: Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway 22
Table 1e: Preliminary estimates of waterfowl harvest and hunter activity in the Alaska & the US 25
Table 2: Flyway-specific point estimates of duck and goose harvest in Colorado, Montana, New Mexico, and Wyoming.....27
Table 3: Preliminary estimates of sea duck harvest and hunter activity for states with special sea duck seasons or sea duck permits 28
Table 4: Preliminary estimates of brant harvest and hunter activity along the Atlantic and Pacific coasts 28
Table 5: Preliminary harvest estimates for special September teal/duck seasons 29
Table 6: Preliminary estimates of the number of Canada geese harvested during the special September, regular, and special late seasons 30
Table 7: Waterfowl harvest estimates in Canada 31
Table 8: Preliminary weighted age ratios of mallards in state harvests 35
Table 9: Preliminary weighted age ratios of ducks by species and flyway 37
Table 10: Preliminary weighted sex ratios of mallards in state harvests 41
Table 11: Preliminary weighted sex ratios of ducks by species and flyway 43
Table 12: Preliminary weighted age ratios of geese by species and flyway 46
Table 13: Preliminary estimates of mourning dove harvest and hunter activity 51
Table 14: Preliminary estimates of white-winged dove harvest and hunter activity.....52
Table 15: Preliminary estimates of band-tailed pigeon harvest and hunter activity 52
Table 16: Preliminary estimates of woodcock harvest and hunter activity 53
Table 17: Preliminary estimates of snipe harvest and hunter activity 54
Table 18: Preliminary estimates of coot harvest and hunter activity 56
Table 19: Preliminary estimates of gallinule harvest and hunter activity 58
Table 20: Preliminary estimates of rail harvest and hunter activity 59
Table 21: Preliminary species-specific estimates of rail harvest.....60

List of Figures

Figure 1: Number of ducks harvested by hunters in the United States.....33
Figure 2: Number of geese harvested by hunters in the United States 34
Figure 3: Age ratios of mallards harvested in the United States 47
Figure 4: Age ratios of northern pintails harvested in the United States 48
Figure 5: Age ratios of American black ducks and wood ducks harvested in the United States.....49
Figure 6: Age ratios of lesser scaup harvested in the United States 50

Abstract: National surveys of migratory bird hunters were conducted during the 2010 and 2011 hunting seasons. Hunters of the following types of migratory birds were surveyed: waterfowl (family *Anatidae*), doves (mourning [*Zenaida macroura*] and white-winged [*Z. asiatica*]), band-tailed pigeon (*Patagioenas fasciata*), American woodcock (*Scolopax minor*), Wilson's snipe (*Gallinago delicata*), American coot (*Fulica americana*), gallinules (Common gallinule [*Gallinula galeata*] and purple gallinule [*Pophyrio martinica*]), and rails (king rail [*Rallus elegans*], clapper rail [*R. longirostris*], Virginia rail [*R. limicola*], and sora [*Coturnicops noveboracensis*]). About 1.1 million waterfowl hunters harvested 14,796,700 (±4%) ducks and 3,169,900 (±5%) geese in 2010, and almost 1.2 million waterfowl hunters harvested 15,880,900 (±6%) ducks and 2,868,500 (±5%) geese in 2011. Mallard (*Anas platyrhynchos*), green-winged teal (*A. crecca*), gadwall (*A. strepera*), wood duck (*Aix sponsa*), and blue-winged/cinnamon teal (*Anas discors*), were the 5 most-harvested duck species in the U.S., and Canada goose (*Branta canadensis*) was the predominant goose species in the goose harvest. About 959,900 dove hunters harvested 17,230,400 (±5%) mourning doves in 2010 and 955,700 hunters harvested 16,580,900 ± 5% in 2011. Woodcock hunters numbered about 138,300 in 2010 and 113,800 in 2011, and harvested 332,900 (±11%) birds in 2010 and 308,700 (±16%) birds in 2011. About 37,500 people hunted snipe in 2010 and 32,700 in 2011, and they harvested 118,200 (±37%) and 136,300 (±49%) snipe in 2010 and 2011, respectively. Coot hunters (about 50,500 in 2010 and 46,200 in 2011) harvested 302,600 (±50%) coots in 2010 and 416,600 (±36%) in 2011. Gallinule hunters (about 15,000 in 2010 and 2,200 in 2011) harvested13,700 (±87%) gallinules in 2010 and 7,600 (±100%) in 2011. About 17,000 rail hunters harvested 27,100 (±57%) rails in 2009 and 3,300 rail hunters harvested 14,300 (±50%) rails in 2011.

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 (Elden et al. 2002). 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 their 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 2010-11 and 2011-12 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 or 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). The FWS used this prior-year information as a predictor of their current year hunting activity and success to assign each hunter to a success/activity stratum for each of the 10 species or species-groups based on his or her answers to the screening questions. From each State list the FWS selected stratified samples for each species or species-group, sampling the small group of active/very successful hunters at a high rate, the larger group of less successful hunters at a lower rate, and the very large group of hunters who rarely if ever hunt the species or species-group at a very low rate. The FWS conducted 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 and the Central Flyway.

Survey Methodology. Contact before or early in the hunting season, and a daily hunting diary format were used in an effort to reduce memory and prestige bias, both of which result in overestimation (Atwood 1956). Hunters selected for the surveys were asked to record the date of each hunt, the state and county where they hunted, and how many birds of various species or species-groups they personally bagged that day. As a check on recording 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, stratified samples were selected according to predetermined sampling rates. All surveys were conducted using Dillman's Total Design Method for mail surveys (Dillman 1978, Dillman 1991) to maximize survey response and ensure quality and timely responses. A survey packet including a cover letter and a survey form for recording daily hunting activity was sent to each selected hunter within one to two weeks after his/her name was received. The sample selection and initial mailing process continued with each subsequent batch of names and addresses (roughly twice per month), with the last initial mailing occurring on or shortly after the date the season closed in the state. Postcards were sent at the close of the season reminding sampled hunters to return their completed survey forms and thanking them for their help. About 3 weeks after this mailing, a follow-up packet with an additional form was sent 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. Standard analyses for stratified samples (Cochran 1977, Steele and Torrie 1980) were used to obtain estimates of harvest and hunter activity for each state and species or 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. Variance estimates for these parameters were also calculated and converted to 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. To get total numbers at larger geographic scales, we summed the number of active hunters in each state. This may overestimate the total number of active hunters because hunters are required to HIP register in each state in which they hunt migratory birds.

Parts Collection Surveys

The FWS has conducted a cooperative Waterfowl Parts Survey 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. Hunters who agreed to participate in this survey were provided with large, postage-paid "wing envelopes" and were asked 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. They were also asked 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.

Species composition estimates derived from the Waterfowl Parts Survey were combined with harvest estimates from the HIP waterfowl survey to calculate species-specific duck and goose harvest estimates. Similarly, date information provided by Waterfowl Parts Survey 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, state ratios were weighted by harvest estimates from the HIP waterfowl survey to obtain flyway and U.S. ratios.

The FWS has conducted a Woodcock Wing 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 1963-2011 were reported in "American woodcock population status, 2012" (Cooper and Rau 2012). 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.

Beginning in 2007, the FWS has conducted a national Mourning Dove Wing Collection Survey annually to obtain an index of recruitment. Selected hunters were asked to send in a wing from each mourning dove they harvested early in the season. Pooled age ratios from 2007-2011 were reported in "Mourning Dove population status, 2012" (Seamans et al. 2012).

Survey Results

Waterfowl Hunter Activity and Harvest (Tables 1-7, Figures 1-3). HIP waterfowl harvest survey sample sizes and response rates were 67,413 hunters and 44% for the 2010-11, and 71,036 hunters and 40% for the 2011-12 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 Waterfowl Parts Collection Survey enabled us to provide Flyway-specific point estimates of duck and goose harvest for those four states; those point estimates are shown in Table 2.

Sea duck hunter activity and harvest were estimated separately from other ducks for states that had special sea duck seasons or regulations (Table 3). Likewise, brant hunter activity and harvest along the Atlantic and Pacific coasts was estimated separately and reported in 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 days afield and active hunters shown in Tables 3 and 4 are not included in the estimates duck and goose days afield, and active duck and goose hunters 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 duck harvest, and goose harvest since 1961 are shown in Figures 1-2. The curves are locally weighted regression (lowess) lines (Cleveland and Devlin 1988) that fit a pattern to the majority of the estimates and identify points that deviate from that pattern. These figures 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-present.

Waterfowl Age and Sex Ratios (Tables 8-12, Figures 3-6). The 2010-11 Waterfowl Parts Survey collected 79,333 duck wings and 18,122 goose tails and primary tips from 4,535 hunters; the 2011-12 sample consisted of 74,045 duck wings and 14,073 goose tails and primary wing tips from 3,771 hunters. 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 3-6 show the long-term trends in age ratios of mallards (Figure 3), Northern pintails (Figure 4), American black ducks and wood ducks (Figure 5),and lesser scaup (Figure 6).

Dove and Band-tailed Pigeon Hunter Activity and Harvest (Tables 13-15). The dove and band-tailed pigeon estimates were based on samples of 38,369 hunters in 2010-11 (52% response rate) and 41,549 hunters in 2011-12 (45% 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 2010-11 survey had a sample size of 15,175 hunters and a 57% response rate; the 2011-12 survey sample size and response rate were 18,432 hunters and 47%.

Snipe, Coot, Gallinule, and Rail Hunter Activity and Harvest (Tables 17-21). The sample for the 2010-11 snipe, coot, gallinule, and rail harvest survey was 22,214 hunters (55% response rate) and 22,115 hunters (45% response rate) for the 2011-12 survey. Tables 17-20 give the estimates for Wilson's snipe (Table 17), American coot (Table 18), gallinules (Table 19; all species combined) and rails (Table 20; all species combined).

We believe that the number of rail wings collected each year is too small 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 2010-11 estimates are based on the species composition of 2,918 rail wings collected from 118 hunters collected during 2006-2010, and the 2011-12 estimates are based on 3,021 rail wings collected from 99 hunters collected during 2007-2011.

Alaska Sandhill Crane Hunter Activity and Harvest Estimates. The estimates presented below were derived from surveys of 697 (2010-11, 63% response rate) and 658 (2011-12, 46% response rate) Alaska migratory bird hunters. For Alaska's 2010 season, we estimated that 1,200 active sandhill crane hunters spent 4,000 days hunting cranes and harvested 1,400 birds. In 2011, an estimated 1,000 active hunters spent 3,700 days hunting cranes and harvested 800 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 2010 and 2011 seasons were reported in, "Status and harvests of sandhill cranes: Mid-continent, Rocky Mountain, Lower Colorado River Valley and Eastern populations" (Kruse et al. 2012).

Acknowledgments

The staff of the Branch of Harvest Surveys were major contributors to this project: survey clerks Ellen Griffin-Pollard, Robert Mack, and Pamela Mathias; mail clerk Joe Duncan; biological technicians Brent West, Lyle Hancock, and Paul Walfoort; and administrative support assistant Susane Finucane.

The HIP and Waterfowl Parts surveys could not be conducted without the close cooperation of participating States. We appreciate the efforts of all State personnel who were involved with the HIP at various levels, as well as all who helped with the Waterfowl Parts Surveys at one of the 4 "wingbees". The names of the people who were primarily responsible for coordinating the HIP program in each state are included in Appendix A. The names of wingbee particpants are in Appendix B. We also would like to acknowledge Victor Elam at the Flint Hills NWR for

providing support for the Central Flyway wingbee and Scott Hamelberg and Debbie Anderson at the Coleman National Fish Hatchery for providing support for the Pacific Flyway wingbee.

REFERENCES

Atwood, E. L. 1956. Validity of mail survey data on bagged waterfowl. Journal of Wildlife Management 20: 1-16.

Cleveland, W. S., and S. J. Devlin. 1988. Locally weighted regression: an approach to regression analysis by local fitting. Journal of the American Statistical Association 83: 596-610.

Cochran, W. G. 1977. Sampling Techniques. Wiley, New York.

Cooper, T. R., and R.D. Rau. 2012. American woodcock population status, 2012. U.S. Fish and Wildlife Service, Laurel, Maryland. 16 pp.

Dillman, D. A. 1978. Mail and telephone surveys: the Total Design Method. Wiley & Sons, New York, USA.

Dillman, D. A. 1991. The design and administration of mail surveys. Annual Review of Sociology 17: 225-249.

Elden R.C., W.V. Bevill, P.I. Padding, J.E. Frampton, and D.L. Shroufe. 2002. Pages 7-16 *in* J.M. Ver Steeg and R.C. Elden, compilers. Harvest Information Program: Evaluation and Recommendations. International Association of Fish and Wildlife Agencies, Migratory Shore and Upland Game Bird Working Group, Ad Hoc Committee on HIP, Washington, D.C.

Kruse, K.L., J.A Dubovsky, and T.R. Cooper. 2012. Status and harvests of sandhill cranes: Mid-continent, Rocky Mountain, Lower Colorado River Valley Populations and Eastern Populations. Administrative Report, U.S. Fish and Wildlife Service, Denver, Colorado 14 pp.

Seamans, M.E., R.D. Rau, and T.A. Sanders. 2012. Mourning dove population status, 2012. U.S. Department of the Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Washington, D.C.

Steele, R.G., and J.H. Torrie. 1980. Principles and procedures of statistics: a biometrical approach. McGraw-Hill Book Company, New York, New York. 633 pp.

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2010 and 2011 hunting seasons.

	Connecticut		Delaware		Florida	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	5,236	3,890	15,084	11,225	764	1,223
Domestic Mallard	46	30	0	140	127	122
Black Duck	1,486	653	8,185	3,227	127	0
Mallard x Black Duck Hybrid	91	178	468	421	0	0
Mottled Duck	0	0	0	0	13,882	10,640
Gadwall	160	297	819	702	2,038	1,835
Wigeon	0	594	234	140	2,292	6,971
Green-winged Teal	526	505	10,290	10,804	20,377	12,842
Blue-winged/Cinnamon Teal	0	30	117	281	86,601	76,562
Northern Shoveler	0	0	351	1,122	9,806	9,540
Northern Pintail	91	30	1,988	1,263	2,802	1,468
Wood Duck	1,623	1,544	1,637	5,472	16,811	11,741
Redhead	0	0	0	0	2,674	1,590
Canvasback	23	0	117	0	255	0
Greater Scaup	206	30	0	0	127	245
Lesser Scaup	114	119	585	281	14,518	4,770
Ring-necked Duck	137	445	935	421	38,843	92,217
Goldeneyes	69	30	0	140	127	0
Bufflehead	252	59	3,742	3,508	3,821	245
Ruddy Duck	46	0	468	140	1,528	734
Long-tailed Duck	824	1,339	0	0	0	0
Eiders	906	0	25	0	0	0
Scoters	1,154	609	661	1,004	0	0
Hooded Merganser	229	30	702	561	2,038	1,468
Other Mergansers	389	148	0	140	127	612
Other Ducks	0	0	0	0	9,297	7,583
Total Duck Harvest	13,600±19%	10,600±26%	46,400±18%	41,000±26%	229,000±29%	242,400±27%
Total Active Duck Hunters[a]	1,800±17%	1,500±26%	4,300±14%	3,900±9%	13,800±22%	15,500±21%
Total Duck Hunter Days Afield[a]	9,500±19%	9,300±32%	31,200±16%	27,500±12%	84,800±27%	82,000±22%
Seasonal Duck Harvest Per Hunter	7.7±26%	7.1±37%	10.9±23%	10.5±17%	16.6±36%	15.6±34%
Goose Species Composition						
Canada Goose	8,807	9,521	34,251	12,686	2,063	0
Snow Goose	0	0	3,005	2,633	0	0
Blue Goose	0	0	240	0	0	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	132	194	224	81	0	0
Other Geese	28	0	0	0	0	0
Total Goose Harvest	9,000±25%	9,700±36%	37,700±17%	15,400±17%	2,100±136%	0±146%
Total Active Goose Hunters[b]	1,600±20%	1,800±26%	4,300±13%	3,400±11%	800±97%	500±113%
Total Goose Hunter Days Afield[b]	7,800±22%	11,600±43%	30,000±16%	19,500±13%	7,100±127%	900±161%
Seasonal Goose Harvest Per Hunter	5.7±32%	5.3±44%	8.7±21%	4.6±20%	2.8±168%	1.0±184%
Active Waterfowl Hunters	2,300±15%	2,700±22%	5,400±11%	4,700±8%	13,800±22%	15,400±21%
Sample Sizes						
Duck Wings	504	306	418	286	1,798	1,982
Goose Tails	323	254	326	130	1	0

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2010 and 2011 hunting seasons.

	Georgia		Maine		Maryland	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	34,323	18,491	8,379	7,441	36,855	32,541
Domestic Mallard	528	0	0	181	1,204	1,731
Black Duck	1,056	0	3,377	2,133	12,526	7,962
Mallard x Black Duck Hybrid	0	0	250	91	1,686	173
Mottled Duck	0	430	0	0	0	0
Gadwall	3,696	5,160	63	45	1,204	2,769
Wigeon	528	430	63	45	4,336	3,116
Green-winged Teal	7,393	7,740	3,189	2,042	7,949	5,366
Blue-winged/Cinnamon Teal	4,752	17,201	813	681	1,927	2,250
Northern Shoveler	3,168	3,870	0	91	1,445	1,039
Northern Pintail	0	0	188	45	482	1,039
Wood Duck	135,707	129,007	8,567	5,989	7,467	10,905
Redhead	3,696	3,010	63	0	2,168	346
Canvasback	1,056	430	0	0	13,489	2,942
Greater Scaup	1,584	430	188	45	12,285	865
Lesser Scaup	2,640	6,450	250	45	11,562	9,347
Ring-necked Duck	8,977	16,341	1,688	454	1,204	2,596
Goldeneyes	0	0	313	318	482	1,039
Bufflehead	528	2,150	2,376	771	14,212	19,732
Ruddy Duck	5,280	3,010	125	91	2,409	346
Long-tailed Duck	0	0	2,321	2,695	2,597	1,904
Eiders	0	0	4,505	6,400	0	0
Scoters	528	0	1,092	674	6,678	8,654
Hooded Merganser	3,168	6,020	938	953	2,891	2,250
Other Mergansers	0	0	313	272	723	865
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	218,600±26%	220,200±18%	39,100±21%	31,500±18%	147,781±16%	119,800±29%
Total Active Duck Hunters[a]	21,900±18%	20,200±14%	5,600±15%	4,000±15%	18,500±11%	17,200±12%
Total Duck Hunter Days Afield[a]	120,400±21%	124,000±16%	26,000±16%	21,700±18%	83,400±14%	95,100±23%
Seasonal Duck Harvest Per Hunter	10.0±32%	10.9±23%	7.0±26%	7.8±24%	8.0±20%	8.0±31%
Goose Species Composition						
Canada Goose	23,739	34,381	9,194	3,717	200,873	111,369
Snow Goose	0	0	0	0	3,629	5,676
Blue Goose	0	0	0	0	0	196
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	0	0	0	0	1,589	391
Other Geese	0	0	0	0	0	0
Total Goose Harvest	23,700±35%	34,400±33%	9,200±28%	3,700±23%	206,100±13%	117,600±16%
Total Active Goose Hunters[b]	8,800±32%	10,500±24%	3,500±20%	1,900±24%	26,600±8%	25,000±10%
Total Goose Hunter Days Afield[b]	38,900±38%	49,000±31%	13,900±24%	8,000±30%	152,300±11%	131,200±13%
Seasonal Goose Harvest Per Hunter	2.7±47%	3.3±41%	2.7±34%	2.0±33%	7.7±16%	4.7±19%
Active Waterfowl Hunters	23,100±18%	21,500±15%	6,400±14%	4,700±15%	35,200±6%	32,600±7%
Duck Wings	414	512	556	537	625	692
Goose Tails	115	96	134	167	959	601

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2010 and 2011 hunting seasons.

	Massachusetts		New Hampshire		New Jersey	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	5,897	9,861	5,913	4,893	18,369	5,708
Domestic Mallard	31	0	0	0	762	0
Black Duck	2,683	4,511	1,806	2,021	11,766	8,592
Mallard x Black Duck Hybrid	218	157	226	213	423	481
Mottled Duck	0	0	0	0	0	0
Gadwall	0	210	45	0	593	60
Wigeon	94	0	0	106	931	60
Green-winged Teal	1,466	1,836	1,219	957	7,873	5,648
Blue-winged/Cinnamon Teal	31	262	181	53	0	60
Northern Shoveler	31	52	0	0	339	0
Northern Pintail	0	105	90	53	339	421
Wood Duck	1,654	4,458	4,514	5,159	10,243	3,785
Redhead	0	0	0	0	0	0
Canvasback	0	0	0	0	0	0
Greater Scaup	0	52	0	0	423	180
Lesser Scaup	31	0	45	53	423	120
Ring-necked Duck	94	472	90	106	0	120
Goldeneyes	187	1,259	45	0	254	60
Bufflehead	2,714	2,570	587	372	7,957	6,489
Ruddy Duck	0	157	0	0	423	120
Long-tailed Duck	67	91	0	358	2,067	603
Eiders	5,019	5,763	598	835	413	0
Scoters	2,476	1,235	1,495	4,057	1,447	1,067
Hooded Merganser	343	839	451	425	2,201	1,562
Other Mergansers	1,154	1,993	0	319	1,947	601
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	24,200±28%	35,900±31%	17,300±21%	20,000±16%	69,200±21%	35,700±19%
Total Active Duck Hunters[a]	3,000±15%	3,400±18%	2,700±16%	2,800±17%	6,500±11%	4,200±12%
Total Duck Hunter Days Afield[a]	15,400±17%	24,300±25%	17,700±19%	17,200±16%	41,800±16%	26,700±17%
Seasonal Duck Harvest Per Hunter	8.1±32%	10.5±35%	6.5±26%	7.3±23%	10.7±24%	8.5±23%
Goose Species Composition						
Canada Goose	12,553	15,029	5,829	7,955	52,669	11,548
Snow Goose	100	49	0	95	4,060	4,130
Blue Goose	0	0	0	0	0	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	84
Brant	469	413	7	0	5,785	2,770
Other Geese	0	0	0	0	0	0
Total Goose Harvest	13,100±36%	15,500±24%	5,836±20%	8,100±22%	62,500±29%	18,500±32%
Total Active Goose Hunters[b]	2,200±17%	3,100±18%	2,100±17%	2,100±18%	5,100±13%	2,400±19%
Total Goose Hunter Days Afield[b]	14,600±21%	20,200±25%	12,700±23%	14,600±24%	29,200±18%	11,200±25%
Seasonal Goose Harvest Per Hunter	5.9±40%	5.0±30%	2.7±26%	3.9±29%	12.3±31%	7.8±37%
Active Waterfowl Hunters	3,900±12%	4,500±15%	3,100±15%	3,300±16%	7,900±9%	5,100±10%
Sample Sizes						
Duck Wings	646	704	351	321	790	603
Goose Tails	293	323	126	85	543	211

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2010 and 2011 hunting seasons.

	New York		North Carolina		Pennsylvania	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	73,353	70,311	32,952	36,525	50,672	40,893
Domestic Mallard	712	722	785	769	998	416
Black Duck	17,250	15,877	5,231	3,845	7,370	4,713
Mallard x Black Duck Hybrid	870	928	392	384	1,075	277
Mottled Duck	0	0	0	0	0	0
Gadwall	2,611	3,299	17,130	22,876	1,919	1,525
Wigeon	2,611	5,052	21,184	16,533	691	1,109
Green-winged Teal	8,783	12,990	47,075	22,300	5,144	3,951
Blue-winged/Cinnamon Teal	950	4,536	4,054	6,728	537	1,178
Northern Shoveler	554	103	8,369	4,998	77	139
Northern Pintail	2,453	1,856	7,846	7,113	230	139
Wood Duck	13,373	20,207	82,511	88,430	31,785	16,427
Redhead	4,352	1,237	7,715	3,268	384	277
Canvasback	712	103	654	0	77	0
Greater Scaup	4,115	1,340	1,438	961	154	554
Lesser Scaup	3,877	2,680	21,837	7,497	1,228	1,386
Ring-necked Duck	2,453	5,258	14,776	22,876	1,459	970
Goldeneyes	9,970	8,041	262	0	307	208
Bufflehead	7,438	3,608	8,500	5,959	3,071	3,673
Ruddy Duck	237	103	4,969	192	1,152	139
Long-tailed Duck	7,040	2,469	0	192	0	0
Eiders	512	299	0	0	0	0
Scoters	6,400	4,639	5,231	14,226	307	69
Hooded Merganser	3,086	2,474	7,061	5,575	1,459	1,802
Other Mergansers	6,172	5,773	392	192	4,146	1,594
Other Ducks	0	0	0	384	0	0
Total Duck Harvest	179,900±12%	173,900±14%	300,400±26%	271,800±33%	114,200±18%	81,400±19%
Total Active Duck Hunters[a]	16,600±7%	17,900±8%	22,100±17%	25,700±23%	23,200±16%	24,200±18%
Total Duck Hunter Days Afield[a]	102,600±11%	119,400±12%	151,800±21%	179,700±31%	104,800±17%	109,400±18%
Seasonal Duck Harvest Per Hunter	10.8±14%	9.7±16%	13.6±31%	10.6±40%	4.9±25%	3.4±26%
Goose Species Composition						
Canada Goose	127,614	126,605	54,624	29,843	153,257	75,107
Snow Goose	4,354	1,631	0	1,020	2,045	20,902
Blue Goose	0	0	0	0	178	836
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	125	0	0	0	0
Brant	5,232	4,391	1,409	2,122	89	0
Other Geese	0	0	0	0	89	0
Total Goose Harvest	137,200±15%	132,800±15%	56,000±52%	33,000±56%	155,700±22%	96,800±25%
Total Active Goose Hunters[b]	14,400±8%	15,600±8%	12,300±24%	15,300±30%	28,100±13%	27,900±15%
Total Goose Hunter Days Afield[b]	85,000±11%	101,000±12%	52,500±37%	44,700±32%	127,100±16%	130,500±19%
Seasonal Goose Harvest Per Hunter	9.5±17%	8.5±17%	4.6±57%	2.2±64%	5.5±25%	3.5±29%
Active Waterfowl Hunters	20,800±6%	22,800±6%	23,400±17%	27,600±22%	39,700±13%	39,800±13%
Sample Sizes						
Duck Wings	2,206	1,714	2,297	1,414	1,488	1,175
Goose Tails	1,292	1,058	149	124	1,751	1,390

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2010 and 2011 hunting seasons.

	Rhode Island		South Carolina		Vermont	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	2,233	512	33,590	24,754	6,977	9,634
Domestic Mallard	31	0	3,075	688	0	0
Black Duck	1,258	384	2,365	688	2,031	1,359
Mallard x Black Duck Hybrid	189	21	710	0	131	40
Mottled Duck	0	0	710	2,750	0	0
Gadwall	346	32	12,537	16,961	197	80
Wigeon	503	160	3,312	7,564	66	120
Green-winged Teal	31	53	18,687	17,190	2,588	2,199
Blue-winged/Cinnamon Teal	126	0	16,085	20,628	262	200
Northern Shoveler	0	11	3,548	9,627	197	0
Northern Pintail	126	11	4,021	2,980	328	80
Wood Duck	818	128	114,016	88,931	5,077	4,797
Redhead	0	0	1,419	0	0	40
Canvasback	31	0	946	1,375	0	0
Greater Scaup	220	171	710	688	98	80
Lesser Scaup	31	11	5,441	8,710	557	240
Ring-necked Duck	126	0	13,483	3,896	1,474	799
Goldeneyes	157	11	0	0	2,031	1,319
Bufflehead	94	96	3,075	2,980	98	600
Ruddy Duck	31	0	2,839	458	0	40
Long-tailed Duck	34	0	0	0	131	120
Eiders	1,071	201	0	0	0	0
Scoters	182	86	1,656	0	33	680
Hooded Merganser	786	43	3,785	4,584	131	200
Other Mergansers	1,321	160	237	458	524	400
Other Ducks	0	0	710	229	0	0
Total Duck Harvest	9,700±36%	2,100±36%	247,000±21%	216,100±25%	22,900±13%	23,000±15%
Total Active Duck Hunters[a]	1,000±17%	500±21%	20,200±17%	20,500±19%	2,700±11%	2,600±11%
Total Duck Hunter Days Afield[a]	6,200±20%	2,800±28%	141,000±20%	141,600±26%	17,300±13%	17,400±14%
Seasonal Duck Harvest Per Hunter	9.9±40%	4.2±42%	12.2±27%	10.5±32%	8.5±17%	8.8±19%
Goose Species Composition						
Canada Goose	4,165	2,931	19,337	17,250	9,644	8,277
Snow Goose	12	0	0	0	0	134
Blue Goose	0	0	0	0	0	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	694	368	0	0	42	168
Other Geese	0	0	0	0	0	0
Total Goose Harvest	4,900±33%	3,300±90%	19,300±35%	17,200±40%	9,700±19%	8,600±24%
Total Active Goose Hunters[b]	900±19%	500±24%	7,300±28%	7,300±32%	2,000±13%	1,900±14%
Total Goose Hunter Days Afield[b]	5,000±25%	3,300±45%	20,600±33%	24,200±41%	9,300±16%	8,300±16%
Seasonal Goose Harvest Per Hunter	5.6±39%	7.0±93%	2.6±45%	2.4±51%	4.9±23%	4.5±28%
Active Waterfowl Hunters	1,300±13%	600±16%	21,700±17%	21,300±19%	3,300±10%	3,200±10%
Sample Sizes						
Duck Wings	382	189	1,044	943	700	576
Goose Tails	386	280	59	72	232	256

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2010 and 2011 hunting seasons.

	Virginia		West Virginia		Flyway Total	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	60,045	34,891	4,027	3,105	394,670	315,897
Domestic Mallard	442	125	43	0	8,784	4,923
Black Duck	12,914	9,844	771	394	92,204	66,203
Mallard x Black Duck Hybrid	883	748	86	148	7,699	4,260
Mottled Duck	0	0	0	0	14,591	13,821
Gadwall	9,934	12,710	129	0	53,420	68,561
Wigeon	2,980	2,368	86	0	39,910	44,367
Green-winged Teal	5,850	5,483	43	197	148,482	112,102
Blue-winged/Cinnamon Teal	2,870	3,489	43	296	119,348	134,436
Northern Shoveler	1,766	1,495	0	0	29,651	32,087
Northern Pintail	2,539	1,371	0	0	23,522	17,971
Wood Duck	16,225	18,941	1,028	1,676	453,057	417,596
Redhead	1,656	125	0	0	24,127	9,893
Canvasback	5,629	498	0	0	22,989	5,349
Greater Scaup	1,987	623	0	0	23,535	6,265
Lesser Scaup	3,863	4,486	0	0	67,005	46,195
Ring-necked Duck	8,609	5,109	0	49	94,349	152,132
Goldeneyes	442	0	0	49	14,645	12,473
Bufflehead	17,660	21,433	0	49	76,125	74,295
Ruddy Duck	1,876	0	43	0	21,427	5,531
Long-tailed Duck	762	926	0	0	15,844	10,698
Eiders	0	0	0	0	13,050	13,498
Scoters	4,382	8,338	0	0	33,723	45,337
Hooded Merganser	6,623	6,106	257	99	36,148	34,991
Other Mergansers	1,656	1,994	129	345	19,229	15,868
Other Ducks	0	0	0	0	10,006	8,197
Total Duck Harvest	171,600±23%	141,100±26%	6,684±37%	6,400±47%	1,857,500±8%	1,672,900±9%
Total Active Duck Hunters[a]	18,400±13%	16,600±16%	1,000±26%	800±25%	183,100[c]	181,500[c]
Total Duck Hunter Days Afield[a]	113,000±20%	89,000±19%	5,500±32%	4,200±36%	1,072,400±6%	1,091,400±7%
Seasonal Duck Harvest Per Hunter	9.3±27%	8.5±31%	6.4±45%	8.3±53%		
Goose Species Composition						
Canada Goose	71,131	60,721	6,478	3,689	796,229	530,630
Snow Goose	671	289	0	0	17,875	36,560
Blue Goose	0	0	0	0	418	1,032
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	578	0	0	0	788
Brant	2,401	509	0	0	18,073	11,407
Other Geese	134	0	0	0	251	0
Total Goose Harvest	74,300±18%	62,100±25%	6,500±61%	3,700±56%	832,800±8%	580,400±8%
Total Active Goose Hunters[b]	16,400±14%	13,100±16%	1,000±27%	600±31%	137,300[c]	132,800[c]
Total Goose Hunter Days Afield[b]	77,100±22%	75,100±20%	5,800±42%	3,600±41%	688,900±6%	657,000±7%
Seasonal Goose Harvest Per Hunter	4.4±23%	4.7±30%	6.2±67%	5.7±64%		
Active Waterfowl Hunters	23,700±11%	21,800±13%	1,300±24%	800±24%	236,300[c]	232,500[c]
Sample Sizes						
Duck Wings	1,535	1,068	156	130	15,910	13,152
Goose Tails	546	222	88	93	7,323	5,362

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2010 and 2011 hunting seasons.

	Alabama		Arkansas		Illinois	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	27,890	27,617	691,693	639,672	183,672	271,428
Domestic Mallard	0	337	0	0	197	278
Black Duck	1,073	0	1,396	0	2,370	1,667
Mallard x Black Duck Hybrid	0	0	465	764	197	833
Mottled Duck	0	337	0	0	0	0
Gadwall	85,012	77,463	231,340	257,932	34,759	32,227
Wigeon	3,486	3,031	27,463	21,017	5,332	6,390
Green-winged Teal	12,068	12,125	171,760	172,337	23,897	34,727
Blue-winged/Cinnamon Teal	3,218	12,798	5,586	19,488	18,565	26,393
Northern Shoveler	17,432	2,694	101,939	87,888	18,367	16,113
Northern Pintail	1,341	2,021	31,652	30,952	9,480	13,613
Wood Duck	45,054	52,204	111,248	90,945	36,734	50,285
Redhead	1,609	3,368	3,724	6,878	2,567	7,223
Canvasback	2,682	4,378	1,862	2,293	5,925	4,167
Greater Scaup	1,073	1,684	1,396	382	1,580	2,778
Lesser Scaup	2,682	7,410	2,793	4,203	6,912	6,390
Ring-necked Duck	5,900	17,513	12,568	11,846	7,505	16,669
Goldeneyes	805	0	3,258	0	7,307	4,167
Bufflehead	1,609	3,705	2,327	1,146	3,752	5,834
Ruddy Duck	0	4,378	0	764	790	1,111
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	337	0	0	197	0
Hooded Merganser	2,950	2,021	7,913	9,935	1,777	3,056
Other Mergansers	0	0	0	0	395	1,389
Other Ducks	0	0	465	0	395	278
Total Duck Harvest	215,900±29%	235,400±26%	1,410,800±18%	1,358,400±13%	372,700±18%	507,000±17%
Total Active Duck Hunters[a]	12,800±21%	14,100±20%	52,700±9%	58,800±9%	32,700±11%	34,100±10%
Total Duck Hunter Days Afield[a]	90,000±23%	117,900±29%	460,200±15%	476,000±13%	227,600±15%	311,000±13%
Seasonal Duck Harvest Per Hunter	16.9±36%	16.7±33%	26.8±20%	23.1±16%	11.4±21%	14.9±20%
Goose Species Composition						
Canada Goose	12,866	13,770	54,084	15,446	131,701	104,097
Snow Goose	477	0	27,702	33,098	1,380	4,379
Blue Goose	0	0	21,106	15,814	986	2,695
Ross's Goose	0	0	2,638	1,839	197	674
White-fronted Goose	0	0	36,935	22,801	3,746	3,032
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	197	0
Total Goose Harvest	13,300±60%	13,800±50%	142,500±31%	89,000±31%	138,200±22%	114,900±28%
Total Active Goose Hunters[b]	4,200±42%	5,700±35%	14,900±18%	18,400±16%	27,900±13%	21,200±14%
Total Goose Hunter Days Afield[b]	18,200±61%	19,400±53%	86,300±26%	97,000±26%	209,000±20%	171,700±16%
Seasonal Goose Harvest Per Hunter	3.1±74%	2.4±61%	9.5±36%	4.8±34%	5.0±26%	5.4±31%
Active Waterfowl Hunters	12,800±21%	14,200±20%	52,700±9%	58,600±9%	42,100±10%	37,600±10%
Sample Sizes						
Duck Wings	805	699	3,031	3,555	1,887	1,825
Goose Tails	28	25	108	242	701	341

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2010 and 2011 hunting seasons.

	Indiana		Iowa		Kentucky	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	41,658	61,158	68,332	71,999	33,229	136,019
Domestic Mallard	0	0	192	0	0	621
Black Duck	1,195	2,008	192	0	1,994	5,590
Mallard x Black Duck Hybrid	0	183	0	0	0	1,242
Mottled Duck	0	0	0	0	0	0
Gadwall	7,000	6,024	17,851	9,467	4,430	28,570
Wigeon	683	2,008	3,647	3,239	2,104	4,969
Green-winged Teal	4,268	11,501	20,346	19,682	1,329	11,801
Blue-winged/Cinnamon Teal	4,439	6,572	46,834	23,419	665	2,484
Northern Shoveler	1,537	5,294	10,941	10,962	886	4,969
Northern Pintail	1,024	1,826	9,213	3,488	665	6,832
Wood Duck	23,561	20,082	55,472	43,349	4,209	24,844
Redhead	1,024	1,095	2,303	2,491	222	0
Canvasback	171	365	1,919	1,993	222	1,242
Greater Scaup	0	0	192	997	665	1,242
Lesser Scaup	171	183	768	1,495	997	6,832
Ring-necked Duck	3,073	1,826	4,799	2,242	222	11,180
Goldeneyes	341	365	1,344	1,246	665	621
Bufflehead	2,902	1,460	576	2,242	886	1,863
Ruddy Duck	0	0	384	2,491	554	0
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	249	0	0
Hooded Merganser	1,024	1,278	192	498	554	4,348
Other Mergansers	0	0	0	0	332	0
Other Ducks	0	0	0	249	0	0
Total Duck Harvest	94,100±15%	123,200±16%	245,500±16%	201,800±24%	54,800±48%	255,300±108%
Total Active Duck Hunters[a]	10,900±12%	12,700±13%	22,200±10%	18,700±16%	5,800±46%	9,900±38%
Total Duck Hunter Days Afield[a]	67,600±13%	84,500±12%	149,100±15%	136,200±22%	39,100±68%	117,400±58%
Seasonal Duck Harvest Per Hunter	8.6±19%	9.7±21%	11.1±19%	10.8±28%	9.4±66%	25.8±114%
Goose Species Composition						
Canada Goose	74,201	49,296	65,777	51,967	31,263	16,246
Snow Goose	0	0	156	146	0	428
Blue Goose	0	0	0	0	0	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	587	279	156	146	2,039	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	855
Total Goose Harvest	74,800±20%	49,600±21%	66,100±25%	52,300±32%	33,300±91%	17,500±81%
Total Active Goose Hunters[b]	11,800±11%	12,000±13%	15,100±14%	14,500±20%	9,000±37%	7,600±40%
Total Goose Hunter Days Afield[b]	78,800±14%	74,600±18%	94,500±19%	84,600±34%	55,700±54%	56,600±55%
Seasonal Goose Harvest Per Hunter	6.3±23%	4.1±24%	4.4±28%	3.6±38%	3.7±98%	2.3±91%
Active Waterfowl Hunters	13,500±11%	15,200±12%	25,200±9%	24,900±12%	7,100±42%	9,900±38%
Sample Sizes						
Duck Wings	551	675	1,279	810	495	411
Goose Tails	255	178	425	357	49	41

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2010 and 2011 hunting seasons.

	Louisiana		Michigan		Minnesota	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	229,415	147,403	104,807	108,763	138,167	180,515
Domestic Mallard	0	0	0	446	0	0
Black Duck	4,015	604	4,295	4,680	1,421	491
Mallard x Black Duck Hybrid	1,147	0	687	0	284	491
Mottled Duck	55,060	39,871	0	0	0	0
Gadwall	485,212	839,713	5,154	6,463	25,871	8,339
Wigeon	47,604	57,995	2,577	4,903	9,382	5,396
Green-winged Teal	621,141	555,781	20,618	11,812	36,674	36,790
Blue-winged/Cinnamon Teal	446,212	462,748	2,062	3,566	36,958	89,767
Northern Shoveler	211,635	151,632	2,062	2,674	19,332	15,697
Northern Pintail	86,031	101,490	5,498	4,457	11,087	7,848
Wood Duck	278,165	225,937	55,324	41,232	77,897	150,593
Redhead	33,265	61,619	18,728	28,305	18,479	18,640
Canvasback	29,824	32,018	1,546	2,452	13,362	9,811
Greater Scaup	2,294	2,416	3,780	8,023	1,421	1,962
Lesser Scaup	93,487	44,704	8,591	9,584	14,783	5,396
Ring-necked Duck	90,619	71,285	11,512	13,372	88,984	63,278
Goldeneyes	0	1,208	3,952	1,783	4,833	9,320
Bufflehead	2,868	2,416	21,992	19,836	17,058	7,358
Ruddy Duck	1,147	4,229	2,234	1,114	1,421	1,962
Long-tailed Duck	0	0	5,498	1,560	0	0
Eiders	0	0	0	0	0	0
Scoters	574	0	1,203	3,343	284	0
Hooded Merganser	9,750	9,666	4,811	3,789	6,254	6,377
Other Mergansers	574	1,812	1,031	5,349	0	981
Other Ducks	6,309	4,229	0	0	0	0
Total Duck Harvest	2,736,300±11%	2,818,800±10%	288,000±13%	287,500±16%	524,000±13%	621,000±11%
Total Active Duck Hunters[a]	89,300±6%	97,500±5%	37,100±10%	31,500±11%	69,600±9%	76,800±9%
Total Duck Hunter Days Afield[a]	821,700±9%	857,100±9%	203,000±11%	191,000±12%	396,600±14%	401,100±11%
Seasonal Duck Harvest Per Hunter	30.6±12%	28.9±12%	7.8±16%	9.1±19%	7.5±16%	8.1±15%
Goose Species Composition						
Canada Goose	4,545	2,933	125,087	125,379	188,450	238,726
Snow Goose	6,818	21,999	0	0	0	4,788
Blue Goose	7,576	17,599	0	0	1,967	4,788
Ross's Goose	1,515	1,467	0	0	0	0
White-fronted Goose	44,696	30,798	0	0	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	65,100±39%	74,800±48%	125,100±16%	125,400±18%	190,400±21%	248,300±22%
Total Active Goose Hunters[b]	10,700±21%	10,300±21%	30,700±11%	28,400±12%	51,600±11%	54,700±11%
Total Goose Hunter Days Afield[b]	48,600±25%	64,000±42%	164,300±13%	166,900±15%	298,200±19%	309,600±15%
Seasonal Goose Harvest Per Hunter	6.1±44%	7.2±53%	4.1±20%	4.4±21%	3.7±24%	4.5±25%
Active Waterfowl Hunters	89,600±6%	97,700±5%	43,200±9%	39,400±10%	81,900±9%	88,100±9%
Sample Sizes						
Duck Wings	4,771	4,666	1,676	1,290	1,843	1,266
Goose Tails	86	51	655	347	484	363

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2010 and 2011 hunting seasons.

	Mississippi		Missouri		Ohio	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	113,597	72,078	262,778	246,149	50,863	52,038
Domestic Mallard	0	0	0	0	175	771
Black Duck	247	0	0	223	2,797	3,469
Mallard x Black Duck Hybrid	247	0	372	223	350	385
Mottled Duck	0	0	0	0	0	0
Gadwall	57,170	87,935	66,672	61,649	5,069	3,469
Wigeon	5,940	9,370	8,381	8,935	1,049	2,120
Green-winged Teal	30,194	37,841	54,939	53,384	8,914	6,167
Blue-winged/Cinnamon Teal	8,662	7,929	27,004	18,763	8,914	3,084
Northern Shoveler	39,103	22,344	41,717	42,663	1,573	1,927
Northern Pintail	8,167	11,532	18,251	16,976	2,272	1,349
Wood Duck	59,150	54,058	18,437	21,220	24,470	18,117
Redhead	1,732	0	3,911	2,904	1,923	771
Canvasback	247	0	1,490	1,340	175	193
Greater Scaup	990	0	186	223	699	0
Lesser Scaup	3,960	4,685	2,980	1,787	3,321	2,313
Ring-necked Duck	1,237	9,370	9,684	11,392	699	1,156
Goldeneyes	0	0	931	223	175	4,626
Bufflehead	0	2,883	186	2,234	3,845	1,349
Ruddy Duck	0	721	0	223	350	385
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	0	193
Hooded Merganser	1,732	4,325	1,676	2,457	524	1,156
Other Mergansers	0	0	372	0	1,049	2,891
Other Ducks	0	0	186	223	0	0
Total Duck Harvest	332,400±19%	325,100±21%	520,200±19%	493,200±26%	119,200±37%	107,900±38%
Total Active Duck Hunters[a]	15,500±15%	13,300±15%	30,200±11%	29,600±12%	16,400±22%	13,100±23%
Total Duck Hunter Days Afield[a]	108,600±16%	114,600±22%	225,400±18%	230,300±20%	94,100±24%	88,800±24%
Seasonal Duck Harvest Per Hunter	21.4±24%	24.4±26%	17.2±22%	16.7±29%	7.3±43%	8.3±44%
Goose Species Composition						
Canada Goose	2,380	6,508	47,689	33,391	79,046	111,594
Snow Goose	4,760	5,206	3,093	3,442	0	0
Blue Goose	4,760	3,905	1,547	4,131	0	0
Ross's Goose	0	0	258	688	0	0
White-fronted Goose	14,280	11,715	1,804	2,065	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	26,200±62%	27,300±62%	54,400±21%	43,700±25%	79,000±37%	111,600±30%
Total Active Goose Hunters[b]	5,000±28%	4,400±29%	12,400±16%	11,500±18%	15,600±21%	28,400±20%
Total Goose Hunter Days Afield[b]	19,900±38%	27,500±41%	74,100±23%	60,700±26%	110,200±31%	204,200±23%
Seasonal Goose Harvest Per Hunter	5.2±68%	6.2±68%	4.4±26%	3.8±31%	5.1±42%	3.9±36%
Active Waterfowl Hunters	15,500±15%	13,300±15%	32,700±11%	31,600±12%	19,700±21%	30,800±22%
Sample Sizes						
Duck Wings	1,343	902	2,793	2,208	682	560
Goose Tails	11	21	211	127	555	250

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2010 and 2011 hunting seasons.

	Tennessee		Wisconsin		Flyway Total	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	112,500	76,135	170,271	149,273	2,228,872	2,240,248
Domestic Mallard	625	0	293	946	1,482	3,398
Black Duck	1,250	1,746	4,827	1,514	27,073	21,992
Mallard x Black Duck Hybrid	625	0	146	946	4,522	5,068
Mottled Duck	0	349	0	0	55,060	40,557
Gadwall	57,500	46,449	15,652	8,703	1,098,694	1,474,405
Wigeon	5,000	4,191	7,314	3,216	129,962	136,779
Green-winged Teal	15,625	12,223	31,012	25,730	1,052,784	1,001,902
Blue-winged/Cinnamon Teal	5,313	6,636	19,017	21,000	633,448	704,647
Northern Shoveler	3,438	8,033	5,120	3,027	475,080	375,918
Northern Pintail	3,750	3,492	7,753	6,622	196,185	212,499
Wood Duck	49,063	38,067	80,455	97,245	919,239	928,178
Redhead	938	2,445	18,578	19,487	109,003	155,227
Canvasback	4,063	349	9,216	7,757	72,703	68,358
Greater Scaup	3,125	349	6,290	13,622	23,692	33,680
Lesser Scaup	2,813	3,842	13,019	16,081	157,275	114,903
Ring-necked Duck	9,375	6,985	22,235	21,946	268,411	260,061
Goldeneyes	313	1,746	9,655	14,000	33,578	39,306
Bufflehead	6,875	3,492	14,774	22,325	79,652	78,145
Ruddy Duck	0	2,445	1,317	1,892	8,196	21,717
Long-tailed Duck	0	0	4,242	3,216	9,740	4,776
Eiders	0	0	0	0	0	0
Scoters	0	0	878	1,892	3,136	6,014
Hooded Merganser	1,563	698	5,266	4,162	45,988	53,766
Other Mergansers	625	0	878	946	5,256	13,368
Other Ducks	313	0	293	189	7,961	5,168
Total Duck Harvest	284,700±33%	219,700±71%	448,500±14%	445,700±12%	7,647,000±6%	8,000,100±6%
Total Active Duck Hunters[a]	15,900±22%	8,800±31%	58,700±11%	58,300±11%	469,800[c]	477,000[c]
Total Duck Hunter Days Afield[a]	137,600±30%	86,400±49%	383,400±14%	424,700±15%	3,404,200±5%	3,637,200±5%
Seasonal Duck Harvest Per Hunter	17.9±40%	25.0±77%	7.6±18%	7.6±16%		
Goose Species Composition						
Canada Goose	29,167	20,917	92,156	93,169	938,413	883,440
Snow Goose	503	0	105	153	44,993	73,641
Blue Goose	0	0	0	0	37,941	48,932
Ross's Goose	0	0	0	153	4,608	4,821
White-fronted Goose	1,006	0	0	0	105,249	70,836
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	197	855
Total Goose Harvest	30,700±56%	20,900±65%	92,300±22%	93,500±19%	1,131,400±8%	1,082,500±9%
Total Active Goose Hunters[b]	8,600±28%	7,000±37%	44,100±11%	40,800±12%	261,800[c]	265,100[c]
Total Goose Hunter Days Afield[b]	52,500±44%	59,500±43%	269,600±17%	271,000±16%	1,579,900±7%	1,667,300±7%
Seasonal Goose Harvest Per Hunter	3.6±62%	3.0±75%	2.1±24%	2.3±22%		
Active Waterfowl Hunters	15,900±22%	9,400±30%	77,200±9%	73,100±9%	529,200[c]	543,900[c]
Sample Sizes						
Duck Wings	911	629	3,066	2,356	25,133	21,852
Goose Tails	61	32	876	610	4,505	2,985

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2010 and 2011 hunting seasons.

	Colorado		Kansas		Nebraska	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	47,129	56,934	76,639	85,163	75,236	104,793
Domestic Mallard	90	0	129	159	0	0
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	0	0	129	0	0	0
Mottled Duck	0	0	0	0	0	0
Gadwall	5,846	5,839	30,940	29,553	9,262	16,134
Wigeon	3,418	6,083	8,415	8,262	11,542	10,703
Green-winged Teal	5,307	10,827	17,088	19,861	16,529	27,157
Blue-winged/Cinnamon Teal	6,116	10,462	20,195	26,693	22,371	28,754
Northern Shoveler	2,069	1,338	9,321	8,262	5,842	9,904
Northern Pintail	630	2,798	5,437	5,243	2,992	9,585
Wood Duck	1,169	2,676	3,366	2,224	6,412	4,792
Redhead	540	487	4,013	2,542	2,137	3,355
Canvasback	180	730	388	2,860	570	1,597
Greater Scaup	0	0	0	0	0	0
Lesser Scaup	720	487	1,424	1,271	142	639
Ring-necked Duck	1,259	2,555	4,660	6,197	712	2,396
Goldeneyes	2,249	3,285	3,884	318	0	1,438
Bufflehead	180	730	129	477	0	160
Ruddy Duck	450	487	0	1,589	0	160
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	129	0	0	0
Hooded Merganser	90	122	777	1,589	0	639
Other Mergansers	450	122	0	0	0	0
Other Ducks	90	0	0	159	0	160
Total Duck Harvest	78,000±21%	106,000±18%	187,100±25%	202,400±18%	153,700±16%	222,400±19%
Total Active Duck Hunters[a]	9,100±16%	12,200±14%	13,100±15%	13,500±18%	13,400±16%	14,700±11%
Total Duck Hunter Days Afield[a]	51,200±16%	64,600±20%	79,100±16%	96,100±18%	98,500±22%	124,800±19%
Seasonal Duck Harvest Per Hunter	8.6±26%	8.7±23%	14.3±29%	15.0±25%	11.5±23%	15.2±22%
Goose Species Composition						
Canada Goose	67,612	46,192	66,494	51,900	107,108	68,644
Snow Goose	1,734	6,716	2,908	13,803	0	5,372
Blue Goose	347	1,310	388	4,141	0	1,592
Ross's Goose	347	819	1,163	1,932	0	398
White-fronted Goose	173	164	4,847	19,877	0	1,791
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	70,200±18%	55,200±18%	75,800±22%	91,700±26%	107,100±20%	77,800±19%
Total Active Goose Hunters[b]	10,700±14%	12,000±15%	10,700±16%	12,900±18%	13,800±15%	12,100±12%
Total Goose Hunter Days Afield[b]	60,300±22%	67,800±21%	56,900±18%	75,800±23%	116,800±24%	112,800±18%
Seasonal Goose Harvest Per Hunter	6.6±23%	4.6±23%	7.1±27%	7.1±32%	7.8±25%	6.4±22%
Active Waterfowl Hunters	13,200±14%	17,300±13%	16,100±14%	16,600±16%	18,100±13%	17,200±10%
Sample Sizes						
Duck Wings	867	871	1,445	1,274	1,079	1,392
Goose Tails	405	337	391	332	236	391

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2010 and 2011 hunting seasons.

	New Mexico		North Dakota		Oklahoma	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	14,985	15,712	105,146	187,683	90,298	101,595
Domestic Mallard	71	43	108	0	0	131
Black Duck	0	0	0	156	107	0
Mallard x Black Duck Hybrid	0	0	0	0	107	0
Mottled Duck	0	0	0	0	0	0
Gadwall	4,064	3,853	55,061	65,673	56,302	71,914
Wigeon	6,962	2,783	11,575	12,294	14,585	16,736
Green-winged Teal	2,368	1,284	15,036	19,453	29,170	40,010
Blue-winged/Cinnamon Teal	707	2,697	25,205	53,846	7,614	7,322
Northern Shoveler	1,237	642	21,743	28,012	8,472	9,545
Northern Pintail	2,509	1,927	11,250	28,635	11,153	16,998
Wood Duck	459	599	1,406	1,556	3,539	3,792
Redhead	601	257	25,854	24,277	5,148	6,930
Canvasback	35	214	7,248	8,092	1,716	4,315
Greater Scaup	0	0	108	0	322	523
Lesser Scaup	35	0	18,390	12,294	858	1,700
Ring-necked Duck	389	257	10,493	5,291	11,046	18,436
Goldeneyes	71	214	325	311	1,180	654
Bufflehead	35	385	9,303	9,960	536	654
Ruddy Duck	0	86	3,137	2,179	0	0
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	0	0
Hooded Merganser	177	0	865	622	1,930	2,877
Other Mergansers	0	43	0	156	107	131
Other Ducks	389	557	108	156	0	131
Total Duck Harvest	35,100±35%	31,600±33%	322,400±11%	460,600±8%	244,200±28%	304,400±24%
Total Active Duck Hunters[a]	2,600±22%	2,900±34%	24,800±8%	32,000±6%	13,600±14%	13,700±16%
Total Duck Hunter Days Afield[a]	15,900±25%	16,700±30%	115,500±9%	162,600±10%	89,900±22%	107,800±23%
Seasonal Duck Harvest Per Hunter	13.4±41%	10.7±47%	13.0±14%	14.4±10%	18.0±31%	22.2±29%
Goose Species Composition						
Canada Goose	5,074	12,663	88,966	114,189	21,831	27,113
Snow Goose	276	1,551	17,277	17,904	4,962	1,724
Blue Goose	0	0	17,277	10,544	2,580	157
Ross's Goose	221	258	1,547	2,785	794	1,410
White-fronted Goose	0	0	5,157	2,188	1,588	1,567
Brant	0	0	0	0	0	0
Other Geese	0	0	0	199	0	0
Total Goose Harvest	5,600±32%	14,500±75%	130,200±15%	147,800±13%	31,800±42%	32,000±23%
Total Active Goose Hunters[b]	1,700±32%	2,500±39%	21,600±8%	24,500±7%	6,500±22%	7,500±20%
Total Goose Hunter Days Afield[b]	5,600±29%	15,100±70%	90,400±10%	109,300±9%	29,100±36%	29,600±24%
Seasonal Goose Harvest Per Hunter	3.2±45%	5.8±84%	6.0±17%	6.0±15%	4.9±47%	4.3±30%
Active Waterfowl Hunters	3,200±21%	3,600±31%	28,100±7%	35,500±6%	14,300±14%	14,700±16%
Sample Sizes						
Duck Wings	993	737	2,980	2,960	2,277	2,328
Goose Tails	101	56	505	743	160	204

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2010 and 2011 hunting seasons.

	South Dakota		Texas		Wyoming	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	83,910	100,254	89,514	113,557	22,075	22,562
Domestic Mallard	0	0	930	533	0	61
Black Duck	0	0	233	0	0	0
Mallard x Black Duck Hybrid	0	0	233	0	0	0
Mottled Duck	0	0	10,463	13,062	0	0
Gadwall	21,671	20,910	182,980	337,206	2,985	2,729
Wigeon	5,551	8,020	68,123	99,429	2,707	2,608
Green-winged Teal	12,277	17,186	161,822	191,128	3,124	2,365
Blue-winged/Cinnamon Teal	14,839	28,501	161,590	199,125	1,805	1,031
Northern Shoveler	11,957	8,736	78,354	106,360	625	607
Northern Pintail	12,917	14,752	68,821	106,893	417	607
Wood Duck	2,776	6,302	36,735	23,458	347	182
Redhead	5,872	4,010	44,176	79,703	208	182
Canvasback	2,242	1,575	11,858	21,592	0	243
Greater Scaup	214	0	930	2,932	0	0
Lesser Scaup	4,270	3,437	13,718	23,191	0	61
Ring-necked Duck	6,085	3,151	33,015	49,315	208	364
Goldeneyes	320	143	2,325	2,133	625	2,365
Bufflehead	1,495	5,013	4,418	8,530	694	243
Ruddy Duck	961	3,151	3,488	2,399	69	61
Long-tailed Duck	0	0	0	0	0	61
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	0	0
Hooded Merganser	107	716	3,488	6,931	0	61
Other Mergansers	0	143	0	267	139	121
Other Ducks	0	143	8,835	2,666	0	0
Total Duck Harvest	187,500±18%	226,100±22%	986,000±20%	1,390,400±46%	36,000±32%	36,500±31%
Total Active Duck Hunters[a]	16,500±13%	16,100±16%	67,000±20%	74,700±21%	3,300±18%	4,000±19%
Total Duck Hunter Days Afield[a]	71,500±17%	85,900±20%	355,100±16%	480,100±45%	18,700±26%	19,600±26%
Seasonal Duck Harvest Per Hunter	11.3±22%	14.1±27%	14.7±28%	18.6±50%	10.8±37%	9.1±36%
Goose Species Composition						
Canada Goose	77,830	93,210	70,113	45,323	24,378	15,482
Snow Goose	12,151	7,823	75,121	73,948	0	248
Blue Goose	5,384	4,023	13,355	18,288	0	0
Ross's Goose	1,077	671	18,363	23,854	90	83
White-fronted Goose	615	671	75,121	74,744	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	97,100±17%	106,400±28%	252,100±32%	236,200±41%	24,500±24%	15,800±27%
Total Active Goose Hunters[b]	14,200±13%	12,000±16%	46,000±20%	42,300±23%	3,800±15%	3,700±18%
Total Goose Hunter Days Afield[b]	69,200±15%	66,800±21%	152,400±30%	192,800±56%	20,000±22%	17,900±23%
Seasonal Goose Harvest Per Hunter	6.8±21%	8.9±32%	5.5±38%	5.6±47%	6.4±28%	4.3±33%
Active Waterfowl Hunters	21,300±11%	20,200±14%	75,800±19%	87,600±20%	5,700±12%	5,600±14%
Sample Sizes						
Duck Wings	1,756	1,579	4,241	5,216	519	602
Goose Tails	631	476	302	297	273	191

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2010 and 2011 hunting seasons.

	Flyway Total	
Duck Species Composition	2010	2011
Mallard	604,931	788,254
Domestic Mallard	1,328	926
Black Duck	340	156
Mallard x Black Duck Hybrid	469	0
Mottled Duck	10,463	13,062
Gadwall	369,112	553,813
Wigeon	132,878	166,919
Green-winged Teal	262,721	329,272
Blue-winged/Cinnamon Teal	260,442	358,431
Northern Shoveler	139,619	173,407
Northern Pintail	116,127	187,436
Wood Duck	56,210	45,582
Redhead	88,548	121,743
Canvasback	24,237	41,219
Greater Scaup	1,573	3,455
Lesser Scaup	39,557	43,080
Ring-necked Duck	67,869	87,961
Goldeneyes	10,977	10,860
Bufflehead	16,790	26,151
Ruddy Duck	8,105	10,110
Long-tailed Duck	0	61
Eiders	0	0
Scoters	129	0
Hooded Merganser	7,433	13,556
Other Mergansers	696	982
Other Ducks	9,422	3,970
Total Duck Harvest	2,230,000±10%	2,980,400±22%
Total Active Duck Hunters[a]	163,300[c]	183,800[c]
Total Duck Hunter Days Afield[a]	895,300±8%	1,158,100±19%
Seasonal Duck Harvest Per Hunter		
Goose Species Composition		
Canada Goose	529,406	474,715
Snow Goose	114,429	129,090
Blue Goose	39,330	40,055
Ross's Goose	23,601	32,211
White-fronted Goose	87,502	101,001
Brant	0	0
Other Geese	0	199
Total Goose Harvest	794,300±12%	777,300±14%
Total Active Goose Hunters[b]	129,000[c]	129,400[c]
Total Goose Hunter Days Afield[b]	600,800±10%	688,000±17%
Seasonal Goose Harvest Per Hunter		
Active Waterfowl Hunters	195,700[c]	218,200[c]
Sample Sizes		
Duck Wings	16,157	16,959
Goose Tails	3,004	3,027

Table 1D. Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2010 and 2011 hunting seasons.

	Arizona		California		Idaho	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	12,152	8,006	331,987	308,051	104,223	112,066
Domestic Mallard	0	44	2,105	589	0	296
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	5,258	2,263	124,376	106,218	6,248	11,991
Wigeon	2,688	2,524	226,172	171,009	13,821	31,088
Green-winged Teal	5,726	6,004	394,940	311,978	10,791	11,991
Blue-winged/Cinnamon Teal	292	1,740	48,219	36,911	757	1,036
Northern Shoveler	3,564	9,572	220,814	253,862	947	2,665
Northern Pintail	1,986	1,218	242,628	201,637	4,828	3,849
Wood Duck	526	218	34,060	21,008	1,515	2,961
Redhead	1,110	827	7,654	14,333	1,799	4,441
Canvasback	175	392	17,604	15,903	95	1,184
Greater Scaup	0	44	4,592	393	663	1,628
Lesser Scaup	234	566	9,376	7,657	757	1,332
Ring-necked Duck	2,103	1,958	36,930	17,867	1,420	3,849
Goldeneyes	58	566	4,401	6,675	4,070	11,103
Bufflehead	526	1,001	9,185	6,675	4,165	7,402
Ruddy Duck	993	566	12,438	6,283	0	0
Long-tailed Duck	58	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	5,092	306	0	0
Hooded Merganser	0	44	765	1,178	189	444
Other Mergansers	409	479	191	196	284	148
Other Ducks	643	305	574	393	0	0
Total Duck Harvest	38,500±20%	38,300±30%	1,734,100±22%	1,489,100±16%	156,600±36%	209,500±19%
Total Active Duck Hunters[a]	3,400±16%	3,000±28%	55,500±10%	49,100±10%	16,900±17%	14,200±16%
Total Duck Hunter Days Afield[a]	18,200±17%	21,800±44%	596,800±18%	468,500±13%	84,300±26%	98,100±18%
Seasonal Duck Harvest Per Hunter	11.5±26%	12.8±41%	31.2±24%	30.3±19%	9.3±40%	14.7±25%
Goose Species Composition						
Canada Goose	668	3,662	68,666	51,870	30,031	50,423
Snow Goose	859	0	53,906	43,348	1,221	600
Blue Goose	0	0	642	370	0	0
Ross's Goose	286	0	14,974	14,635	122	0
White-fronted Goose	0	0	67,810	55,760	0	0
Brant	0	0	541	750	0	0
Other Geese	0	0	214	0	0	0
Total Goose Harvest	1,800±56%	3,700±16%	206,800±20%	166,700±19%	31,400±32%	51,000±20%
Total Active Goose Hunters[b]	1,100±31%	1,400±38%	38,600±11%	33,900±11%	11,100±20%	12,800±15%
Total Goose Hunter Days Afield[b]	5,700±43%	7,800±45%	279,100±17%	219,100±13%	56,400±28%	74,000±19%
Seasonal Goose Harvest Per Hunter	1.7±64%	2.6±67%	5.4±23%	4.9±22%	2.8±38%	4.0±25%
Active Waterfowl Hunters	3,400±16%	3,300±27%	57,100±10%	50,300±10%	18,100±16%	17,000±15%
Sample Sizes						
Duck Wings	659	881	9,037	7,585	1,654	1,415
Goose Tails	19	10	1,023	941	257	85

Table 1D. Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2010 and 2011 hunting seasons.

	Montana		Nevada		Oregon	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	79,844	65,762	10,088	20,760	161,862	189,305
Domestic Mallard	0	0	0	0	94	445
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	4,022	6,576	6,834	10,149	13,746	15,048
Wigeon	4,414	4,521	3,384	3,979	61,622	73,371
Green-winged Teal	5,983	4,795	6,248	6,170	56,572	55,207
Blue-winged/Cinnamon Teal	1,079	2,740	1,172	807	1,029	1,158
Northern Shoveler	1,471	4,247	10,219	11,764	18,515	21,637
Northern Pintail	2,256	1,644	3,515	4,613	59,658	73,995
Wood Duck	1,079	1,507	456	0	9,725	11,308
Redhead	1,766	2,192	2,473	2,768	281	890
Canvasback	687	1,096	1,497	980	748	1,692
Greater Scaup	98	0	0	0	6,452	6,589
Lesser Scaup	490	1,233	260	115	5,236	3,740
Ring-necked Duck	490	548	716	519	10,847	8,637
Goldeneyes	2,452	3,562	130	58	1,590	2,226
Bufflehead	687	822	781	115	4,582	9,082
Ruddy Duck	392	0	325	750	187	623
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	58	312	270
Hooded Merganser	196	137	0	115	4,208	3,740
Other Mergansers	196	137	130	58	1,777	1,158
Other Ducks	98	0	0	0	94	178
Total Duck Harvest	107,700±23%	101,500±23%	48,200±18%	63,800±16%	419,100±18%	480,300±24%
Total Active Duck Hunters[a]	10,200±17%	11,600±17%	3,600±19%	3,200±17%	19,500±9%	20,800±11%
Total Duck Hunter Days Afield[a]	49,700±19%	60,600±22%	23,900±19%	24,100±18%	161,600±14%	170,600±19%
Seasonal Duck Harvest Per Hunter	10.6±29%	8.7±29%	13.3±26%	19.8±24%	21.5±21%	23.0±26%
Goose Species Composition						
Canada Goose	39,088	40,262	5,859	4,478	39,057	56,005
Snow Goose	1,382	3,080	1,652	700	2,220	4,088
Blue Goose	0	0	0	0	0	0
Ross's Goose	395	342	451	280	0	0
White-fronted Goose	99	0	0	0	3,885	5,314
Brant	0	0	0	0	212	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	41,000±18%	43,700±23%	8,000±29%	5,500±30%	45,400±19%	65,400±20%
Total Active Goose Hunters[b]	10,700±18%	8,900±20%	2,500±20%	2,100±22%	10,000±12%	12,100±13%
Total Goose Hunter Days Afield[b]	42,200±22%	40,200±26%	12,800±22%	11,400±26%	51,600±14%	69,400±22%
Seasonal Goose Harvest Per Hunter	3.8±25%	4.9±31%	3.1±35%	2.6±37%	4.5±22%	5.4±24%
Active Waterfowl Hunters	16,300±14%	15,900±15%	4,000±18%	3,200±17%	21,400±9%	22,500±10%
Sample Sizes						
Duck Wings	1,098	741	741	1,106	4,488	5,394
Goose Tails	415	383	53	39	657	640

Table 1D. Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2010 and 2011 hunting seasons.

	Utah		Washington		Flyway Total	
Duck Species Composition	2010	2011	2010	2011	2010	2011
Mallard	76,285	92,926	128,805	247,483	905,246	1,044,359
Domestic Mallard	202	250	0	669	2,401	2,293
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	43,100	46,713	8,205	15,562	211,788	214,520
Wigeon	22,258	24,730	61,109	88,183	395,468	399,406
Green-winged Teal	28,531	48,961	30,339	57,395	539,131	502,501
Blue-winged/Cinnamon Teal	6,880	9,243	0	0	59,428	53,635
Northern Shoveler	24,889	17,486	6,694	12,215	287,112	333,449
Northern Pintail	21,044	48,711	22,781	48,526	358,696	384,194
Wood Duck	0	1,249	3,023	4,351	50,383	42,601
Redhead	5,261	7,244	2,051	1,673	22,394	34,368
Canvasback	3,440	3,497	1,512	1,004	25,757	25,749
Greater Scaup	202	0	6,586	6,526	18,593	15,180
Lesser Scaup	3,440	1,998	3,671	5,857	23,465	22,498
Ring-necked Duck	3,845	3,997	3,347	6,861	59,698	44,235
Goldeneyes	3,642	2,748	2,591	5,689	18,935	32,627
Bufflehead	1,012	749	4,319	8,367	25,256	34,214
Ruddy Duck	3,035	999	0	167	17,371	9,388
Long-tailed Duck	0	0	0	0	58	0
Eiders	0	0	0	0	0	0
Scoters	0	0	1,404	7,865	6,807	8,498
Hooded Merganser	202	500	756	2,343	6,317	8,500
Other Mergansers	1,619	500	324	1,506	4,930	4,181
Other Ducks	202	0	108	335	1,719	1,210
Total Duck Harvest	249,100±44%	312,500±18%	287,600±16%	522,600±42%	3,041,000±13%	3,217,600±11%
Total Active Duck Hunters[a]	15,900±16%	14,700±14%	21,000±13%	20,100±11%	146,000[c]	136,800[c]
Total Duck Hunter Days Afield[a]	116,600±41%	128,200±20%	131,400±15%	190,300±24%	1,182,600±11%	1,162,300±8%
Seasonal Duck Harvest Per Hunter	15.6±47%	21.2±23%	13.6±21%	26.0±44%		
Goose Species Composition						
Canada Goose	36,218	17,728	41,446	62,093	261,033	286,520
Snow Goose	866	366	2,285	11,405	64,392	63,586
Blue Goose	0	0	0	158	642	529
Ross's Goose	520	183	127	475	16,875	15,915
White-fronted Goose	0	0	2,031	1,109	73,825	62,183
Brant	0	0	0	253	753	1,003
Other Geese	0	0	0	158	214	158
Total Goose Harvest	37,600±24%	18,300±29%	45,900±17%	75,700±19%	417,700±11%	429,900±9%
Total Active Goose Hunters[b]	11,700±18%	8,900±17%	12,000±12%	12,700±11%	97,800[c]	92,900[c]
Total Goose Hunter Days Afield[b]	69,500±29%	54,400±23%	52,900±17%	73,300±19%	570,300±10%	549,500±8%
Seasonal Goose Harvest Per Hunter	3.2±29%	2.1±34%	3.8±21%	6.0±22%		
Active Waterfowl Hunters	18,000±15%	16,700±13%	23,900±12%	22,200±11%	162,200[c]	151,500[c]
Sample Sizes						
Duck Wings	1,231	1,251	2,664	3,123	21,572	21,496
Goose Tails	217	100	726	478	3,367	2,676

Table 1E. Preliminary estimates of waterfowl harvest and hunter activity in Alaska and the United States during the 2010 and 2011 hunting seasons.

	Alaska		United States Total	
Duck Species Composition	2010	2011	2010	2011
Mallard	32,534	20,338	4,166,254	4,409,096
Domestic Mallard	0	0	13,995	11,541
Black Duck	0	0	119,616	88,351
Mallard x Black Duck Hybrid	0	0	12,690	9,328
Mottled Duck	0	0	80,113	67,440
Gadwall	2,270	1,406	1,735,283	2,312,705
Wigeon	17,553	10,778	715,771	758,249
Green-winged Teal	8,928	3,655	2,012,046	1,949,433
Blue-winged/Cinnamon Teal	0	0	1,072,665	1,251,149
Northern Shoveler	3,178	2,624	934,639	917,485
Northern Pintail	10,139	7,873	704,668	809,973
Wood Duck	0	0	1,478,889	1,433,957
Redhead	0	187	244,072	321,419
Canvasback	0	187	145,686	140,862
Greater Scaup	2,421	844	69,814	59,423
Lesser Scaup	605	750	287,907	227,427
Ring-necked Duck	757	562	491,083	544,952
Goldeneyes	2,724	2,718	80,859	97,985
Bufflehead	1,665	2,156	199,487	214,960
Ruddy Duck	0	0	55,098	46,746
Long-tailed Duck	598	746	26,241	16,281
Eiders	598	0	13,648	13,498
Scoters	2,392	2,237	46,187	62,086
Hooded Merganser	0	0	95,886	110,813
Other Mergansers	598	746	30,708	35,145
Other Ducks	4,784	2,331	33,891	20,876
Total Duck Harvest	91,700±16%	60,100±12%	14,867,200±4%	15,931,200±6%
Total Active Duck Hunters[a]	7,900±5%	4,800±7%	970,200[c]	983,900[c]
Total Duck Hunter Days Afield[a]	36,400±11%	24,800±12%	6,590,800±3%	7,073,700±4%
Seasonal Duck Harvest Per Hunter	11.5±17%	12.4±14%		
Goose Species Composition				
Canada Goose	10,189	9,749	2,535,269	2,185,053
Snow Goose	0	0	241,689	302,876
Blue Goose	0	0	78,331	90,547
Ross's Goose	0	0	45,084	52,947
White-fronted Goose	2,183	0	268,759	234,808
Brant	2,118	0	20,943	12,410
Other Geese	0	0	662	1,212
Total Goose Harvest	14,500±35%	9,700±30%	3,190,700±5%	2,879,900±5%
Total Active Goose Hunters[b]	3,100±13%	2,100±13%	629,000[c]	622,200[c]
Total Goose Hunter Days Afield[b]	13,500±21%	12,100±23%	3,453,400±4%	3,573,800±5%
Seasonal Goose Harvest Per Hunter	4.6±37%	5.0±32%		
Active Waterfowl Hunters	8,800±3%	5,300±7%	1,132,200[c]	1,150,900[c]
Sample Sizes				
Duck Wings	562	586	79,334	74,045
Goose Tails	23	23	18,222	14,073

[a] Duck hunter statistics do not include sea duck hunter statistics for states with special sea duck seasons or sea duck permits: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Virginia, California, Oregon, and Alaska. (Refer to Table 3.)

[b] Goose hunter statistics do not include brant hunter statistics for coastal states with brant seasons: Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York, North Carolina, Rhode Island, Virginia, California, Oregon, Washington, and Alaska. (Refer to Table 4.)

[c] Hunter number estimates at the flyway and national levels may be biased high because the HIP sample frames are state-specific; therefore hunters are counted twice if they hunt in more than one state. Variance inestimable.

Table 2. Flyway-specific point estimates of duck and goose harvest in Colorado, Montana, New Mexico, and Wyoming during the 2010 and 2011 hunting seasons.

	2010		2011	
	Central Flyway	Pacific Flyway	Central Flyway	Pacific Flyway
Duck Harvest				
Colorado	52,300	25,700	65,000	41,000
Montana	37,000	70,700	34,800	66,700
New Mexico	32,800	2,300	31,000	500
Wyoming	25,200	10,800	32,000	4,500
Goose Harvest				
Colorado	51,700	18,500	40,500	14,700
Montana	18,300	22,700	21,800	21,900
New Mexico	2,000	3,600	8,500	5,900
Wyoming	20,500	3,900	14,900	900

Table 3. Preliminary estimates of sea duck harvest and hunter activity for states with special sea duck seasons or sea duck permits during the 2010 and 2011 hunting seasons. [1]

	Sea Duck Harvest [2]		Active Sea Duck Hunters [3]		Sea Duck Hunter Days Afield		Seasonal Harvest Per Hunter	
State / Flyway	2010	2011	2010	2011	2010	2011	2010	2011
Connecticut	2,900 ± 81%	1,900 ± 77%	400 ± 41%	300 ± 63%	1,500 ± 67%	800 ± 78%	6.7 ± 90%	6.2 ± 99%
Delaware	700 ± 82%	1,000 ± 70%	100 ± 90%	300 ± 48%	300 ± 105%	700 ± 80%	6.9 ± 122%	3.4 ± 85%
Maine	7,900 ± 87%	9,800 ± 54%	1,200 ± 52%	1,300 ± 44%	3,000 ± 58%	3,300 ± 44%	6.5 ± 102%	7.7 ± 69%
Maryland	9,300 ± 34%	18,200 ± 46%	2,600 ± 29%	3,100 ± 29%	5,600 ± 35%	8,600 ± 43%	3.6 ± 45%	5.9 ± 55%
Massachusetts	7,600 ± 41%	7,100 ± 38%	1,000 ± 29%	900 ± 32%	3,500 ± 39%	4,700 ± 68%	7.6 ± 51%	7.8 ± 50%
New Hampshire	2,100 ± 106%	5,300 ± 77%	200 ± 56%	400 ± 47%	900 ± 86%	1,800 ± 81%	11.3 ± 120%	14.8 ± 90%
New Jersey	3,900 ± 47%	1,700 ± 57%	900 ± 35%	600 ± 46%	2,300 ± 40%	1,500 ± 76%	4.3 ± 59%	3.0 ± 73%
New York	14,000 ± 74%	7,400 ± 47%	1,500 ± 34%	1,200 ± 37%	8,000 ± 57%	4,700 ± 47%	9.6 ± 82%	6.4 ± 60%
Rhode Island	1,300 ± 47%	300 ± 90%	200 ± 33%	100 ± 46%	1,000 ± 43%	200 ± 54%	5.3 ± 58%	5.1 ± 101%
Virginia	5,100 ± 81%	9,300 ± 53%	1,700 ± 43%	2,000 ± 40%	6,000 ± 65%	5,400 ± 50%	3.1 ± 91%	4.7 ± 67%
Atlantic Flyway Total	54,700 ± 26%	61,900 ± 21%	9,800	10,000	32,000 ± 21%	31,700 ± 21%		
California	5,100 ± 109%	300 ± 93%	1,500 ± 64%	100 ± 53%	6,300 ± 113%	200 ± 80%	3.4 ± 127%	4.6 ± 107%
Oregon	300 ± 49%	300 ± 70%	200 ± 67%	100 ± 45%	300 ± 67%	200 ± 60%	2.0 ± 83%	4.5 ± 83%
Pacific Flyway	5,400 ± 103%	600 ± 59%	1,700	100	6,600 ± 107%	400 ± 51%		
Alaska [4]	9,000 ± 32%	6,000 ± 47%	1,300 ± 25%	600 ± 29%	5,000 ± 35%	3,400 ± 50%	6.8 ± 41%	9.9 ± 55%
U.S. Total	69,100 ± 23%	68,500 ± 19%	12,800	10,700	43,600 ± 23%	35,500 ± 19%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Sea ducks include Long-tailed Ducks, Common Eiders, King Eiders, Black Scoters, Whited-winged Scoters, and Surf Scoters.

[3] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

[4] 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 2010 and 2011 hunting seasons. [1]

	Brant Harvest		Active Brant Hunters [2]		Brant Hunter Days Afield		Seasonal Harvest Per Hunter	
State / Flyway	2010	2011	2010	2011	2010	2011	2010	2011
Connecticut	100 ± 195%	200 ± 92%	100 ± 195%	100 ± 75%	100 ± 195%	300 ± 91%	2.0 ± 275%	2.2 ± 119%
Delaware	200 ± 85%	100 ± 87%	200 ± 63%	100 ± 72%	400 ± 65%	100 ± 65%	0.9 ± 106%	0.9 ± 113%
Maryland	1,600 ± 123%	200 ± 126%	300 ± 76%	200 ± 103%	1,200 ± 115%	1,500 ± 145%	4.6 ± 144%	1.3 ± 163%
Massachusetts	500 ± 58%	400 ± 84%	200 ± 62%	400 ± 56%	700 ± 42%	2,600 ± 118%	2.0 ± 85%	1.0 ± 100%
New Hampshire	<50 ± 165%	200 ± 134%	<50 ± 165%	100 ± 79%	<50 ± 165%	900 ± 133%	2.0 ± 233%	1.4 ± 156%
New Jersey	5,800 ± 39%	2,800 ± 49%	1,900 ± 24%	800 ± 34%	5,400 ± 33%	3,100 ± 47%	3.1 ± 46%	3.5 ± 60%
New York	5,200 ± 66%	4,400 ± 44%	1,100 ± 41%	1,400 ± 37%	7,300 ± 58%	8,900 ± 45%	4.7 ± 77%	3.1 ± 58%
North Carolina	1,400 ± 99%	2,100 ± 107%	1,800 ± 57%	2,500 ± 65%	7,100 ± 107%	4,700 ± 78%	0.8 ± 114%	0.9 ± 125%
Rhode Island	700 ± 60%	400 ± 144%	200 ± 62%	100 ± 133%	900 ± 45%	400 ± 100%	2.9 ± 86%	2.8 ± 196%
Virginia	2,400 ± 53%	500 ± 91%	1,200 ± 42%	400 ± 59%	3,400 ± 63%	900 ± 54%	1.9 ± 67%	1.2 ± 108%
Atlantic Flyway Total	17,900 ± 28%	11,300 ± 30%	7,200	6,100	26,400 ± 35%	23,500 ± 29%		
California	500 ± 37%	700 ± 50%	200 ± 26%	100 ± 35%	600 ± 37%	600 ± 48%	3.0 ± 45%	7.4 ± 61%
Oregon	200 ± 145%	<50 ± 110%	100 ± 111%	<50 ± 83%	300 ± 95%	100 ± 102%	1.8 ± 182%	0.6 ± 138%
Washington	0	300 ± 101%	200 ± 138%	300 ± 71%	400 ± 145%	300 ± 73%	0	1.0 ± 123%
Pacific Flyway Total	800 ± 49%	1,000 ± 44%	500	400	1,200 ± 52%	1,000 ± 38%		
Alaska	2,100 ± 41%	600 ± 65%	600 ± 30%	200 ± 48%	2,700 ± 43%	800 ± 62%	3.3 ± 51%	3.0 ± 81%
U.S. Total	20,800 ± 24%	12,900 ± 27%	8,400	6,700	30,300 ± 31%	25,400 ± 27%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

Table 5. Preliminary harvest estimates for special September teal/duck seasons during the 2010 and 2011 hunting seasons.

	Harvest										Number of	
	Green-winged Teal		Blue-winged/Cinnamon Teal		Wood Duck		Other Ducks		Total Duck Harvest		Wings Received	
State	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
September Teal Season												
Delaware	1,403	1,964	117	140	0	0	0	140	1,520	2,245	13	16
Georgia	0	0	0	13,331	0	0	0	0	0	13,331	0	31
Maryland	482	0	723	346	0	0	0	0	1,204	346	5	2
North Carolina	262	192	0	3,268	0	0	0	0	262	3,460	2	18
South Carolina	0	0	9,225	13,523	237	0	0	0	9,462	13,523	40	59
Virginia	110	374	1,656	1,495	0	0	0	0	1,766	1,869	16	15
Subtotal	2,257	2,530	11,721	32,104	237	0	0	140	14,214	34,774	76	141
Alabama	268	0	2,682	12,125	0	0	0	0	2,950	12,125	11	36
Arkansas	465	1,146	3,724	15,667	0	0	0	0	4,189	16,813	9	44
Illinois	1,185	833	16,985	19,725	0	0	0	0	18,170	20,559	92	74
Indiana	171	730	3,585	5,842	0	0	0	0	3,756	6,572	22	36
Louisiana	574	9,062	217,371	292,389	0	0	0	3,625	217,944	305,076	380	505
Mississippi	0	0	8,167	6,847	0	0	0	0	8,167	6,847	33	19
Missouri	1,862	1,787	25,328	14,519	0	0	0	223	27,190	16,529	146	74
Ohio	2,447	1,349	7,691	2,506	0	0	0	0	10,138	3,855	58	20
Subtotal	6,972	14,908	285,532	369,620	0	0	0	3,848	292,504	388,375	751	808
Colorado	90	852	2,518	5,718	0	0	0	365	2,608	6,934	29	57
Kansas	1,812	1,748	16,829	22,562	0	0	0	0	18,642	24,310	144	153
Nebraska	2,565	1,438	12,112	17,892	0	0	0	0	14,677	19,329	103	121
New Mexico	212	86	565	2,141	0	0	0	0	778	2,226	22	52
Oklahoma	965	523	7,507	5,753	0	0	0	262	8,472	6,538	79	50
Texas	3,255	13,328	113,926	159,406	233	0	0	0	117,414	172,735	505	648
Subtotal	8,899	17,974	153,459	213,471	233	0	0	626	162,591	232,072	882	1,081
Total	18,129	35,412	450,711	615,195	469	0	0	4,615	469,309	655,222	1,709	2,030
September Duck Season												
Florida	0	0	15,282	9,417	4,457	1,590	0	0	19,740	11,007	155	90
Kentucky	0	0	665	1,863	1,994	6,832	0	0	2,658	8,695	24	14
Tennessee	313	0	5,313	6,636	16,250	16,065	0	0	21,875	22,701	70	65
Total	313	0	21,260	17,916	22,701	24,487	0	0	44,273	42,403	249	169
U.S. Total	18,441	35,412	471,971	633,111	23,170	24,487	0	4,615	513,582	697,625	1,958	2,199

Table 6. Preliminary estimates of the number of Canada geese harvested during the special September, regular, and special late seasons during the 2010 and 2011 hunting seasons.

	September		Regular		Late		Total	
State / Flyway	2010	2011	2010	2011	2010	2011	2010	2011
Connecticut	2,300	2,900	6,500	6,600	0	0	8,800	9,500
Delaware	1,100	5,400	33,200	7,100	---	---	34,300	12,400
Florida	0	0	2,100	0	---	---	2,100	0
Georgia	5,400	19,000	18,400	15,400	---	---	23,700	34,400
Maine	4,700	1,700	4,500	2,000	---	---	9,200	3,700
Maryland	3,600	5,100	197,200	106,300	---	---	200,900	111,400
Massachusetts	2,200	1,500	7,500	9,100	2,800	4,500	12,600	15,000
New Hampshire	500	2,500	5,400	5,500	---	---	5,800	8,000
New Jersey	15,300	2,400	28,900	7,400	8,500	1,700	52,700	11,500
New York	45,300	53,100	82,300	73,500	---	0	127,600	126,600
North Carolina	29,700	8,900	24,900	20,900	---	---	54,600	29,800
Pennsylvania	42,100	15,000	111,100	60,100	---	---	153,300	75,100
Rhode Island	1,000	200	2,700	2,700	500	0	4,200	2,900
South Carolina	11,100	13,900	8,200	3,400	---	---	19,300	17,200
Vermont	3,300	4,600	6,300	3,700	---	---	9,600	8,300
Virginia	15,600	14,700	55,600	46,000	---	0	71,100	60,700
West Virginia	3,200	1,400	3,200	2,300	---	---	6,500	3,700
Atlantic Flyway Total	186,500	152,300	598,000	371,900	11,800	6,100	796,200	530,300
Alabama	1,400	6,100	11,400	7,700	---	---	12,900	13,800
Arkansas	26,400	1,100	27,700	14,300	---	---	54,100	15,400
Illinois	14,800	9,800	116,900	94,300	0	---	131,700	104,100
Indiana	19,900	11,700	47,800	37,600	6,500	0	74,200	49,300
Iowa	300	0	65,500	52,000	---	---	65,800	52,000
Kentucky	8,200	4,700	23,100	11,500	---	---	31,300	16,200
Louisiana	0	0	4,500	2,900	---	---	4,500	2,900
Michigan	43,000	45,200	82,100	80,200	---	0	125,100	125,400
Minnesota	76,700	97,800	111,700	140,900	---	---	188,500	238,700
Mississippi	0	0	2,400	6,500	---	---	2,400	6,500
Missouri	0	0	47,700	33,400	---	---	47,700	33,400
Ohio	25,600	32,600	53,400	79,000	---	---	79,000	111,600
Tennessee	6,000	13,100	23,100	7,800	---	---	29,200	20,900
Wisconsin	32,400	31,900	59,700	61,300	---	---	92,200	93,200
Mississippi Flyway Total	254,800	253,800	677,200	629,600	6,500	0	938,400	883,400
Kansas	0	0	66,500	51,900	---	---	66,500	51,900
Nebraska	3,600	0	103,500	68,600	---	---	107,100	68,600
North Dakota[a]	0	18,500	87,400	89,500	---	---	89,000	114,000
Oklahoma	1,400	800	20,400	26,300	---	---	21,800	27,100
South Dakota [b]	17,700	21,000	53,500	72,200	---	---	77,800	93,200
Colorado	0	3,100	18,500	11,600	---	---	18,500	14,700
Oregon	2,600	4,200	36,400	51,800	---	---	39,100	56,000
Washington	600	7,300	39,500	53,400	1,300	1,400	41,400	62,100
Wyoming	0	400	3,900	500	---	---	3,900	900

[a] The total harvest for North Dakota includes geese taken during the August conservation order: 1,500 in 2010 and 6,000 in 2011.

[b] The total harvest for South Dakota includes geese taken during the August conservation order: 6,600 in 2010.

Table 7. Waterfowl harvest estimates in Canada during the 2010 and 2011 hunting seasons (estimates courtesy of the Canadian Wildlife Service).

	Newfoundland		Prince Edward Isl.		Nova Scotia		New Brunswick		Quebec		Ontario		Manitoba	
Duck Species Composition	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
Mallard	1,120	670	2,210	3,430	4,130	5,300	4,670	5,500	56,520	62,040	105,400	105,530	48,540	59,170
Black Duck	6,430	8,920	7,730	5,870	13,110	22,240	12,080	9,240	31,130	31,680	14,060	13,930	90	0
Gadwall	0	0	410	710	170	0	0	220	1,250	940	4,340	3,930	3,900	7,230
Wigeon	350	580	290	740	670	1,530	930	1,090	1,730	1,260	6,570	5,860	3,440	1,550
Green-winged Teal	3,330	4,120	1,800	1,720	6,910	2,470	5,390	4,140	23,110	16,280	18,000	8,830	3,880	5,840
Blue-winged/Cinnamon Teal	0	0	1,390	250	530	510	3,870	2,360	3,490	1,990	5,180	5,600	5,910	11,270
Northern Shoveler	0	0	0	0	140	0	70	0	1,330	630	1,280	1,280	2,470	5,290
Northern Pintail	300	300	960		830	580	610	260	6,210	3,290	6,410	1,670	4,890	6,190
Wood Duck	90	0	0	0	1,130	340	3,710	2,360	12,400	14,370	42,950	52,530	520	5,030
Redhead	0	0	0	0	0	0	0	0	210	190	9,310	4,610	15,710	6,150
Canvasback	0	0	0	0	0	0	0	0	120	90	1,970	3,910	2,120	2,050
Greater Scaup	240	0	0	0	0	0	2,600		930	1,920	2,800	3,620	50	0
Lesser Scaup	610	0	0	210	370	0	740	190	2,780	2,990	11,320	7,720	10,230	5,550
Ring-necked Duck	3,410	5,130	0	210	690	1,310	1,750	3,040	4,600	5,150	13,020	18,090	8,920	4,860
Goldeneyes	610	410	0	0	470	390	910	1,840	2,220	6,670	8,870	11,850	1,710	1,140
Bufflehead	0	0	0	0	300	1,100	160	1,910	2,040	1,060	6,900	11,580	2,690	3,100
Ruddy Duck	0	0	0	0		0		210	0	0	960	840	0	0
Long-tailed Duck	900	210	0	0	1,050	0	90	0	620	460	0	1,360	0	0
Eiders	4,520	13,150	0	0	2,980	320	1,160	170	670	3,180	0	0	0	0
Scoters	2,380	1,790	0	0	5,120	2,750	880	60	3,640	4,310	310	130	0	0
Hooded Merganser	430	520	0	0	850	760	160	310	4,860	3,430	2,450	3,770	190	360
Other Mergansers	7,880	11,070	0	460	2,430	2,080	510	0	2,330	3,550	990	2,040	0	0
Other Ducks														
Total Duck Harvest	32,590	46,880	14,790	13,590	41,880	41,670	40,260	32,890	162,180	165,470	263,080	268,680	115,250	124,780
Goose Species Composition														
Canada Goose	4,250	4,120	15,770	14,970	12,770	7,720	10,610	11,480	121,550	119,600	169,500	199,400	90,060	86,960
Snow Goose	0	0	0	0	0	0	0	0	52,880	96,140	640	3,030	2,670	3,010
Blue Goose	0	0	0	0	0	0	0	0	660	850	90	0	9,340	9,890
Ross's Goose	0	0	0	0	0	0	0	0	0	0	0	0	2,110	3,070
White-fronted Goose	0	0	0	0	0	0	0	0	120	0	0	0	0	630
Brant	0	0	0	0	0	0	0	0	0	0	0	200	0	0
Total Goose Harvest	4,250	4,120	15,770	14,970	12,770	7,720	10,610	11,480	175,210	216,590	170,220	202,630	104,190	103,560
Migratory Bird Permits Sold	15,737	15,823	1,754	1,742	5,696	5,619	5,536	5,594	29,290	30,856	54,857	56,305	12,635	11,859

Table 7 (continued). Waterfowl harvest estimates in Canada during the 2010 and 2011 hunting seasons (estimates courtesy of the Canadian Wildlife Service).

	Saskatchewan		Alberta		British Columbia		Nunavut		Northwest Terr.		Yukon Territory		Canada Total	
Duck Species Composition	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
Mallard	125,690	143,260	68,010	91,670	28,300	32,990	0	0	0	330	0	0	444,590	509,890
Black Duck	0	0	0	0	50	0	0	0	0	0	0	0	84,670	91,860
Gadwall	15,650	29,400	12,420	8,530	570	600	0	0	0	0	0	0	38,710	51,550
Wigeon	5,250	8,990	3,860	5,780	8,560	9,870	0	0	0	170	0	0	31,630	37,420
Green-winged Teal	6,090	3,530	4,450	5,330	2,480	1,570	0	0	0	330	0	0	75,450	54,160
Blue-winged/Cinnamon Teal	12,270	22,790	5,940	4,650	0	0	0	0	0	0	0	0	38,580	49,420
Northern Shoveler	14,180	22,040	7,200	7,660	660	560	0	0	0	0	0	0	27,310	37,460
Northern Pintail	13,630	20,220	6,710	14,050	2,060	2,760	0	0	0	0	0	0	42,600	49,310
Wood Duck	0	0	0	0	0	80	0	0	0	0	0	0	60,800	74,710
Redhead	4,350	4,560	720	4,300	0	130	0	0	0	0	0	0	30,300	19,940
Canvasback	490	6,150	1,100	790	60	0	0	0	0	0	0	0	5,860	13,000
Greater Scaup	0	0	0	0	0	0	0	0	0	0	0	0	6,610	5,530
Lesser Scaup	4,060	2,030	4,040	2,160	530	220	0	0	0	0	0	0	34,670	21,070
Ring-necked Duck	1,870	2,280	410	0	790	320	0	0	0	0	0	0	35,450	40,390
Goldeneyes	0	240	540	2,320	180	280	0	0	0	0	0	0	15,500	25,150
Bufflehead	580	0	5,960	610	860	200	0	0	0	0	0	0	19,480	19,560
Ruddy Duck	0	0	180	0	0	0	0	0	0	0	0	0	1,140	1,050
Long-tailed Duck	0	0	0	0	0	0	0	0	0	0	0	0	2,660	2,030
Eiders	0	0	0	0	0	0	0	0	0	0	0	0	9,330	16,820
Scoters	0	0	0	0	0	0	0	0	0	0	0	0	12,330	9,030
Hooded Merganser	0	2,650	50	90	80	40	0	0	0	0	0	0	9,050	11,930
Other Mergansers	0	0	0	0	0	0	0	0	0	0	0	0	14,140	19,200
Other Ducks	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Duck Harvest	204,110	268,150	121,570	147,940	45,170	49,620	0	0	0	840	0	0	1,040,870	1,160,490
Goose Species Composition														
Canada Goose	149,530	173,050	104,960	98,640	10,760	14,400	0	0	0	0	0	0	689,740	730,320
Snow Goose	60,800	44,990	14,770	14,480	850	0	0	0	0	0	0	0	132,610	161,650
Blue Goose	18,200	40,860	580	490	0	0	0	0	0	0	0	0	28,880	52,100
Ross's Goose	26,280	34,680	6,300	2,200	0	0	0	0	0	0	0	0	34,690	39,950
White-fronted Goose	33,560	52,760	22,110	27,650	190	0	0	0	0	0	0	0	55,980	81,040
Brant	0	0	0	0	0	0	0	0	0	0	0	0	0	200
Total Goose Harvest	288,370	346,340	148,720	143,460	11,800	14,400	0	0	0	0	0	0	941,890	1,065,260
Migratory Bird Permits Sold	17,830	17,513	19,775	21,080	6,387	6,299	47	24	245	249	195	234	169,984	173,240

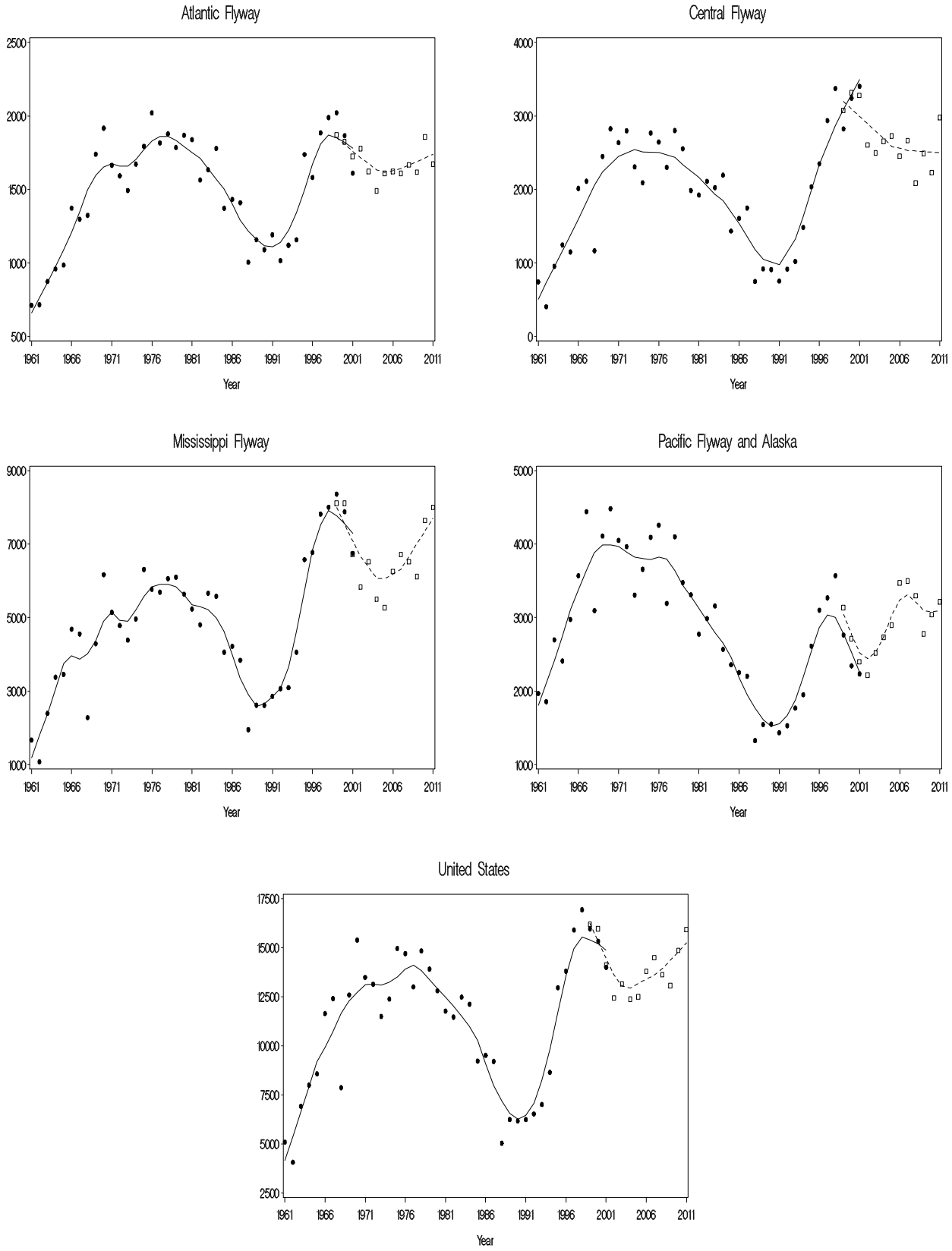

Figure 1. Number of ducks harvested (in thousands) by hunters in the the United States, 1961-2011. (Federal Duck Stamp Survey - circles and solid line; HIP survey squares and dashed line).

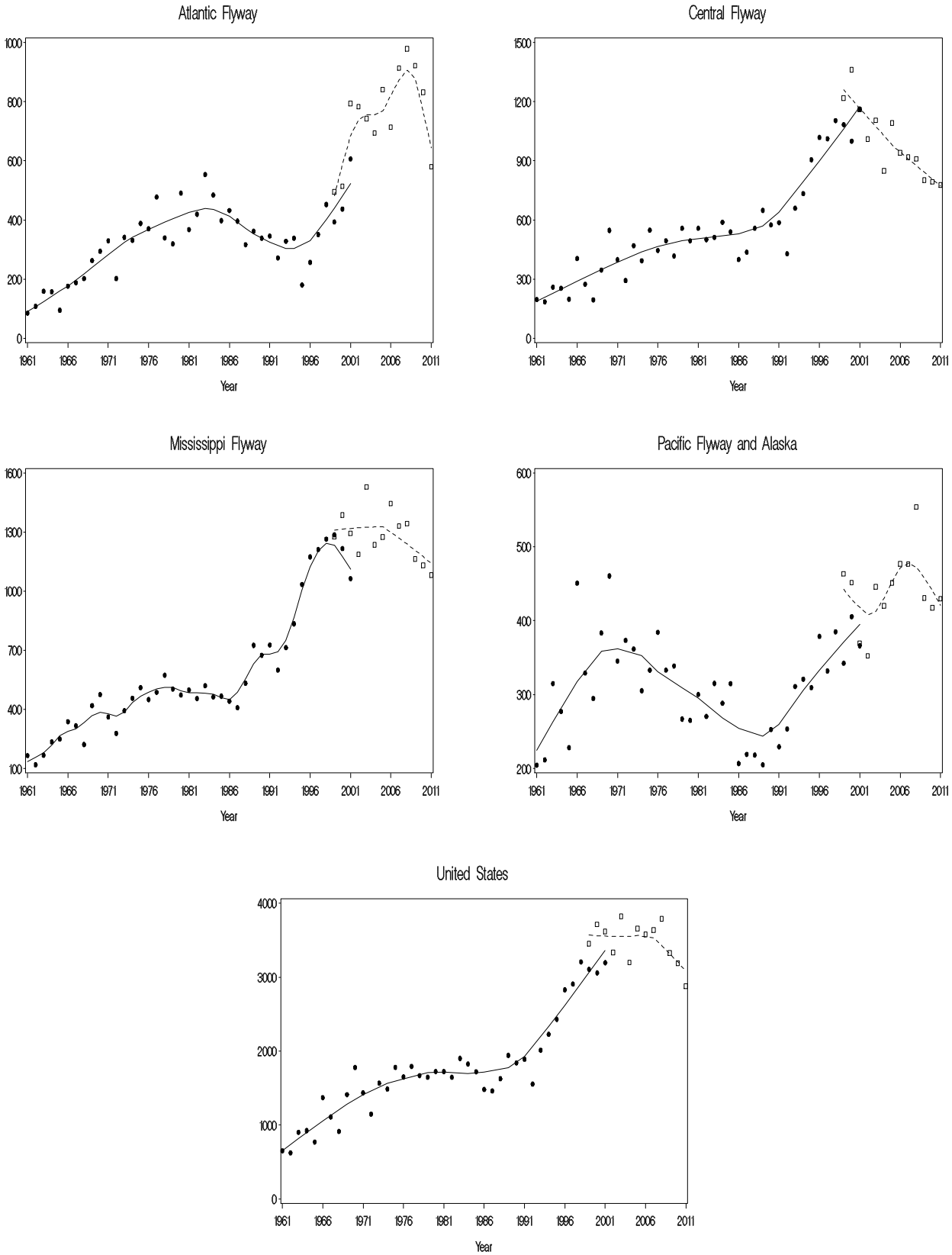

Figure 2. Number of geese harvested (in thousands) by hunters in the the United States, 1961-2011. (Federal Duck Stamp Survey - circles and solid line; HIP survey squares and dashed line).

Table 8. Preliminary weighted age ratios of mallards in state harvests during the 2007-2011 hunting seasons as determined from Waterfowl Parts Collection Survey.

	Immatures per adult [a]				
State and Flyway	2007	2008	2009	2010	2011
Connecticut	1.8	1.0	1.4	1.5	1.2
Delaware	1.9	1.5	1.6	0.9	1.2
Florida	3.0	---	---	---	---
Georgia	---	1.0	1.2	1.2	1.2
Maine	1.9	2.0	2.8	2.7	1.9
Maryland	1.7	1.3	1.4	1.1	1.5
Massachusetts	1.2	1.6	1.1	1.1	1.0
New Hampshire	1.9	1.0	3.1	1.1	1.2
New Jersey	1.2	0.9	0.8	1.0	1.1
New York	1.3	1.4	1.6	1.7	1.7
North Carolina	1.2	1.4	1.4	1.4	1.1
Pennsylvania	1.2	0.9	1.0	1.1	1.0
Rhode Island	0.4	0.8	0.8	0.7	0.8
South Carolina	1.9	1.5	1.7	2.0	1.5
Vermont	2.6	3.9	2.2	1.9	1.8
Virginia	0.9	0.9	1.2	1.0	0.7
West Virginia	0.7	0.6	0.7	1.2	1.4
Atlantic Flyway Total [b]	1.31	1.22	1.37	1.30	1.24
Alabama	1.1	1.3	0.4	1.2	1.2
Arkansas	0.7	0.7	0.9	1.1	1.3
Illinois	1.4	1.2	1.7	1.9	2.1
Indiana	1.2	1.4	1.5	1.1	1.9
Iowa	1.9	1.8	2.3	3.4	4.6
Kentucky	1.1	0.6	1.5	1.2	1.3
Louisiana	1.3	0.8	1.1	1.4	2.3
Michigan	1.7	1.9	2.0	1.8	2.2
Minnesota	2.1	2.8	3.0	2.9	4.7
Mississippi	1.1	0.7	0.7	1.3	1.2
Missouri	1.6	0.9	1.3	2.3	2.3
Ohio	1.4	1.1	1.4	1.7	1.9
Tennessee	1.0	0.9	1.0	1.6	1.3
Wisconsin	1.7	2.3	2.6	2.9	3.5
Mississippi Flyway Total [b]	1.20	1.06	1.24	1.59	1.91

Table 8 (continued). Preliminary weighted age ratios of mallards in state harvests during the 2007-2011 hunting seasons as determined from Waterfowl Parts Collection Survey.

	Immatures per adult [a]				
State and Flyway	2007	2008	2009	2010	2011
Colorado	1.1	0.5	0.7	0.9	1.6
Kansas	1.0	0.6	0.6	1.3	1.2
Montana	1.2	0.8	0.8	1.0	1.0
Nebraska	1.0	0.7	0.8	1.3	1.2
New Mexico	1.7	1.2	1.3	1.5	1.5
North Dakota	2.1	1.3	2.3	2.4	3.7
Oklahoma	0.6	0.3	0.4	0.6	0.7
South Dakota	1.8	1.2	1.7	2.5	2.9
Texas	0.7	0.4	0.7	0.9	0.9
Wyoming	0.8	0.5	0.9	1.3	1.6
Central Flyway Total [b]	1.07	0.70	1.01	1.29	1.52
Arizona	1.4	1.1	1.1	1.4	2.4
California	1.3	1.5	1.9	2.2	2.7
Colorado	1.3	0.7	1.5	1.1	1.8
Idaho	1.2	1.1	1.0	1.3	2.0
Montana	0.9	0.9	1.0	1.2	2.2
Nevada	0.8	1.7	1.4	3.2	3.7
New Mexico	0.9	0.8	0.9	0.7	---
Oregon	1.5	1.4	1.6	1.5	2.1
Utah	1.1	1.1	1.7	1.3	2.6
Washington	1.1	0.9	1.1	1.4	2.0
Wyoming	3.3	2.5	2.5	1.6	2.7
Pacific Flyway Total [b]	1.23	1.19	1.42	1.63	2.28
Alaska	2.7	2.5	3.4	3.2	4.0
U.S. Total [b]	1.20	1.04	1.25	1.53	1.85

[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 weighed 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 harvested during the 2007-2011 hunting seasons, by species and flyway.

	Immatures per adult [a, b]				
Species and Flyway	2007	2008	2009	2010	2011
Mallard					
Atlantic	1.31	1.22	1.37	1.30	1.24
Mississippi	1.20	1.06	1.24	1.59	1.91
Central	1.07	0.70	1.01	1.29	1.52
Pacific	1.23	1.19	1.42	1.63	2.28
U.S. Total	1.20	1.04	1.25	1.53	1.85
Black duck					
Atlantic	1.31	0.96	1.15	1.43	1.23
Mississippi	1.02	1.03	1.65	2.24	1.38
U.S. Total	1.22	0.98	1.27	1.58	1.27
Mottled duck					
Atlantic	1.17	0.81	1.07	0.69	1.20
Mississippi	1.44	0.76	1.19	1.40	3.16
Central	1.12	0.49	0.85	1.93	0.24
U.S. Total	1.34	0.73	1.11	1.29	1.56
Gadwall					
Atlantic	1.35	0.79	1.00	1.82	2.61
Mississippi	1.37	0.74	1.32	1.72	1.82
Central	1.29	0.70	1.16	1.68	1.38
Pacific	0.79	0.79	1.03	1.34	1.46
U.S. Total	1.25	0.74	1.22	1.66	1.68
American wigeon					
Atlantic	1.22	0.67	0.66	1.79	1.43
Mississippi	1.65	0.91	1.37	1.69	1.97
Central	0.82	0.94	0.71	1.11	0.76
Pacific	1.31	1.09	1.29	1.34	1.76
U.S. Total	1.26	1.02	1.10	1.41	1.48
Green-winged teal					
Atlantic	1.90	1.61	1.62	1.95	1.97
Mississippi	1.98	1.38	1.23	1.61	2.00
Central	1.83	1.68	1.59	1.68	1.81
Pacific	1.22	0.92	1.05	0.87	1.28
U.S. Total	1.66	1.26	1.25	1.39	1.75
Blue-winged/Cinnamon teal					
Atlantic	1.24	0.86	0.96	0.97	1.97
Mississippi	1.87	0.92	1.24	1.71	1.59
Central	2.85	1.59	1.42	1.57	2.36
Pacific	1.73	0.83	0.63	0.94	1.34
U.S. Total	2.03	1.03	1.22	1.52	1.79

Table 9 (continued). Preliminary weighted age ratios of ducks harvested during the 2007-2011 hunting seasons, by species and flyway.

	Immatures per adult [a, b]				
Species and Flyway	2007	2008	2009	2010	2011
Northern shoveler					
Atlantic	1.38	0.73	0.98	1.98	3.17
Mississippi	1.66	0.80	1.30	1.57	1.89
Central	2.04	1.35	2.12	2.28	2.05
Pacific	1.50	0.70	0.90	1.51	2.21
U.S. Total	1.64	0.80	1.27	1.66	2.07
Northern pintail					
Atlantic	1.70	0.95	0.66	1.77	1.30
Mississippi	1.43	0.96	1.30	2.03	1.67
Central	0.82	1.06	1.09	1.31	0.90
Pacific	1.03	0.54	0.98	1.24	1.44
U.S. Total	1.13	0.75	1.07	1.46	1.35
Wood duck					
Atlantic	0.97	1.21	1.31	1.20	0.90
Mississippi	1.28	1.77	2.05	1.78	1.22
Central	1.64	1.63	1.01	1.42	1.09
Pacific	1.12	1.23	2.08	1.43	1.69
U.S. Total	1.18	1.53	1.71	1.54	1.12
Redhead					
Atlantic	1.47	0.13	0.38	1.93	2.30
Mississippi	2.45	0.68	1.62	6.54	4.51
Central	2.21	0.56	1.56	3.47	2.15
Pacific	1.18	0.52	0.70	1.27	2.46
U.S. Total	2.09	0.56	1.32	3.69	3.03
Canvasback					
Atlantic	1.42	---	0.52	0.58	1.24
Mississippi	1.15	---	0.74	1.83	1.63
Central	1.50	0.75	1.34	2.48	2.11
Pacific	0.99	---	1.00	1.37	2.82
U.S. Total	1.14	0.84	0.90	1.51	1.91
Greater scaup					
Atlantic	0.78	0.37	0.63	0.57	0.86
Mississippi	1.26	0.79	1.24	1.15	2.01
Central	---	---	---	---	---
Pacific	1.23	1.22	1.19	0.64	0.48
U.S. Total	1.19	0.80	1.06	0.80	1.22

Table 9 (continued). Preliminary weighted age ratios of ducks harvested during the 2007-2011 hunting seasons, by species and flyway.

	Immatures per adult [a, b]				
Species and Flyway	2007	2008	2009	2010	2011
Lesser scaup					
Atlantic	0.77	0.46	0.52	0.80	1.18
Mississippi	1.05	0.63	0.53	1.54	1.55
Central	1.08	0.67	0.82	1.23	1.29
Pacific	1.36	2.57	1.37	1.07	1.29
U.S. Total	1.05	0.75	0.66	1.24	1.39
Ring-necked duck					
Atlantic	1.01	0.92	0.93	1.45	1.54
Mississippi	1.81	1.28	1.96	2.37	2.15
Central	0.96	0.86	1.00	1.09	1.42
Pacific	1.49	1.21	1.47	1.75	1.90
U.S. Total	1.38	1.10	1.37	1.85	1.81
Common goldeneye					
Atlantic	0.55	0.49	0.62	0.80	0.58
Mississippi	1.11	0.75	0.96	0.94	1.39
Central	0.51	0.56	0.47	0.84	0.98
Pacific	0.78	1.19	0.88	0.83	1.16
U.S. Total	0.81	0.81	0.84	0.88	1.14
Bufflehead					
Atlantic	0.81	0.67	0.47	0.62	0.97
Mississippi	1.26	0.85	1.17	0.94	1.49
Central	0.84	0.54	0.83	0.45	0.94
Pacific	1.06	0.71	0.87	1.02	1.31
U.S. Total	1.00	0.73	0.79	0.77	1.19
Ruddy duck					
Atlantic	2.15	0.81	1.90	0.63	2.64
Mississippi	3.61	0.89	1.22	0.89	2.62
Central	2.94	0.77	1.81	2.85	1.99
Pacific	1.49	0.42	1.21	1.92	4.13
U.S. Total	2.44	0.76	1.47	1.16	2.68
Hooded merganser					
Atlantic	0.88	0.61	0.99	0.77	0.66
Mississippi	0.87	1.34	1.18	1.09	1.06
Central	1.40	0.85	0.74	0.75	0.83
Pacific	0.87	2.22	1.09	3.83	1.74
U.S. Total	0.91	0.94	1.05	1.00	0.93

Table 9 (continued). Preliminary weighted age ratios of ducks harvested during the 2007-2011 hunting seasons, by species and flyway.

	Immatures per adult [a, b]				
Species and Flyway	2007	2008	2009	2010	2011
Common merganser					
Atlantic	0.74	0.52	1.04	1.51	1.62
Mississippi	---	0.85	---	---	0.78
Central	---	---	---	---	---
Pacific	1.04	0.68	0.56	1.03	1.86
U.S. Total	0.78	0.71	0.74	1.25	1.22
Red-breasted merganser					
Atlantic	1.11	1.30	0.74	1.27	1.17
Mississippi	---	---	0.73	---	0.40
U.S. Total	1.21	1.22	0.76	1.33	0.89
Long-tailed duck					
Atlantic	0.86	0.35	0.37	0.77	0.34
Mississippi	---	0.27	0.57	1.98	0.90
U.S. Total	0.79	0.35	0.43	1.04	0.54
Common eider					
Atlantic	0.19	0.27	0.23	0.30	0.21
U.S. Total	0.19	0.27	0.23	0.30	0.21
Black scoter					
Atlantic	0.44	0.26	0.41	0.66	0.59
U.S. Total	0.75	0.45	0.41	0.68	0.62
White-winged scoter					
Atlantic	0.82	0.74	0.15	0.76	2.02
Pacific	---	---	0.29	---	0.49
U.S. Total	1.56	0.64	0.43	1.18	1.91
Surf scoter					
Atlantic	0.43	0.31	0.21	0.60	0.58
Pacific	1.63	0.27	0.37	---	0.51
U.S. Total	0.58	0.36	0.29	1.08	0.71

[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 weighed in proportion to the estimated harvest in that state as determined from the Harvest Information Program Waterfowl Harvest Survey.

Table 10. Preliminary weighted sex ratios of mallards in state harvests during the 2007-2011 hunting seasons as determined from Waterfowl Parts Collection Survey.

	Males per female [a]				
State and Flyway	2007	2008	2009	2010	2011
Connecticut	2.0	2.4	2.0	2.2	1.7
Delaware	1.5	1.6	1.5	2.0	1.7
Florida	---	---	---	---	---
Georgia	---	2.6	2.4	1.3	2.1
Maine	1.7	1.8	1.4	1.2	1.5
Maryland	1.7	1.9	1.9	2.4	2.5
Massachusetts	1.9	1.9	1.5	1.6	1.6
New Hampshire	1.4	1.1	2.0	1.6	1.8
New Jersey	1.7	1.6	2.2	1.7	2.5
New York	1.7	1.9	1.7	1.8	1.7
North Carolina	2.5	2.1	2.0	1.6	1.9
Pennsylvania	2.0	2.1	2.1	2.2	2.2
Rhode Island	2.1	2.8	1.6	2.3	1.8
South Carolina	1.9	2.8	1.7	2.0	2.3
Vermont	1.8	1.8	1.0	1.4	1.5
Virginia	1.9	2.2	2.1	2.1	2.2
West Virginia	2.5	1.9	2.2	1.8	1.6
Atlantic Flyway Total [b]	1.87	2.00	1.86	1.84	1.95
Alabama	1.6	1.6	2.5	1.7	2.3
Arkansas	3.9	3.3	3.0	2.3	2.4
Illinois	2.3	2.1	2.2	2.1	2.6
Indiana	2.5	2.7	3.1	2.3	2.4
Iowa	2.4	1.9	1.7	2.5	2.2
Kentucky	3.0	2.2	2.6	2.5	2.0
Louisiana	2.4	2.2	2.8	1.9	1.2
Michigan	2.3	2.1	1.7	2.0	2.0
Minnesota	2.2	1.8	2.0	1.9	1.4
Mississippi	2.8	2.9	3.2	2.1	2.1
Missouri	2.7	3.4	3.3	3.1	2.3
Ohio	2.6	3.0	2.6	3.0	2.6
Tennessee	2.3	3.0	2.4	1.6	2.1
Wisconsin	2.1	2.2	2.0	2.2	2.2
Mississippi Flyway Total [b]	2.65	2.58	2.58	2.20	2.12

Table 10 (continued). Preliminary weighted sex ratios of mallards in state harvests during the 2007-2011 hunting seasons as determined from Waterfowl Parts Collection Survey.

	Males per female [a]				
State and Flyway	2007	2008	2009	2010	2011
Colorado	3.1	3.4	4.2	2.6	2.7
Kansas	4.8	7.1	5.8	4.0	3.9
Montana	2.9	3.8	4.1	3.7	3.3
Nebraska	4.1	3.8	4.9	3.4	4.9
New Mexico	2.2	2.9	3.3	4.3	3.1
North Dakota	3.4	3.8	2.5	2.2	2.4
Oklahoma	3.6	4.1	3.6	3.8	3.0
South Dakota	3.5	5.1	4.7	3.4	3.0
Texas	3.3	2.7	3.0	2.3	2.6
Wyoming	6.6	6.6	5.2	4.0	2.9
Central Flyway Total [b]	3.62	4.13	3.67	3.04	3.03
Arizona	1.9	1.7	1.4	1.6	1.2
California	2.3	2.3	2.3	2.2	2.1
Colorado	2.3	2.4	2.2	2.9	2.7
Idaho	3.3	3.2	2.5	3.1	2.6
Montana	3.5	3.1	2.4	3.4	3.4
Nevada	1.8	1.7	1.3	2.0	1.8
New Mexico	4.1	4.1	2.2	3.1	---
Oregon	1.7	2.1	1.9	1.8	2.0
Utah	2.4	1.9	2.6	2.9	2.4
Washington	2.6	2.8	2.3	2.2	2.1
Wyoming	1.4	1.7	1.7	2.4	1.6
Pacific Flyway Total [b]	2.33	2.44	2.23	2.30	2.17
Alaska	1.5	1.6	1.3	1.4	1.4
U.S. Total [b]	2.60	2.63	2.54	2.27	2.24

[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 weighed 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 2007-2011 hunting seasons, by species and flyway.

	Males per female [a]				
Species and Flyway	2007	2008	2009	2010	2011
Mallard					
Atlantic	1.87	2.00	1.86	1.84	1.95
Mississippi	2.65	2.58	2.58	2.20	2.12
Central	3.62	4.13	3.67	3.04	3.03
Pacific	2.33	2.44	2.23	2.30	2.17
U.S. Total	2.60	2.63	2.54	2.27	2.24
Black duck					
Atlantic	1.08	1.08	1.00	1.04	1.02
Mississippi	0.80	1.21	0.87	0.67	1.70
U.S. Total	0.99	1.11	0.96	0.94	1.16
Mottled duck					
Atlantic	0.99	1.13	0.98	0.82	1.18
Mississippi	0.62	0.77	1.05	1.18	0.78
Central	0.94	1.50	1.27	0.96	1.14
U.S. Total	0.71	0.89	1.06	1.07	0.91
Gadwall					
Atlantic	1.81	1.96	1.83	1.77	1.15
Mississippi	1.93	1.84	1.79	1.73	1.60
Central	1.76	1.83	1.66	1.69	1.58
Pacific	1.64	1.91	1.76	1.69	1.52
U.S. Total	1.84	1.85	1.75	1.72	1.57
American wigeon					
Atlantic	2.12	1.95	2.15	1.39	1.14
Mississippi	1.36	1.32	1.40	1.85	1.52
Central	1.80	1.69	2.02	1.85	1.90
Pacific	1.48	1.74	1.64	1.62	1.41
U.S. Total	1.52	1.64	1.70	1.66	1.49
Green-winged teal					
Atlantic	1.12	1.45	1.31	1.14	1.35
Mississippi	1.95	1.92	1.71	2.01	1.73
Central	2.07	1.65	1.73	1.82	2.16
Pacific	1.53	1.74	1.81	1.83	1.65
U.S. Total	1.73	1.76	1.70	1.84	1.74
Blue-winged/Cinnamon teal					
Atlantic	1.28	1.51	1.48	1.55	1.20
Mississippi	1.39	1.43	1.79	1.51	1.58
Central	1.12	1.19	1.46	1.58	1.53
Pacific	1.29	1.71	1.19	1.72	1.04
U.S. Total	1.29	1.39	1.64	1.54	1.49

Table 11 (continued). Preliminary weighted sex ratios of ducks harvested during the 2007-2011 hunting seasons, by species and flyway.

	Males per female [a]				
Species and Flyway	2007	2008	2009	2010	2011
Northern shoveler					
Atlantic	1.47	1.27	1.26	1.32	1.52
Mississippi	1.82	1.88	1.83	1.71	1.43
Central	1.71	1.54	1.42	1.35	1.41
Pacific	1.44	1.45	1.89	1.70	1.18
U.S. Total	1.61	1.63	1.72	1.63	1.33
Northern pintail					
Atlantic	2.10	2.07	1.25	2.43	1.78
Mississippi	1.98	2.32	3.04	2.11	1.83
Central	2.41	2.49	2.34	2.35	2.24
Pacific	2.36	2.76	2.72	2.69	2.30
U.S. Total	2.20	2.51	2.59	2.40	2.12
Wood duck					
Atlantic	1.97	2.06	2.15	2.17	1.92
Mississippi	1.77	1.68	1.83	1.86	1.98
Central	2.11	1.90	3.15	2.05	2.15
Pacific	1.72	1.86	1.61	1.77	1.64
U.S. Total	1.85	1.82	1.96	1.95	1.96
Redhead					
Atlantic	1.96	2.22	1.60	1.09	0.58
Mississippi	1.08	1.10	1.24	1.14	1.22
Central	1.55	1.85	1.11	1.38	1.50
Pacific	1.81	1.45	1.26	1.16	1.68
U.S. Total	1.39	1.49	1.20	1.22	1.33
Canvasback					
Atlantic	0.74	---	1.59	1.97	1.37
Mississippi	2.05	---	1.09	1.72	0.99
Central	1.80	2.60	1.10	1.16	0.74
Pacific	1.17	---	1.50	1.03	0.91
U.S. Total	1.54	2.28	1.24	1.49	0.90
Greater scaup					
Atlantic	1.79	1.95	1.38	1.38	1.06
Mississippi	0.96	1.23	1.02	0.73	1.18
Central	---	---	---	---	---
Pacific	1.90	2.26	2.06	1.61	2.14
U.S. Total	1.51	1.58	1.38	1.16	1.26

Table 11 (continued). Preliminary weighted sex ratios of ducks harvested during the 2007-2011 hunting seasons, by species and flyway.

	Males per female [a]				
Species and Flyway	2007	2008	2009	2010	2011
Lesser scaup					
Atlantic	2.53	1.81	2.57	2.32	2.24
Mississippi	1.93	2.18	2.08	1.37	2.03
Central	1.53	1.82	1.93	1.47	1.23
Pacific	1.55	1.53	1.80	1.06	1.07
U.S. Total	1.85	1.95	2.08	1.52	1.74
Ring-necked duck					
Atlantic	1.89	1.54	1.65	1.18	1.11
Mississippi	1.94	2.18	1.84	2.21	2.06
Central	2.79	2.47	2.36	1.94	3.02
Pacific	1.83	1.53	1.48	1.46	1.87
U.S. Total	2.02	1.94	1.82	1.82	1.79
Common goldeneye					
Atlantic	1.38	1.28	1.96	1.35	2.58
Mississippi	1.32	1.64	2.01	1.75	1.40
Central	1.73	1.36	2.67	1.09	1.07
Pacific	1.29	1.42	1.77	1.33	1.42
U.S. Total	1.36	1.46	1.91	1.44	1.48
Bufflehead					
Atlantic	1.65	1.96	2.38	1.74	1.90
Mississippi	1.79	1.39	1.45	1.55	1.41
Central	1.42	1.95	1.91	1.47	1.96
Pacific	1.63	1.10	1.81	1.04	1.23
U.S. Total	1.66	1.53	1.82	1.52	1.59
Hooded merganser					
Atlantic	2.97	2.07	2.30	3.04	2.43
Mississippi	2.86	1.83	4.77	2.82	1.54
Central	---	4.04	2.14	5.40	1.77
Pacific	0.87	---	1.37	---	1.99
U.S. Total	2.55	2.12	2.88	3.00	1.86
Common merganser					
Atlantic	1.13	1.05	0.87	0.73	1.12
Mississippi	---	0.26	---	---	---
Central	---	---	---	---	---
Pacific	0.92	0.82	1.19	0.88	1.34
U.S. Total	1.06	0.75	0.88	0.70	1.07

[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 weighed 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 2007-2011 hunting seasons, by species and flyway.

	Immatures per adult [a, b]				
Species and Flyway	2007	2008	2009	2010	2011
Canada goose					
Atlantic	0.40	0.59	0.37	0.63	0.34
Mississippi	0.50	0.51	0.47	0.55	0.52
Central	0.40	0.51	0.57	0.60	0.64
Pacific	0.44	0.38	0.50	0.45	0.50
U.S. Total	0.44	0.52	0.46	0.57	0.49
Snow goose					
Atlantic	0.56	1.46	0.26	0.44	0.77
Mississippi	0.34	0.29	0.20	0.30	0.62
Central	0.20	0.54	0.14	0.42	0.31
Pacific	0.64	0.17	0.67	0.59	0.84
U.S. Total	0.33	0.46	0.25	0.44	0.52
Blue goose					
Mississippi	0.35	0.23	0.50	0.54	0.64
Central	0.43	0.64	0.22	0.59	0.89
U.S. Total	0.39	0.41	0.35	0.57	0.75
Ross' goose					
Mississippi	---	2.07	---	---	---
Central	0.91	1.57	0.70	0.93	1.22
Pacific	0.22	0.39	0.10	0.19	0.31
U.S. Total	0.64	1.26	0.54	0.60	0.74
Greater white-fronted goose					
Mississippi	0.31	0.35	0.49	0.46	1.06
Central	0.70	0.50	0.61	0.70	0.87
Pacific	0.68	0.72	1.42	0.94	0.71
U.S. Total	0.48	0.50	0.72	0.66	0.87
Brant					
Atlantic	0.67	0.68	0.22	0.52	0.68
Pacific	1.01	0.50	1.35	0.51	1.01
U.S. Total	0.68	0.70	0.26	0.44	0.70

[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 weighed in proportion to the estimated harvest in that state as determined from the Harvest Information Program Waterfowl Harvest Survey.

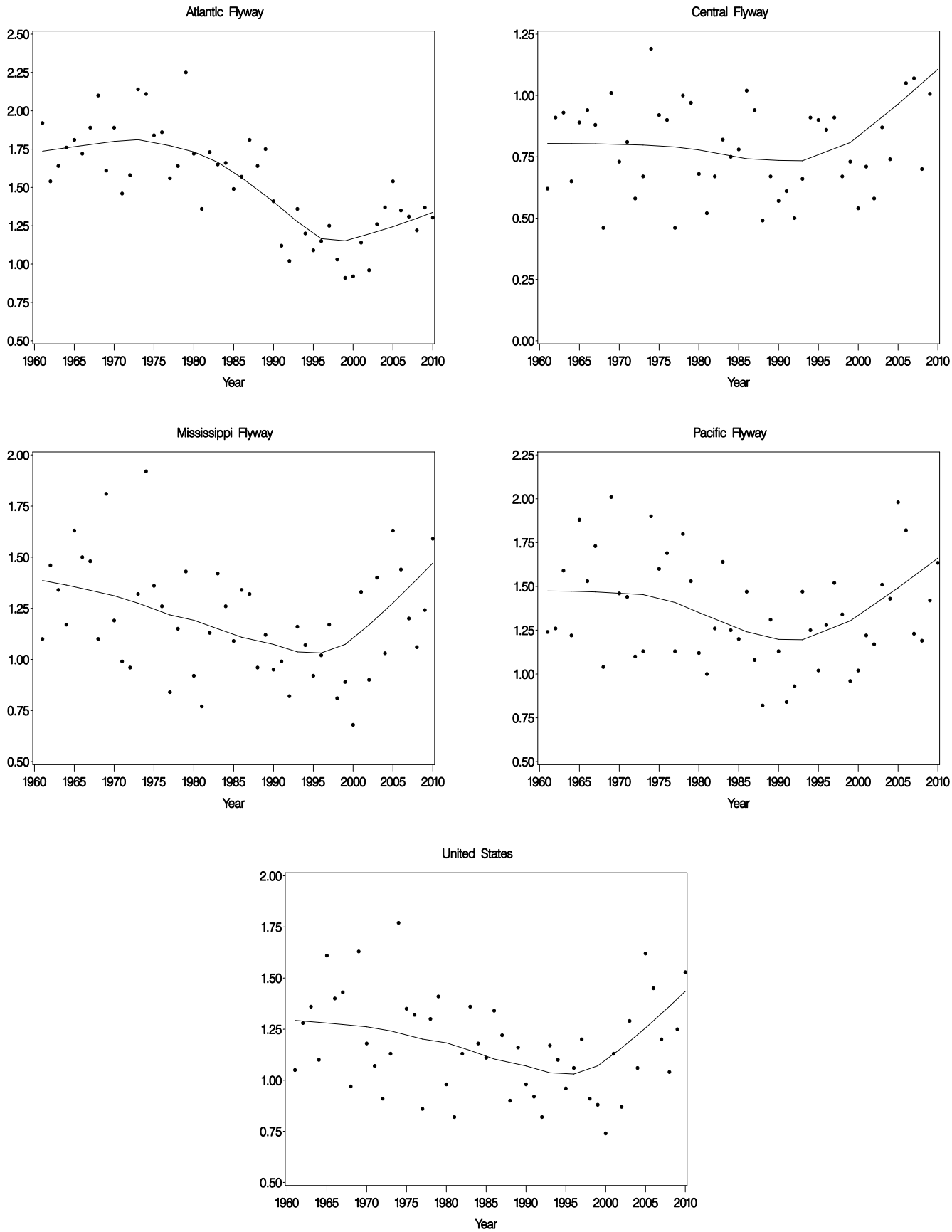

Figure 3. Age ratios of mallards harvested in the United States, 1961-2011.

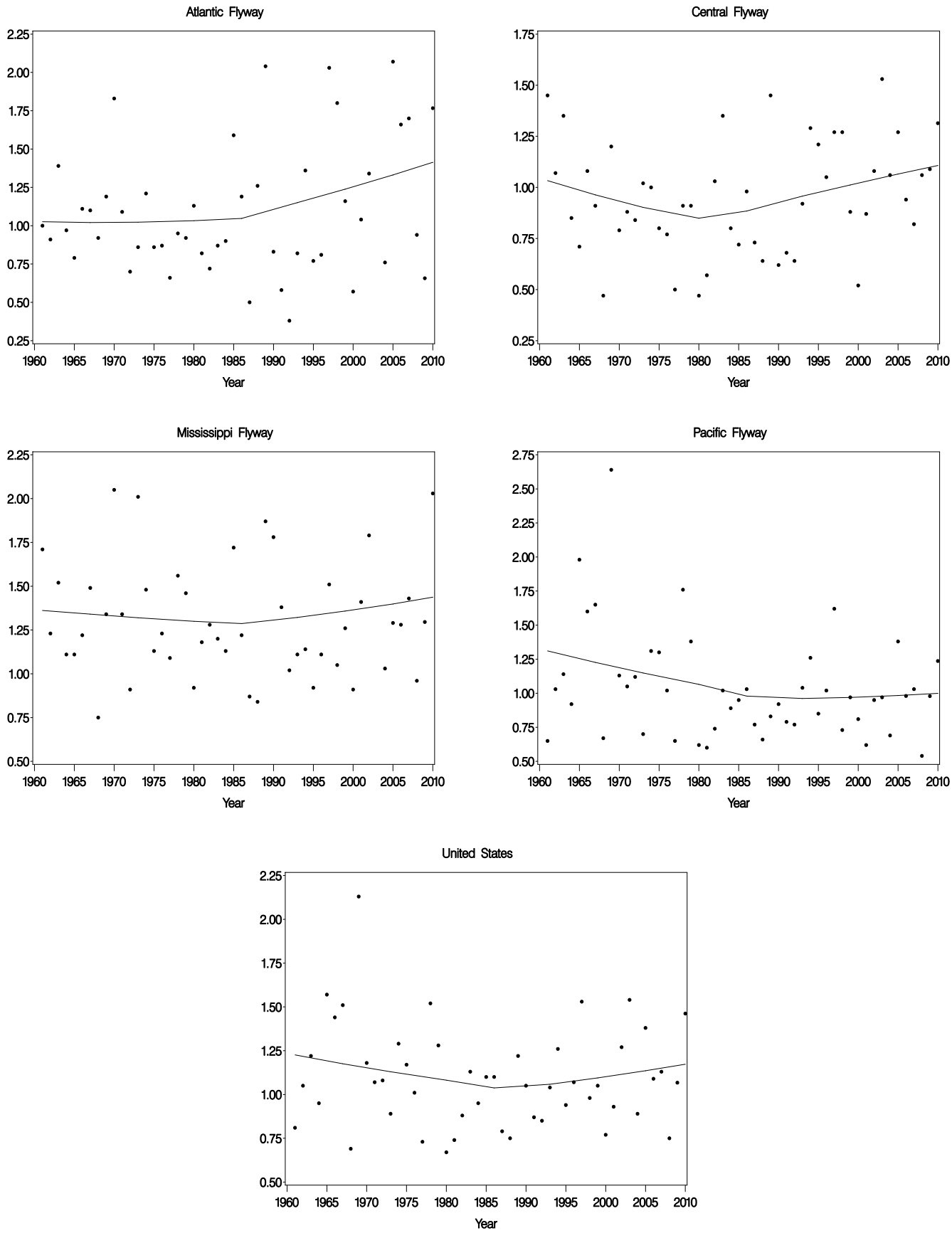

Figure 4. Age ratios of northern pintails harvested in the United States, 1961-2011.

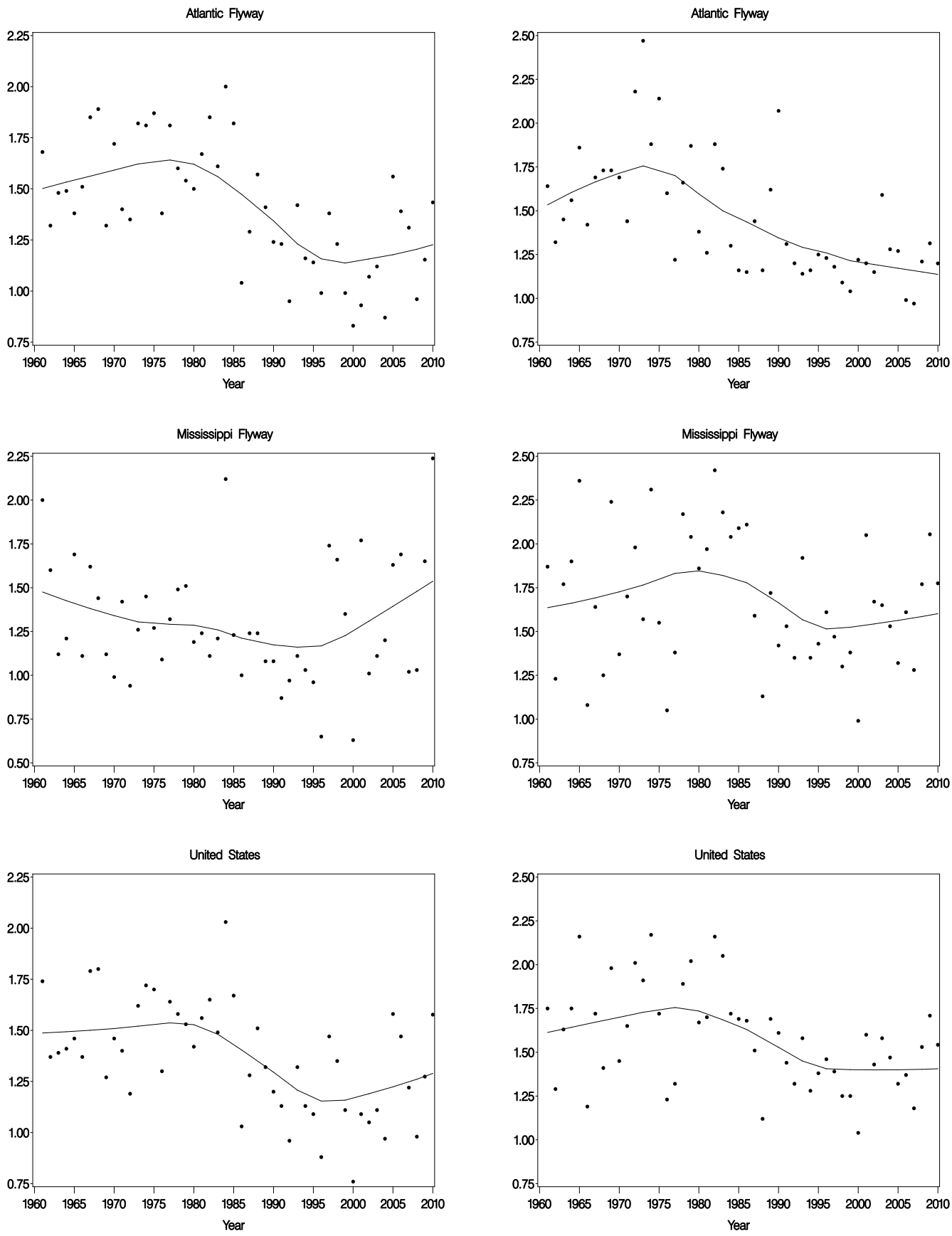

Figure 5. Age ratios of American black ducks (left column) and wood ducks (right column) harvested in the United States, 1961-2011.

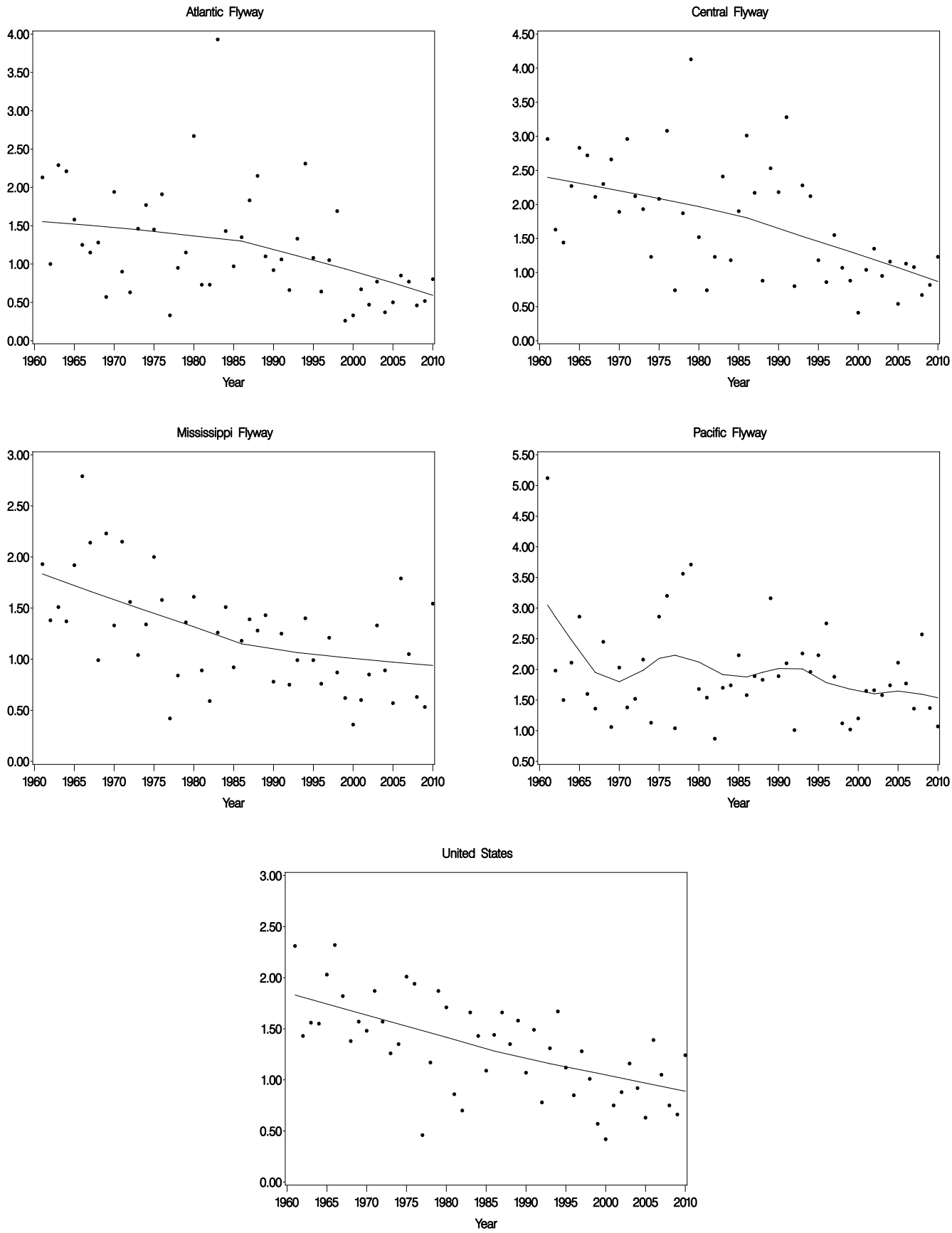

Figure 6. Age ratios of lesser scaup harvested in the United States, 1961-2011.

Table 13. Preliminary estimates of mourning dove harvest and hunter activity during the 2010 and 2011 hunting seasons[1].

State and	Mourning Dove Harvest		Active Hunters [2]		Mourning Dove Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2010	2011	2010	2011	2010	2011	2010	2011
Alabama	1,022,900 ± 17%	796,400 ± 19%	48,600 ± 9%	42,600 ± 11%	127,100 ± 14%	108,300 ± 17%	21.0 ± 19%	18.7 ± 22%
Delaware	42,300 ± 34%	14,700 ± 35%	2,200 ± 21%	1,400 ± 29%	6,400 ± 28%	3,300 ± 38%	18.9 ± 40%	10.3 ± 46%
Florida	321,200 ± 38%	245,700 ± 26%	12,800 ± 29%	13,700 ± 29%	48,200 ± 38%	37,200 ± 26%	25.2 ± 47%	17.9 ± 39%
Georgia	1,053,900 ± 19%	1,154,700 ± 17%	47,100 ± 13%	53,800 ± 11%	148,600 ± 19%	162,600 ± 14%	22.4 ± 23%	21.5 ± 20%
Illinois	464,400 ± 22%	467,700 ± 22%	28,900 ± 14%	25,400 ± 15%	89,300 ± 21%	77,000 ± 21%	16.1 ± 26%	18.4 ± 27%
Indiana	185,700 ± 25%	216,900 ± 25%	10,000 ± 21%	10,000 ± 24%	29,600 ± 19%	37,500 ± 44%	18.5 ± 33%	21.7 ± 35%
Kentucky	357,100 ± 26%	380,700 ± 26%	20,100 ± 35%	18,500 ± 38%	43,400 ± 25%	61,700 ± 38%	17.7 ± 44%	20.6 ± 46%
Louisiana	303,000 ± 54%	471,100 ± 45%	18,000 ± 28%	25,500 ± 27%	46,300 ± 39%	69,400 ± 35%	16.8 ± 61%	18.5 ± 52%
Maryland	113,900 ± 35%	92,600 ± 36%	7,600 ± 22%	6,400 ± 24%	20,800 ± 28%	16,600 ± 32%	15.1 ± 41%	14.4 ± 43%
Mississippi	514,300 ± 22%	443,400 ± 22%	22,400 ± 12%	20,800 ± 15%	57,400 ± 17%	52,200 ± 20%	23.0 ± 25%	21.4 ± 26%
North Carolina	686,900 ± 24%	719,800 ± 33%	44,300 ± 18%	49,700 ± 24%	111,700 ± 31%	142,300 ± 34%	15.5 ± 30%	14.5 ± 41%
Ohio	221,500 ± 37%	174,900 ± 29%	12,700 ± 20%	14,200 ± 25%	45,900 ± 28%	55,800 ± 25%	17.5 ± 42%	12.4 ± 38%
Pennsylvania	226,500 ± 31%	158,800 ± 26%	19,900 ± 22%	13,500 ± 26%	69,600 ± 25%	53,600 ± 23%	11.4 ± 38%	11.7 ± 37%
Rhode Island	7,800 ± 118%	100 ± 194%	400 ± 99%	<50 ± 194%	1,400 ± 98%	200 ± 194%	20.9 ± 154%	3.0 ± 274%
South Carolina	998,700 ± 21%	701,900 ± 27%	43,100 ± 15%	35,700 ± 21%	138,300 ± 22%	100,900 ± 24%	23.2 ± 25%	19.7 ± 34%
Tennessee	530,600 ± 23%	306,700 ± 26%	31,500 ± 18%	21,400 ± 21%	83,400 ± 27%	44,800 ± 25%	16.8 ± 29%	14.3 ± 34%
Virginia	299,000 ± 14%	245,900 ± 19%	23,200 ± 12%	16,400 ± 15%	55,300 ± 15%	46,400 ± 20%	12.9 ± 19%	15.0 ± 24%
West Virginia	24,500 ± 30%	7,800 ± 38%	1,400 ± 23%	700 ± 28%	4,600 ± 48%	1,400 ± 42%	17.6 ± 38%	11.0 ± 47%
Wisconsin	99,400 ± 76%	67,000 ± 64%	9,100 ± 29%	8,800 ± 33%	39,800 ± 43%	24,200 ± 32%	10.9 ± 81%	7.6 ± 72%
Eastern Unit Total	7,473,500 ± 7%	6,666,900 ± 8%	403,200	378,600	1,167,100 ± 7%	1,095,200 ± 7%		
Arkansas	446,400 ± 28%	519,300 ± 43%	23,900 ± 20%	25,300 ± 25%	63,300 ± 28%	63,800 ± 34%	18.7 ± 34%	20.5 ± 50%
Colorado	172,000 ± 18%	178,700 ± 14%	15,900 ± 14%	15,300 ± 14%	38,400 ± 19%	44,500 ± 24%	10.8 ± 22%	11.7 ± 20%
Iowa	-	56,800 ± 21%	-	5,800 ± 11%	-	19,000 ± 17%	-	9.7 ± 24%
Kansas	511,200 ± 15%	534,800 ± 18%	28,200 ± 10%	32,800 ± 10%	93,900 ± 13%	95,800 ± 15%	18.1 ± 18%	16.3 ± 21%
Minnesota	98,900 ± 58%	57,300 ± 40%	10,000 ± 42%	9,400 ± 49%	55,300 ± 115%	25,100 ± 51%	9.9 ± 72%	6.1 ± 63%
Missouri	426,000 ± 20%	359,600 ± 16%	29,300 ± 10%	31,600 ± 11%	75,200 ± 14%	74,600 ± 14%	14.5 ± 23%	11.4 ± 19%
Montana	17,400 ± 36%	14,400 ± 61%	1,600 ± 35%	2,200 ± 37%	4,700 ± 44%	5,900 ± 47%	10.7 ± 50%	6.7 ± 71%
Nebraska	276,400 ± 19%	265,500 ± 23%	15,800 ± 14%	15,500 ± 16%	49,700 ± 21%	46,900 ± 28%	17.5 ± 24%	17.1 ± 28%
New Mexico	128,000 ± 29%	76,900 ± 42%	5,900 ± 20%	6,700 ± 39%	21,000 ± 20%	24,600 ± 49%	21.9 ± 35%	11.4 ± 57%
North Dakota	54,200 ± 38%	41,800 ± 31%	3,800 ± 28%	3,700 ± 25%	11,800 ± 37%	10,400 ± 29%	14.1 ± 48%	11.2 ± 40%
Oklahoma	268,700 ± 28%	379,400 ± 33%	19,500 ± 14%	17,100 ± 15%	51,300 ± 22%	54,200 ± 25%	13.8 ± 31%	22.1 ± 36%
South Dakota	64,300 ± 23%	87,200 ± 26%	5,000 ± 21%	6,200 ± 21%	14,200 ± 26%	16,300 ± 26%	12.9 ± 31%	14.0 ± 34%
Texas	4,699,300 ± 14%	5,061,100 ± 13%	244,600 ± 10%	253,200 ± 11%	876,500 ± 10%	958,600 ± 16%	19.2 ± 17%	20.0 ± 17%
Wyoming	32,100 ± 36%	25,000 ± 52%	2,700 ± 26%	2,700 ± 30%	7,100 ± 32%	5,100 ± 38%	12.0 ± 45%	9.3 ± 60%
Central Unit Total	7,194,900 ± 10%	7,657,700 ± 9%	406,100	427,700	1,362,300 ± 8%	1,444,800 ± 11%		
Arizona	941,800 ± 15%	784,600 ± 15%	40,500 ± 6%	35,400 ± 12%	145,300 ± 13%	123,300 ± 15%	23.3 ± 16%	22.2 ± 19%
California	1,244,900 ± 14%	1,138,200 ± 10%	70,400 ± 8%	72,700 ± 7%	249,200 ± 14%	227,100 ± 10%	17.7 ± 16%	15.6 ± 12%
Idaho	90,600 ± 39%	147,500 ± 45%	10,100 ± 28%	11,000 ± 21%	25,500 ± 33%	38,600 ± 35%	9.0 ± 48%	13.4 ± 50%
Nevada	60,300 ± 27%	31,900 ± 24%	4,500 ± 19%	3,500 ± 19%	12,700 ± 26%	8,600 ± 22%	13.3 ± 33%	9.2 ± 31%
Oregon	43,700 ± 97%	63,000 ± 23%	3,600 ± 35%	12,900 ± 18%	11,600 ± 46%	38,000 ± 25%	12.0 ± 103%	4.9 ± 29%
Utah	102,800 ± 25%	53,900 ± 31%	14,300 ± 23%	9,600 ± 21%	31,500 ± 28%	19,800 ± 23%	7.2 ± 34%	5.6 ± 37%
Washington	77,900 ± 31%	37,200 ± 25%	7,200 ± 25%	4,300 ± 23%	18,900 ± 42%	10,200 ± 25%	10.8 ± 40%	8.7 ± 34%
Western Unit Total	2,562,000 ± 9%	2,256,300 ± 8%	150,600	149,400	494,700 ± 9%	465,700 ± 7%		
U.S. Total	17,230,400 ± 5%	16,580,900 ± 5%	959,900	955,700	3,024,100 ± 5%	3,005,700 ± 6%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

Table 14. Preliminary estimates of white-winged dove harvest and hunter activity during the 2010 and 2011 hunting seasons [1].

State and Management Unit	White-winged Dove Harvest		Active Hunters [2]		White-winged Dove Days Afield		Seasonal Harvest Per Hunter	
	2010	2011	2010	2011	2010	2011	2010	2011
Alabama	4,400 ± 82%	12,100 ± 80%	1,600 ± 57%	3,000 ± 48%	5,400 ± 70%	10,500 ± 96%	2.7 ± 99%	4.0 ± 94%
Florida	6,200 ± 109%	17,700 ± 82%	3,300 ± 66%	2,100 ± 64%	2,300 ± 63%	7,200 ± 88%	1.9 ± 128%	8.6 ± 104%
Georgia	4,200 ± 108%	1,900 ± 172%	1,800 ± 62%	2,900 ± 60%	1,600 ± 90%	1,900 ± 111%	2.2 ± 124%	0.7 ± 183%
Illinois	7,200 ± 141%	700 ± 140%	1,400 ± 91%	700 ± 104%	12,500 ± 103%	1,700 ± 103%	5.3 ± 168%	1.0 ± 174%
Indiana	<50 ± 191%	0	100 ± 124%	0	300 ± 124%	0	0.2 ± 227%	0
Kentucky	0	600 ± 116%	0	100 ± 111%	0	500 ± 139%	0	5.3 ± 160%
Louisiana	4,600 ± 159%	13,800 ± 149%	2,500 ± 77%	3,700 ± 74%	6,600 ± 109%	10,300 ± 83%	1.8 ± 177%	3.7 ± 166%
Maryland	0	0	200 ± 195%	0	600 ± 195%	0	0	0
Mississippi	2,800 ± 74%	700 ± 127%	1,200 ± 70%	500 ± 97%	3,600 ± 81%	1,400 ± 104%	2.4 ± 102%	1.4 ± 160%
Ohio	0	0	100 ± 195%	0	300 ± 195%	0	0	0
Pennsylvainia	0	0	600 ± 177%	0	600 ± 177%	0	0	0
South Carolina	0	200 ± 153%	0	100 ± 137%	0	200 ± 153%	0	2.0 ± 205%
Eastern Unit Total	29,200 ± 53%	47,800 ± 57%	12,700	13,200	33,800 ± 47%	33,700 ± 45%		
Arkansas	2,700 ± 113%	2,000 ± 109%	600 ± 62%	1,100 ± 62%	2,900 ± 93%	4,500 ± 88%	4.3 ± 128%	1.8 ± 126%
Colorado	4,900 ± 99%	4,100 ± 70%	2,000 ± 42%	1,300 ± 41%	4,300 ± 54%	3,700 ± 48%	2.4 ± 107%	3.1 ± 81%
Kansas	2,200 ± 90%	5,800 ± 123%	1,100 ± 62%	1,500 ± 73%	4,500 ± 68%	4,400 ± 93%	2.0 ± 109%	3.7 ± 143%
Missouri	4,400 ± 74%	1,300 ± 138%	2,300 ± 47%	1,700 ± 63%	4,300 ± 46%	5,700 ± 123%	1.9 ± 88%	0.8 ± 151%
Nebraska	400 ± 108%	1,300 ± 100%	600 ± 107%	300 ± 75%	2,500 ± 139%	900 ± 93%	0.7 ± 152%	4.8 ± 125%
New Mexico	29,500 ± 31%	34,800 ± 78%	3,000 ± 29%	4,600 ± 55%	10,400 ± 23%	16,800 ± 66%	9.8 ± 43%	7.6 ± 95%
North Dakota	0	<50 ± 131%	0	<50 ± 111%	0	100 ± 122%	0	0.6 ± 172%
Oklahoma	4,600 ± 111%	4,300 ± 93%	2,500 ± 53%	1,800 ± 57%	8,400 ± 69%	6,800 ± 78%	1.8 ± 123%	2.4 ± 109%
Texas	1,436,800 ± 16%	1,552,000 ± 33%	129,200 ± 15%	119,800 ± 17%	470,400 ± 15%	458,500 ± 21%	11.1 ± 22%	13.0 ± 37%
Central Unit Total	1,485,500 ± 16%	1,605,500 ± 32%	141,400	132,200	507,700 ± 14%	501,400 ± 20%		
Arizona	84,900 ± 24%	118,900 ± 29%	17,400 ± 16%	18,100 ± 22%	52,400 ± 17%	57,200 ± 26%	4.9 ± 29%	6.6 ± 36%
California	78,200 ± 41%	77,900 ± 35%	15,500 ± 21%	12,800 ± 20%	63,300 ± 41%	40,200 ± 29%	5.0 ± 46%	6.1 ± 40%
Nevada	400 ± 95%	300 ± 84%	300 ± 90%	300 ± 85%	500 ± 68%	800 ± 96%	1.4 ± 131%	1.1 ± 119%
Utah	1,800 ± 74%	1,200 ± 160%	400 ± 52%	500 ± 100%	800 ± 56%	700 ± 81%	4.7 ± 90%	2.4 ± 188%
Western Unit Total	165,200 ± 23%	198,300 ± 22%	33,600	31,700	117,100 ± 23%	98,900 ± 19%		
U.S. Total	1,679,900 ± 14%	1,851,600 ± 28%	187,600	177,000	658,600 ± 12%	634,000 ± 16%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

Table 15. Preliminary estimates of band-tailed pigeon harvest and hunter activity during the 2010 and 2011 hunting seasons [1].

State and Management Unit	Band-tailed Pigeon Harvest		Active Hunters[2]		Band-tailed Pigeon Days Afield		Seasonal Harvest Per Hunter	
	2010	2011	2010	2011	2010	2011	2010	2011
Arizona	700 ± 110%	1,000 ± 93%	1,800 ± 47%	500 ± 101%	5,800 ± 57%	900 ± 71%	0.4 ± 120%	1.8 ± 137%
Colorado	1,500 ± 90%	300 ± 101%	1,100 ± 61%	200 ± 38%	3,900 ± 77%	700 ± 55%	1.4 ± 109%	1.4 ± 108%
New Mexico	2,700 ± 100%	500 ± 125%	900 ± 46%	300 ± 37%	3,200 ± 55%	900 ± 62%	2.9 ± 110%	1.8 ± 130%
Utah	200 ± 195%	100 ± 142%	300 ± 112%	200 ± 82%	700 ± 121%	300 ± 94%	0.7 ± 225%	0.6 ± 164%
Four Corners Total	5,000 ± 62%	1,800 ± 61%	4,100	1,200	13,600 ± 36%	2,800 ± 35%		
California	16,500 ± 50%	10,800 ± 39%	5,500 ± 36%	4,500 ± 33%	11,100 ± 39%	11,800 ± 40%	3.0 ± 62%	2.4 ± 51%
Oregon	1,100 ± 41%	900 ± 32%	500 ± 17%	300 ± 15%	1,100 ± 26%	800 ± 22%	2.4 ± 44%	3.4 ± 35%
Washington	700 ± 138%	200 ± 63%	500 ± 79%	100 ± 31%	1,500 ± 96%	200 ± 49%	1.5 ± 159%	2.2 ± 71%
Pacific Coast Total	18,400 ± 45%	11,900 ± 35%	6,400	4,900	13,700 ± 33%	12,800 ± 37%		
U.S. Total	23,400 ± 38%	13,700 ± 32%	10,500	6,100	27,300 ± 25%	15,600 ± 31%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

Table 16. Preliminary estimates of woodcock harvest and hunter activity during the 2010 and 2011 hunting seasons [1].

State and	Woodcock Harvest		Active Hunters [2]		Woodcock Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2010	2011	2010	2011	2010	2011	2010	2011
Connecticut	700 ± 54%	1,800 ± 40%	700 ± 31%	1,100 ± 24%	3,200 ± 39%	5,300 ± 35%	0.9 ± 62%	1.6 ± 47%
Delaware [3]	900 ± 363%	500 ± 130%	300 ± 82%	100 ± 131%	1,600 ± 197%	800 ± 152%	2.4 ± 305%	4.1 ± 184%
Florida	200 ± 195%	300 ± 131%	200 ± 110%	100 ± 110%	400 ± 119%	300 ± 122%	1.0 ± 223%	2.7 ± 171%
Georgia	10,300 ± 196%	6,000 ± 150%	3,400 ± 196%	2,600 ± 112%	3,400 ± 196%	10,300 ± 165%	3.0 ± 277%	2.3 ± 188%
Maine	31,700 ± 55%	11,900 ± 48%	7,100 ± 33%	4,100 ± 35%	40,800 ± 52%	30,500 ± 56%	4.5 ± 64%	2.9 ± 60%
Maryland	2,000 ± 160%	2,100 ± 130%	1,100 ± 99%	2,400 ± 80%	2,100 ± 92%	4,800 ± 81%	1.8 ± 188%	0.9 ± 153%
Massachussetts	2,600 ± 27%	4,000 ± 33%	900 ± 27%	1,900 ± 24%	5,300 ± 32%	8,500 ± 29%	2.8 ± 38%	2.1 ± 41%
New Hampshire	9,500 ± 35%	7,500 ± 42%	2,300 ± 30%	2,600 ± 34%	14,200 ± 35%	15,000 ± 49%	4.1 ± 46%	2.9 ± 54%
New Jersey	3,800 ± 45%	1,900 ± 63%	1,300 ± 49%	1,000 ± 50%	3,700 ± 36%	2,600 ± 50%	2.9 ± 66%	1.9 ± 81%
New York	12,000 ± 40%	11,600 ± 46%	4,000 ± 42%	4,200 ± 31%	13,300 ± 41%	19,200 ± 40%	3.0 ± 58%	2.7 ± 55%
North Carolina	3,400 ± 196%	5,900 ± 136%	3,400 ± 196%	500 ± 93%	3,400 ± 196%	7,300 ± 146%	1.0 ± 277%	11.5 ± 165%
Pennsylvania	12,800 ± 45%	14,200 ± 58%	9,100 ± 32%	7,500 ± 33%	35,600 ± 40%	34,400 ± 37%	1.4 ± 56%	1.9 ± 67%
Rhode Island	400 ± 84%	100 ± 190%	200 ± 100%	100	800 ± 94%	500 ± 53%	2.1 ± 131%	2.0 ± 190%
South Carolina	1,700 ± 139%	1,000 ± 80%	5,300 ± 185%	1,900 ± 166%	11,100 ± 176%	3,000 ± 109%	0.3 ± 232%	0.5 ± 184%
Vermont	6,200 ± 45%	5,200 ± 41%	1,300 ± 25%	1,600 ± 28%	5,400 ± 27%	8,300 ± 29%	4.8 ± 51%	3.2 ± 50%
Virginia	1,100 ± 44%	2,500 ± 51%	300 ± 23%	1,600 ± 79%	1,200 ± 29%	4,500 ± 81%	3.7 ± 50%	1.6 ± 94%
West Virginia	500 ± 32%	500 ± 43%	300 ± 65%	200 ± 83%	1,100 ± 64%	600 ± 53%	1.6 ± 73%	3.0 ± 93%
Eastern Unit Total	99,800 ± 16%	77,000 ± 23%	41,200	33,500	146,700 ± 16%	156,000 ± 21%		
Alabama	600 ± 124%	1,600 ± 146%	1,200 ± 180%	2,500 ± 131%	1,500 ± 142%	7,500 ± 156%	0.5 ± 218%	0.6 ± 196%
Arkansas	200 ± 164%	600 ± 115%	100 ± 111%	200 ± 111%	200 ± 128%	1,000 ± 140%	2.0 ± 198%	3.0 ± 160%
Illinois	900 ± 106%	3,700 ± 195%	800 ± 171%	2,900 ± 108%	1,200 ± 123%	8,800 ± 131%	1.0 ± 201%	1.3 ± 223%
Indiana	3,000 ± 134%	1,800 ± 102%	1,000 ± 66%	1,100 ± 79%	3,900 ± 89%	4,100 ± 86%	2.9 ± 149%	1.6 ± 129%
Iowa	1,700 ± 134%	200 ± 193%	3,200 ± 74%	1,000 ± 176%	7,400 ± 71%	1,600 ± 128%	0.5 ± 153%	0.2 ± 262%
Kansas	0	0	300 ± 193%	<50 ± 127%	700 ± 182%	<50 ± 143%	0	0
Kentucky	6,800 ± 166%	200 ± 86%	2,900 ± 111%	<50 ± 63%	6,700 ± 113%	200 ± 96%	2.4 ± 199%	4.0 ± 107%
Louisiana	33,000 ± 112%	24,400 ± 102%	9,100 ± 70%	6,600 ± 58%	28,200 ± 74%	18,400 ± 67%	3.6 ± 132%	3.7 ± 117%
Michigan	93,200 ± 21%	106,900 ± 28%	31,100 ± 14%	28,400 ± 15%	159,200 ± 19%	144,000 ± 18%	3.0 ± 26%	3.8 ± 31%
Minnesota	34,800 ± 39%	44,200 ± 42%	13,900 ± 32%	17,000 ± 29%	55,400 ± 33%	76,900 ± 46%	2.5 ± 50%	2.6 ± 51%
Mississippi [3]	1,400 ± 355%	400 ± 105%	1,000 ± 170%	100 ± 65%	3,000 ± 153%	500 ± 81%	2.6 ± 235%	3.3 ± 124%
Missouri	3,000 ± 159%	900 ± 91%	2,600 ± 91%	200 ± 36%	6,000 ± 94%	1,100 ± 55%	1.2 ± 183%	4.8 ± 98%
Nebraska	100 ± 193%	0	600 ± 178%	0	800 ± 154%	0	0.1 ± 262%	0
Ohio	1,700 ± 93%	2,300 ± 74%	1,800 ± 98%	3,100 ± 98%	4,300 ± 70%	10,200 ± 96%	0.9 ± 135%	0.7 ± 123%
Oklahoma	3,100 ± 166%	<50 ± 184%	1,000 ± 138%	<50 ± 99%	17,600 ± 174%	200 ± 139%	3.0 ± 216%	0.7 ± 209%
Tennessee [3]	5,100 ± 445%	600 ± 120%	1,600 ± 227%	1,600 ± 177%	4,900 ± 215%	5,400 ± 156%	4.3 ± 190%	0.4 ± 214%
Texas [3]	2,200 ± 280%	1,300 ± 195%	10,100 ± 199%	200 ± 113%	25,500 ± 320%	1,400 ± 125%	0.5 ± 298%	5.5 ± 225%
Wisconsin	42,300 ± 22%	42,600 ± 31%	14,600 ± 25%	15,200 ± 25%	65,700 ± 40%	69,000 ± 30%	2.9 ± 33%	2.8 ± 39%
Central Unit Total	233,100 ± 20%	231,700 ± 20%	97,100	80,300	392,400 ± 20%	350,500 ± 16%		
U.S. Total	332,900 ± 11%	308,700 ± 16%	138,300	113,800	539,100 ± 11%	506,500 ± 12%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

[3] Sample for 2010 insufficient for estimation. Therefore, the long-term average from 1999-2009 was used for the 2010 estimates.

Table 17. Preliminary estimates of snipe harvest and hunter activity during the 2010 and 2011 hunting seasons[1].

State and Management Unit	Snipe Harvest		Active Hunters[2]		Snipe Days Afield		Seasonal Harvest Per Hunter	
	2010	2011	2010	2011	2010	2011	2010	2011
Connecticut	0	0	0	100 ± 137%	0	300 ± 137%	0.0	0.0
Delaware	200 ± 194%	500 ± 188%	100 ± 194%	100 ± 178%	100 ± 194%	200 ± 190%	3.0 ± 275%	8.5 ± 259%
Florida	32,100 ± 55%	46,400 ± 95%	3,700 ± 67%	4,400 ± 75%	9,200 ± 51%	17,400 ± 105%	8.8 ± 87%	10.4 ± 122%
Georgia	3,900 ± 107%	1,600 ± 109%	300 ± 73%	200 ± 78%	700 ± 88%	1,100 ± 94%	13.3 ± 130%	7.2 ± 134%
Maine	100 ± 144%	<50 ± 193%	200 ± 78%	100 ± 136%	300 ± 98%	100 ± 136%	0.5 ± 164%	0.5 ± 236%
Maryland	100 ± 149%	200 ± 133%	<50 ± 133%	<50 ± 107%	200 ± 172%	100 ± 116%	4.0 ± 199%	6.0 ± 171%
Massachusetts	<50 ± 176%	100 ± 146%	200 ± 101%	100 ± 115%	300 ± 120%	200 ± 84%	<0.1 ± 203%	0.8 ± 186%
New Hampshire	400 ± 180%	<50 ± 134%	300 ± 104%	200 ± 123%	2,000 ± 128%	1,100 ± 162%	1.3 ± 208%	0.2 ± 182%
New Jersey	700 ± 144%	400 ± 133%	300 ± 112%	200 ± 121%	400 ± 119%	400 ± 132%	2.3 ± 182%	2.3 ± 179%
New York	600 ± 150%	0	500 ± 127%	<50 ± 192%	2,900 ± 142%	<50 ± 192%	1.4 ± 196%	0.0
North Carolina	7,200 ± 142%	5,500 ± 196%	1,400 ± 159%	800 ± 196%	3,400 ± 144%	1,600 ± 196%	5.1 ± 213%	7.0 ± 277%
Pennsylvania	100 ± 192%	0	<50 ± 192%	0	100 ± 192%	0	2.0 ± 272%	0.0
Rhode Island	0	0	0	0	0	0	0.0	0.0
South Carolina	7,400 ± 140%	1,200 ± 135%	1,400 ± 107%	800 ± 163%	3,800 ± 121%	1,000 ± 138%	5.2 ± 177%	1.4 ± 212%
Vermont[3]	200 ± 169%	0	100 ± 151%	<50 ± 175%	300 ± 158%	<50 ± 175%	4.1 ± 229%	0.0
Virginia	1,000 ± 117%	1,400 ± 132%	200 ± 83%	700 ± 89%	300 ± 88%	3,000 ± 117%	5.6 ± 144%	2.0 ± 159%
West Virginia	100 ± 193%	0	100 ± 136%	<50 ± 193%	100 ± 144%	100 ± 193%	1.0 ± 236%	0.0
Atlantic Flyway Total	54,000 ± 58%	57,500 ± 80%	8,600	7,800	24,100 ± 52%	26,500 ± 71%		
Alabama[3]	3,700 ± 117%	1,600 ± 183%	600 ± 90%	1,600 ± 191%	2,900 ± 102%	1,600 ± 183%	9.5 ± 149%	1.0 ± 264%
Arkansas[3]	2,200 ± 151%	0	600 ± 124%	0	1,700 ± 143%	0	9.9 ± 195%	0.0
Illinois	300 ± 194%	0	100 ± 136%	100 ± 194%	300 ± 164%	100 ± 194%	3.0 ± 237%	0.0
Indiana	400 ± 74%	100 ± 89%	100 ± 34%	100 ± 46%	300 ± 46%	200 ± 67%	5.0 ± 81%	1.5 ± 100%
Iowa	800 ± 144%	100 ± 162%	700 ± 159%	1,200 ± 183%	2,800 ± 163%	2,300 ± 189%	1.1 ± 214%	0.1 ± 245%
Kentucky	0	0	0	1,300 ± 196%	0	1,300 ± 196%	0.0	0.0
Louisiana[3]	24,100 ± 108%	16,000 ± 138%	2,500 ± 99%	1,800 ± 103%	9,000 ± 97%	5,700 ± 115%	8.7 ± 148%	8.7 ± 172%
Michigan	5,200 ± 166%	11,000 ± 138%	2,100 ± 117%	4,300 ± 85%	15,200 ± 134%	14,600 ± 90%	2.5 ± 203%	2.6 ± 162%
Minnesota	1,200 ± 120%	4,900 ± 168%	3,300 ± 73%	1,300 ± 124%	11,200 ± 87%	6,700 ± 160%	0.4 ± 140%	3.7 ± 209%
Mississippi	600 ± 196%	0	2,600 ± 103%	0	3,000 ± 97%	0	0.2 ± 221%	0.0
Missouri	1,600 ± 134%	400 ± 196%	1,100 ± 123%	800 ± 156%	1,100 ± 123%	1,100 ± 142%	1.4 ± 182%	0.5 ± 250%
Ohio	0	0	100 ± 194%	400 ± 196%	200 ± 194%	400 ± 196%	0.0	0.0
Tennessee	0	0	0	0	0	0	0.0	0.0
Wisconsin	<50 ± 192%	2,400 ± 180%	4,300 ± 94%	1,200 ± 182%	7,800 ± 101%	3,500 ± 180%	<0.1 ± 214%	2.0 ± 255%
Mississippi Flyway Total	40,200 ± 60%	36,600 ± 78%	18,100	14,000	55,600 ± 56%	37,400 ± 54%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

[3] Sample size insufficient to provide reliable estimates. Therefore, long-term (1999-2010) averages presented for 2010.

Table 17 (continued). Preliminary estimates of snipe harvest and hunter activity during the 2010 and 2011 hunting seasons[1].

State and	Snipe Harvest		Active Hunters [2]		Snipe Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2010	2011	2010	2011	2010	2011	2010	2011
Colorado	0	1,300 ± 172%	200 ± 111%	200 ± 135%	500 ± 113%	1,300 ± 172%	0.0	8.5 ± 219%
Kansas	2,200 ± 193%	0	700 ± 137%	0	1,100 ± 144%	0	3.0 ± 237%	0.0
Nebraska	1,300 ± 150%	0	1,000 ± 119%	0	1,300 ± 107%	0	1.2 ± 191%	0.0
New Mexico	0	0	<50 ± 182%	0	<50 ± 182%	0	0.0	0.0
North Dakota [3]	1,200 ± 105%	500 ± 51%	400 ± 115%	100 ± 32%	1,000 ± 116%	300 ± 43%	3.0 ± 161%	5.6 ± 60%
Oklahoma	0	100 ± 118%	0	100 ± 87%	0	300 ± 142%	0.0	2.5 ± 147%
South Dakota	400 ± 119%	<50 ± 124%	700 ± 106%	<50 ± 118%	4,300 ± 112%	<50 ± 132%	0.5 ± 160%	1.5 ± 171%
Texas	6,500 ± 153%	23,600 ± 158%	200 ± 78%	6,300 ± 136%	1,500 ± 109%	29,600 ± 131%	30.6 ± 172%	3.7 ± 209%
Wyoming	1,200 ± 129%	400 ± 179%	400 ± 89%	100 ± 184%	600 ± 92%	200 ± 174%	3.2 ± 157%	4.1 ± 256%
Central Flyway Total	12,700 ± 79%	25,900 ± 144%	3,700	6,700	10,400 ± 72%	31,800 ± 122%		
Arizona	0	300 ± 193%	100 ± 110%	<50 ± 193%	100 ± 118%	100 ± 193%	0.0	10.0 ± 273%
California	4,800 ± 74%	10,800 ± 111%	2,300 ± 80%	1,900 ± 86%	5,400 ± 83%	7,700 ± 83%	2.1 ± 109%	5.6 ± 140%
Idaho	600 ± 196%	0	1,300 ± 137%	0	1,300 ± 137%	0	0.5 ± 239%	0.0
Montana	3,400 ± 147%	200 ± 108%	1,300 ± 108%	100 ± 67%	2,100 ± 125%	200 ± 87%	2.7 ± 183%	3.0 ± 127%
Nevada	100 ± 83%	500 ± 126%	200 ± 105%	200 ± 117%	500 ± 107%	200 ± 96%	0.6 ± 134%	2.8 ± 172%
Oregon	300 ± 119%	3,000 ± 142%	600 ± 134%	700 ± 128%	3,100 ± 135%	2,700 ± 95%	0.5 ± 179%	4.5 ± 191%
Utah	1,300 ± 102%	1,300 ± 128%	1,100 ± 79%	700 ± 80%	2,500 ± 86%	1,600 ± 84%	1.2 ± 129%	1.8 ± 151%
Washington	400 ± 74%	0	100 ± 50%	0	400 ± 70%	0	5.3 ± 90%	0.0
Pacific Flyway Total	10,900 ± 75%	16,000 ± 80%	6,900	3,600	15,400 ± 66%	12,500 ± 56%		
Alaska	400 ± 78%	300 ± 103%	200 ± 45%	600 ± 171%	500 ± 63%	1,300 ± 154%	2.2 ± 90%	0.5 ± 200%
U.S. Total	118,200 ± 37%	136,300 ± 49%	37,500	32,700	106,000 ± 36%	109,600 ± 44%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

[3] Sample size insufficient to provide reliable estimates. Therefore, long-term (1999-2010) averages presented for 2010.

Table 18. Preliminary estimates of coot harvest and hunter activity during the 2010 and 2011 hunting seasons[1].

State and	Coot Harvest		Active Hunters [2]		Coot Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2010	2011	2010	2011	2010	2011	2010	2011
Connecticut	200 ± 107%	100 ± 194%	200 ± 93%	100 ± 132%	300 ± 99%	100 ± 132%	0.8 ± 142%	0.5 ± 235%
Delaware	0	800 ± 146%	0	100 ± 125%	0	100 ± 117%	0.0	6.5 ± 192%
Florida	13,900 ± 106%	30,400 ± 105%	2,400 ± 90%	1,300 ± 129%	4,900 ± 69%	12,600 ± 137%	5.9 ± 138%	22.9 ± 166%
Georgia	800 ± 150%	1,200 ± 104%	100 ± 112%	2,000 ± 174%	200 ± 118%	2,400 ± 146%	6.7 ± 187%	0.6 ± 203%
Maine	100 ± 193%	100 ± 136%	100 ± 136%	100 ± 136%	200 ± 159%	100 ± 144%	1.0 ± 237%	2.0 ± 193%
Maryland [3]	800 ± 177%	400 ± 153%	500 ± 169%	<50 ± 132%	700 ± 169%	300 ± 165%	2.3 ± 245%	14.0 ± 202%
Massachusetts	<50 ± 129%	0	100 ± 160%	0	100 ± 119%	0	0.5 ± 206%	0.0
New Hampshire	0	<50 ± 187%	0	<50 ± 187%	0	<50 ± 187%	0.0	1.0 ± 265%
New Jersey	300 ± 145%	400 ± 160%	300 ± 112%	200 ± 137%	300 ± 112%	200 ± 145%	1.0 ± 183%	2.5 ± 211%
New York	400 ± 134%	900 ± 90%	400 ± 149%	200 ± 71%	2,300 ± 172%	400 ± 79%	1.0 ± 201%	5.6 ± 114%
North Carolina	5,500 ± 161%	6,300 ± 196%	2,200 ± 138%	800 ± 196%	3,300 ± 146%	800 ± 196%	2.5 ± 212%	8.0 ± 277%
Pennsylvania	0	2,000 ± 115%	0	1,000 ± 180%	0	1,200 ± 156%	0.0	1.9 ± 213%
Rhode Island	0	0	0	0	0	0	0.0	0.0
South Carolina [3]	5,900 ± 155%	20,900 ± 196%	700 ± 130%	700 ± 196%	2,200 ± 146%	1,400 ± 196%	7.3 ± 204%	30.0 ± 277%
Vermont	0	<50 ± 140%	0	<50 ± 87%	0	100 ± 110%	0.0	1.7 ± 165%
Virginia [3]	1,500 ± 137%	2,500 ± 83%	400 ± 114%	900 ± 77%	1,700 ± 122%	4,300 ± 93%	4.5 ± 181%	2.9 ± 114%
West Virginia	200 ± 180%	300 ± 193%	<50 ± 180%	<50 ± 152%	100 ± 180%	100 ± 170%	35.0 ± 255%	7.8 ± 246%
Atlantic Flyway Total	29,600 ± 78%	66,400 ± 81%	7,200	7,500	16,400 ± 60%	24,300 ± 76%		
Alabama	7,300 ± 131%	11,900 ± 176%	3,000 ± 107%	1,600 ± 185%	14,800 ± 128%	8,000 ± 186%	2.5 ± 170%	7.4 ± 255%
Arkansas	600 ± 195%	0	1,600 ± 126%	0	2,400 ± 136%	0	0.4 ± 232%	0.0
Illinois	800 ± 149%	100 ± 194%	100 ± 111%	100 ± 194%	500 ± 125%	200 ± 194%	6.0 ± 186%	1.0 ± 274%
Indiana	700 ± 67%	1,800 ± 70%	100 ± 31%	700 ± 158%	400 ± 44%	1,500 ± 79%	7.5 ± 74%	2.5 ± 173%
Iowa	9,200 ± 114%	2,700 ± 102%	1,900 ± 101%	100 ± 77%	24,600 ± 124%	700 ± 96%	4.8 ± 152%	22.3 ± 128%
Kentucky	8,500 ± 196%	0	400 ± 196%	0	4,400 ± 196%	0	23.0 ± 277%	0.0
Louisiana [3]	123,200 ± 84%	207,600 ± 64%	5,900 ± 68%	8,700 ± 45%	29,400 ± 79%	49,500 ± 95%	19.8 ± 109%	23.9 ± 78%
Michigan	6,500 ± 130%	10,300 ± 105%	2,800 ± 104%	3,400 ± 95%	9,300 ± 108%	11,300 ± 108%	2.3 ± 167%	3.1 ± 141%
Minnesota	41,500 ± 160%	7,000 ± 156%	4,400 ± 63%	1,300 ± 124%	13,800 ± 86%	6,300 ± 169%	9.3 ± 172%	5.2 ± 199%
Mississippi	0	1,400 ± 196%	2,400 ± 111%	700 ± 196%	2,400 ± 111%	700 ± 196%	0.0	2.0 ± 277%
Missouri [3]	1,800 ± 152%	0	800 ± 139%	0	2,600 ± 153%	0	2.9 ± 207%	0.0
Ohio	0	0	0	0	0	0	0.0	0.0
Tennessee [3]	800 ± 138%	0	100 ± 127%	0	1,800 ± 145%	0	13.7 ± 187%	0.0
Wisconsin	4,600 ± 141%	1,800 ± 123%	4,400 ± 93%	1,300 ± 166%	10,400 ± 86%	2,100 ± 113%	1.0 ± 169%	1.4 ± 206%
Mississippi Flyway Total	205,600 ± 65%	244,500 ± 55%	27,900	17,800	116,900 ± 53%	80,300 ± 65%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

[3] Sample size insufficient to provide reliable estimates. Therefore, long-term (1999-2010) averages presented for 2010.

Table 18 (continued). Preliminary estimates of coot harvest and hunter activity during the 2010 and 2011 hunting seasons[1].

State and	Coot Harvest		Active Hunters [2]		Coot Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2010	2011	2010	2011	2010	2011	2010	2011
Colorado	200 ± 195%	2,900 ± 94%	400 ± 134%	1,100 ± 91%	700 ± 124%	2,100 ± 84%	0.4 ± 236%	2.6 ± 131%
Kansas	100 ± 112%	1,400 ± 178%	<50 ± 101%	400 ± 191%	100 ± 103%	400 ± 191%	3.0 ± 151%	3.2 ± 261%
Nebraska	900 ± 196%	0	500 ± 170%	0	1,300 ± 150%	0	1.7 ± 259%	0.0
New Mexico	100 ± 120%	100 ± 194%	<50 ± 83%	<50 ± 194%	<50 ± 103%	100 ± 194%	4.0 ± 146%	2.0 ± 274%
North Dakota	2,300 ± 108%	2,900 ± 108%	1,400 ± 101%	600 ± 138%	3,400 ± 123%	2,500 ± 151%	1.7 ± 148%	5.2 ± 175%
Oklahoma	100 ± 139%	1,200 ± 122%	<50 ± 124%	700 ± 182%	100 ± 129%	800 ± 163%	5.5 ± 186%	1.6 ± 219%
South Dakota	2,800 ± 108%	800 ± 76%	900 ± 91%	400 ± 152%	3,500 ± 113%	500 ± 111%	3.1 ± 141%	2.1 ± 170%
Texas	15,200 ± 131%	12,300 ± 155%	4,800 ± 137%	6,200 ± 137%	7,600 ± 138%	13,300 ± 129%	3.1 ± 190%	2.0 ± 207%
Wyoming	600 ± 115%	100 ± 124%	200 ± 127%	200 ± 129%	200 ± 108%	500 ± 148%	3.3 ± 171%	0.5 ± 179%
Central Flyway Total	22,400 ± 88%	21,700 ± 91%	8,300	9,600	16,800 ± 86%	20,200 ± 88%		
Arizona	0	100 ± 193%	<50 ± 134%	<50 ± 193%	100 ± 150%	100 ± 193%	0.0	2.0 ± 273%
California	28,000 ± 92%	50,000 ± 65%	3,700 ± 62%	6,400 ± 48%	8,200 ± 47%	20,400 ± 57%	7.6 ± 111%	7.9 ± 80%
Idaho	1,300 ± 196%	0	600 ± 196%	0	600 ± 196%	0	2.0 ± 277%	0.0
Montana	<50 ± 184%	1,300 ± 139%	400 ± 192%	500 ± 184%	400 ± 192%	2,200 ± 189%	<0.1 ± 266%	2.8 ± 230%
Nevada	900 ± 100%	600 ± 61%	300 ± 90%	100 ± 130%	600 ± 89%	300 ± 69%	3.4 ± 134%	4.8 ± 143%
Oregon	700 ± 109%	6,500 ± 156%	600 ± 134%	600 ± 144%	7,400 ± 166%	1,900 ± 105%	1.2 ± 173%	11.0 ± 213%
Utah	13,600 ± 121%	14,800 ± 96%	1,300 ± 74%	1,500 ± 60%	3,000 ± 75%	7,800 ± 82%	10.4 ± 142%	9.7 ± 114%
Washington	500 ± 95%	10,900 ± 108%	<50 ± 62%	2,200 ± 72%	300 ± 94%	4,400 ± 96%	10.5 ± 113%	5.0 ± 130%
Pacific Flyway Total	45,100 ± 63%	84,100 ± 46%	7,000	11,300	20,600 ± 54%	37,100 ± 40%		
U.S. Total	302,600 ± 50%	416,600 ± 36%	50,500	46,200	170,700 ± 36%	161,800 ± 37%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

[3] Sample size insufficient to provide reliable estimates. Therefore, long-term (1999-2010) averages presented for 2010.

Table 20. Preliminary estimates of rail harvest and hunter activity during the 2010 and 2011 hunting seasons[1].

State and	Rail Harvest		Active Hunters [2]		Rail Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2010	2011	2010	2011	2010	2011	2010	2011
Connecticut	<50 ± 70%	0	<50 ± 70%	200 ± 137%	<50 ± 70%	700 ± 141%	25.0 ± 99%	0.0
Delaware	0	<50 ± 125%	0	<50 ± 125%	0	<50 ± 125%	0.0	1.0 ± 177%
Florida	2,300 ± 190%	300 ± 194%	600 ± 166%	100 ± 194%	800 ± 141%	600 ± 194%	3.6 ± 252%	5.0 ± 275%
Georgia	1,600 ± 104%	800 ± 193%	200 ± 96%	<50 ± 193%	200 ± 96%	100 ± 193%	10.3 ± 142%	22.0 ± 273%
Maine	0	0	100 ± 136%	0	100 ± 136%	0	0.0	0.0
Maryland	1,000 ± 192%	700 ± 172%	500 ± 192%	<50 ± 131%	2,600 ± 195%	100 ± 153%	2.0 ± 271%	32.5 ± 216%
Massachusetts	<50 ± 138%	0	100 ± 129%	<50 ± 97%	200 ± 97%	100 ± 97%	0.5 ± 188%	0.0
New Jersey	2,300 ± 80%	2,800 ± 133%	100 ± 50%	300 ± 93%	300 ± 57%	400 ± 93%	16.0 ± 94%	9.2 ± 163%
New York	<50 ± 192%	100 ± 192%	100 ± 95%	<50 ± 135%	400 ± 109%	300 ± 163%	0.3 ± 214%	2.0 ± 234%
North Carolina [3]	900 ± 161%	0	500 ± 166%	0	900 ± 167%	0	3.1 ± 226%	0.0
Pennsylvania	0	0	0	<50 ± 193%	0	<50 ± 193%	0.0	0.0
Rhode Island	0	0	0	0	0	0	0.0	0.0
South Carolina	1,500 ± 104%	1,600 ± 110%	100 ± 92%	100 ± 91%	100 ± 103%	200 ± 109%	26.0 ± 138%	27.0 ± 143%
Virginia [3]	5,800 ± 76%	4,400 ± 96%	400 ± 91%	300 ± 120%	900 ± 87%	500 ± 75%	16.1 ± 123%	15.8 ± 153%
West Virginia	0	0	0	0	0	0	0.0	0.0
Atlantic Flyway Total	15,500 ± 62%	10,700 ± 59%	2,700	1,000	6,400 ± 82%	2,900 ± 57%		
Alabama	800 ± 196%	0	1,700 ± 138%	0	11,700 ± 144%	0	0.5 ± 240%	0.0
Arkansas	0	0	200 ± 195%	0	300 ± 195%	0	0.0	0.0
Illinois	1,000 ± 182%	0	1,000 ± 182%	0	2,900 ± 182%	0	1.0 ± 257%	0.0
Indiana	3,400 ± 189%	1,400 ± 146%	800 ± 84%	600 ± 108%	6,200 ± 100%	1,200 ± 134%	4.0 ± 207%	2.3 ± 182%
Iowa	0	0	0	0	0	0	0.0	0.0
Kentucky	0	0	0	0	0	0	0.0	0.0
Louisiana	900 ± 126%	<50 ± 186%	100 ± 58%	<50 ± 186%	400 ± 70%	<50 ± 186%	10.1 ± 138%	5.0 ± 263%
Michigan	0	1,000 ± 195%	200 ± 137%	1,200 ± 159%	1,400 ± 147%	3,100 ± 132%	0.0	0.9 ± 252%
Minnesota	2,500 ± 161%	0	1,100 ± 131%	0	3,700 ± 143%	0	2.4 ± 208%	0.0
Mississippi	0	0	2,300 ± 111%	0	2,300 ± 111%	0	0.0	0.0
Missouri	500 ± 195%	100 ± 195%	100 ± 195%	100 ± 195%	100 ± 195%	300 ± 195%	5.0 ± 276%	1.0 ± 276%
Ohio	0	0	0	0	0	0	0.0	0.0
Tennessee	0	0	0	0	0	0	0.0	0.0
Wisconsin	0	100 ± 192%	4,300 ± 86%	100 ± 136%	8,900 ± 93%	100 ± 158%	0.0	1.5 ± 235%
Mississippi Flyway Total	9,100 ± 88%	2,700 ± 107%	11,800	2,000	38,000 ± 81%	4,700 ± 94%		
Colorado	0	800 ± 196%	100 ± 195%	300 ± 196%	100 ± 195%	800 ± 196%	0.0	3.0 ± 277%
Kansas	0	0	0	0	0	0	0.0	0.0
Nebraska	0	0	100 ± 194%	0	300 ± 194%	0	0.0	0.0
New Mexico	<50 ± 182%	0	300 ± 190%	0	200 ± 196%	0	<0.1 ± 263%	0.0
Oklahoma [3]	300 ± 158%	<50 ± 152%	200 ± 130%	<50 ± 117%	500 ± 135%	<50 ± 133%	8.4 ± 200%	4.0 ± 191%
Texas [3]	2,100 ± 159%	0	1,900 ± 165%	<50 ± 193%	2,100 ± 161%	100 ± 193%	1.8 ± 229%	0.0
Wyoming	0	0	<50 ± 155%	0	<50 ± 155%	0	0.0	0.0
Central Flyway Total	2,400 ± 115%	800 ± 187%	2,600	300	3,300 ± 120%	900 ± 177%		
U.S. Total	27,100 ± 57%	14,300 ± 50%	17,000	3,300	47,700 ± 56%	8,500 ± 59%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

[3] Sample size insufficient to provide reliable estimates. Therefore, long-term (1999-2010) averages presented for 2010.

Table 19. Preliminary estimates of gallinule harvest and hunter activity during the 2010 and 2011 hunting seasons[1].

State and	Gallinule Harvest		Active Hunters [2]		Gallinule Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2010	2011	2010	2011	2010	2011	2010	2011
Delaware	0	<50 ± 177%	0	<50 ± 177%	0	<50 ± 177%	0.0	2.0 ± 251%
Florida	600 ± 180%	600 ± 177%	1,100 ± 132%	100 ± 137%	1,200 ± 127%	600 ± 177%	0.5 ± 223%	5.5 ± 224%
Georgia	0	0	0	0	0	0	0.0	0.0
New Jersey	0	0	0	100 ± 195%	0	100 ± 195%	0.0	0.0
New York	<50 ± 192%	<50 ± 192%	100 ± 110%	<50 ± 192%	400 ± 121%	300 ± 192%	0.7 ± 221%	1.0 ± 271%
North Carolina	0	0	0	0	0	0	0.0	0.0
Pennsylvania	0	0	0	<50 ± 193%	0	<50 ± 193%	0.0	0.0
South Carolina	500 ± 196%	0	500 ± 196%	0	500 ± 196%	0	1.0 ± 277%	0.0
Virginia	<50 ± 192%	<50 ± 183%	200 ± 178%	<50 ± 183%	200 ± 178%	100 ± 183%	0.2 ± 262%	4.0 ± 259%
West Virginia	0	0	0	0	0	0	0.0	0.0
Atlantic Flyway Total	1,100 ± 127%	700 ± 161%	1,900	300	2,200 ± 117%	1,200 ± 112%		
Alabama [3]	300 ± 148%	0	200 ± 138%	0	1,000 ± 141%	0	3.4 ± 199%	0.0
Arkansas	0	0	200 ± 195%	0	300 ± 195%	0	0.0	0.0
Kentucky [3]	400 ± 98%	0	500 ± 131%	0	300 ± 131%	0	1.3 ± 139%	0.0
Louisiana	2,000 ± 69%	200 ± 107%	100 ± 49%	100 ± 75%	500 ± 58%	200 ± 93%	15.5 ± 84%	3.2 ± 131%
Michigan	0	200 ± 195%	1,100 ± 159%	100 ± 195%	3,200 ± 126%	900 ± 195%	0.0	2.0 ± 276%
Minnesota [3]	600 ± 179%	2,000 ± 177%	500 ± 149%	700 ± 177%	800 ± 157%	700 ± 177%	3.4 ± 234%	3.0 ± 251%
Mississippi	0	0	2,300 ± 111%	0	2,300 ± 111%	0	0.0	0.0
Ohio	0	0	0	0	0	0	0.0	0.0
Tennessee	0	0	0	0	0	0	0.0	0.0
Wisconsin	0	<50 ± 192%	4,300 ± 86%	100 ± 136%	8,900 ± 93%	100 ± 158%	0.0	0.5 ± 235%
Mississippi Flyway Total	3,200 ± 88%	2,400 ± 147%	9,300	900	17,200 ± 91%	1,900 ± 115%		
New Mexico	0	0	200 ± 196%	0	200 ± 196%	0	0.0	0.0
Oklahoma	0	0	0	0	0	0	0.0	0.0
Texas	2,300 ± 196%	100 ± 193%	2,300 ± 196%	<50 ± 193%	4,600 ± 196%	<50 ± 193%	1.0 ± 277%	3.0 ± 273%
Central Flyway Total	2,300 ± 196%	100 ± 193%	2,500	<50	4,800 ± 164%	<50 ± 193%		
Arizona [3]	0	0	<50 ± 134%	0	100 ± 150%	0	0.0	0.0
California	6,000 ± 162%	4,300 ± 151%	800 ± 131%	1,000 ± 109%	2,500 ± 145%	2,800 ± 97%	5.7 ± 206%	4.2 ± 187%
Idaho	0	0	0	0	0	0	0.0	0.0
Montana	1,000 ± 196%	0	300 ± 196%	0	300 ± 196%	0	3.0 ± 277%	0.0
Nevada	<50 ± 107%	0	100 ± 132%	0	200 ± 119%	0	0.2 ± 170%	0.0
Pacific Flyway Total	7,000 ± 154%	4,300 ± 151%	1,200	1,000	3,100 ± 130%	2,800 ± 97%		
U.S. Total	13,700 ± 87%	7,600 ± 100%	15,000	2,200	27,500 ± 73%	5,900 ± 63%		

[1] Variance estimates presented as 95% confidence interval as percent of the point estimate.

[2] Hunter number estimates at the management unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance inestimable.

[3] Sample size insufficient to provide reliable estimates. Therefore, long-term (1999-2010) averages presented for 2010.

Table 21. Preliminary estimates of rail harvest during the 2010 and 2011 hunting seasons. Species-specific estimates were derived from 5-year running averages of species composition estimates from the Migratory Bird Wing Collection Survey.

	Sora		Virginia		Clapper		King	
Flyway	2010	2011	2010	2011	2010	2011	2010	2011
Atlantic	6,400	1,900	400	100	27,800	8,800	<50	0
Mississippi	8,900	2,600	100	<50	200	100	<50	<50
Central	19,800	800	500	<50	0	0	0	0
U.S. Total	35,000	5,300	1,000	100	28,000	8,800	<50	<50

Appendix A. Names of people who coordinate the Harvest Information Program or help provide hunter name and address data to the USFWS.

J. Robertson, Alabama Department of Conservation and Natural Resources
K. Dinnan, Alaska Department of Fish and Game
A. Munig, Arizona Game and Fish Department
S. Porter, Arkansas Game and Fish Commission
K. Shepherd, California Department of Fish and Game
E. Gorman, Colorado Parks and Wildlife
M. Huang, Connecticut Department of Environmental Protection
M. DiBona, Delaware Department of Natural Resources and Environmental Control
C. Whittington, Florida Fish and Wildlife Conservation Commission
M. England and D. Neyhart, Georgia Department of Natural Resources
C. Weidmeier, Idaho Department of Fish and Game
C. Hill, Illinois Department of Natural Resources
A. Phelps, Indiana Department of Natural Resources
M. VanGundy, Iowa Department of Natural Resources
M. Becker, Kansas Department of Wildlife, Parks, and Tourism
D. Boebinger, Kentucky Department of Fish and Wildlife Resources
J. Landry, Louisiana Department of Wildlife and Fisheries
B. Swan, Maine Department of Inland Fisheries and Wildlife
B. Evans, Maryland Wildlife and Heritage Service
R. Kennedy and H Heussman, Massachusetts Division of Fisheries and Wildlife
K. Shuler, Michigan Department of Natural Resources
M. Dexter, Minnesota Department of Natural Resources
C. Thornhill, Mississippi Department of Wildlife, Fisheries and Parks
J. Fleming, Missouri Department of Conservation
H. Worsech, Montana Fish, Wildlife and Parks
M. Vrtiska, Nebraska Game and Parks Commission
P. Lannen, Nevada Department of Wildlife
S. Perry, New Hampshire Fish and Game Department
B. Stoff, New Jersey Division of Fish and Wildlife
B. Hale and J. Sands, New Mexico Department of Game and Fish
M. Bailey and B. Swift, New York Department of Environmental Conservation
H. White and B. Dunn, North Carolina Wildlife Resources Commission
J. Gulke, North Dakota Game and Fish Department
K. Brown, Ohio Department of Natural Resources
R. Derrick, Oklahoma Department of Wildlife Conservation
B. Herber and B. Reishus, Oregon Department of Fish and Wildlife
T. Heckrote, Pennsylvania Game Commission
E. Ferris, Rhode Island Division of Fish and Wildlife
B. Robb, South Carolina Department of Natural Resources
C. Huxoll, South Dakota Game, Fish, and Parks
G. Clouse, Tennessee Wildlife Resources Agency
K. Kraii, Texas Parks and Wildlife Department
T. Aldrich and J. Dolling, Utah Division of Wildlife Resources
T. Merrifield and K. Nolan, Vermont Fish and Wildlife Department
B. Ellis and G. Costanzo, Virginia Department of Game and Inland Fisheries
A. Duff and D. Kraege, Washington Department of Fish and Wildlife
L. Rucker, West Virginia Division of Natural Resources

B. Dhuey, Wisconsin Department of Natural Resources
J. Espinoza, Wyoming Game and Fish Department

Appendix B. Names of waterfowl wingbee participants.

Atlantic Flyway wingbee, Laurel, MD; January 23-27, 2012
J. Baird, DE DFW; J. Bennett, MD DNR; P. Bosco, USFWS; L. Coldiron, USFWS; J. Edwards, USFWS; J. Sefchick Edwards, USFWS; C. Ferguson, USFWS (Retired); J. Fine, MD DNR; P. Garrettson, USFWS; G. Graham, PA GC; K. Hojnacki, USFWS; R. Hossler, DE DFW; A. Hunder, NC WRC; S. Janson, USFWS; J. Klimstra, USFWS; D. Lima, USFWS; M. Livingston, USFWS (Volunteer); J. Lutmerding, USGS BBL; J. Madden, BSA Troop 975 (Volunteer); W. Martin, USFWS (Retired); K. McCargo, NC WRC; S. Noyes, USFWS (Volunteer); J. O'Conner, NY DEC; P. Padding, USFWS; M. Peters, WV DNR; B. Raftovich, USFWS; K. Richkus, USFWS; B. Rosamond, USFWS; N. Sagwitz, MD DNR; C. Savage, USFWS; E. Schmuck, USFWS; J. Stiller, NY DEC; S. Stipetich, USFWS; B. West, USFWS; C. Wicker, USFWS; K. Wilkins, USFWS

Mississippi Flyway Wingbee, Carbondale, IL; January 30-February 3, 2012
J. Bolser, USFWS; C. Bryan, USFWS; J. Carbaugh, AR GFC; R. Colvis, KY DFW; B. Eubanks, IL DNR; K. Fritz, USFWS; D. Fuqua, TN WRA; J. Hanks, LA DWF; C. Herwig, MN DNR; N. Jones, IA DNR; M. Kapsch, USFWS; C. Kemmerer, IA DNR; K. Kiefer, OH DNR; C. Klima, OH DNR; G. Knutsen, USFWS; P. Mathias, USFWS; A. Novara, UFSWS (Retired); D. Prosser, UFSWS (Retired); B. Raftovich, USFWS; D. Rave, MN DNR; D. Schelling, USFWS; V. Snyder, OH DNR; R. Urbanek, USFWS; M. Vanmeter, KY DFW; R. Vinson, MO DoC; R. Whitton, IL DNR; K. Wilkins, USFWS; N. Wirwa, USFWS

Central Flyway wingbee, Emporia, KS; February 15-17, 2012
E. Bartholomew, OK DoW; D. Benning, USFWS (Retired); T. Bidrowski, KS DWP; B. Bowser, USFWS; D. Collins, USFWS; J. Dubovsky, USFWS; M. Ealy, TX PWD; J. Eatmon, USFWS; N. Fix, NE GPC; A. Friesen, KS DWP; J. Gammonley, CO DoW; R. Gross, ND GFD; M. Grovijahn, SD GFP; L. Hancock, USFWS; J. Harbit, KS DWP; T. Hasty, OK DoW; M. Haugen, University of Nebraska; G. Hesse, NE GPC; J. Hoskins, USFWS; A. Inslee, USFWS; M. Johnson, ND GFD; S. Johnson, USFWS; Z. Kincaid, USFWS; K. Kraai, TX PWD; K. Kriegel, TX PWD; K. Kruse, USFWS; J. Laing, TX PWD; N. Lyman, NE GFC (Retired); F. Mcnew, KS DWP; B. Piernicky, NE GPC; J. Prendergast, KS DWP; B. Raftovich, USFWS; J. Richardson, OK DoW; L. Roberts, WY GFD; K. Schoonover, OK DoW; J. Solberg, USFWS (Retired); R. Stutheit, NE GPC; G. Suleiman, USFWS; M. Symmank, TX PWD; M. Szymanski, ND GFD; P. Thorpe, USFWS; M. Vrtiska, NE GPC; B. West, USFWS; K. Wilkins, USFWS

Pacific Flyway wingbee, Anderson, CA: February 20-24, 2012
K. Armstrong, CA DFG; D. Bachman, USFWS; B. Bales, OR DFW; T. Bolla, CA DFG; C. Brady, CWA; J. Bredy, USFWS; L. Cockrell, CA DFG; S. Cordes, CA DFG; M. Cox, USFWS; C. Dau, USFWS; R. Doster, USFWS; D. Flores, CA DFG; T. Fowler, CSU; A. Freitas, CA DFG; G. Gerstenberg, CA DFG; B. Greeves, USFWS; K. Guerena, USFWS; D. Kraege, WA DFW; N. Lasher, USFWS; J. Laughlin, USDA; K. Lopez, USFWS; V. Loverti, USFWS; M. Havens, USFWS; K. Neill, NV DoW; M. Nunn, USFWS; S. Oldenburger, CA DFG; S. Olson, USFWS; R. Prince, OR DFW; B. Raftovich, USFWS; N. Saake, NV DoW (Retired); D. Schiecock, CA DFG; P. Schmidt, USFWS; J. Schultz, CA DFG; G. Spaan, USFWS; B. Stone, CA DFG; D. Taylor, USFWS; T. Thornton, OR DFW; B. Trost, USFWS; D. Van Baren, CA DFG; S. Walden, USFWS; P. Walfoort, USFWS; M. Weaver, CA DFG; B. West, USFWS; K. Wilkins, USFWS; M. Wolder, USFWS; L. Wolf, ID DFG

U.S. Fish and Wildlife Service
Division of Migratory Bird Management
Branch of Harvest Surveys
10815 Loblolly Pine Drive
Luurel, MD 20708-4002

http://www.fws.gov

July 2012

Fr State Transfer Relay Service: TTY/Voice: 771