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

US Fish & Wildlife Publications | US Fish & Wildlife Service

7-1-2008

Migratory bird hunting activity and harvest during the 2006 and 2007 hunting seasons: Preliminary Estimates

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

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

Robert V. Raftovich
U.S. Fish and Wildlife Service, Robert_Raftovich@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: http://digitalcommons.unl.edu/usfwspubs

Richkus, Kenneth D.; Wilkins, Khristi; Raftovich, Robert V.; Williams, Sheri S.; and Spriggs, Howard L., "Migratory bird hunting activity and harvest during the 2006 and 2007 hunting seasons: Preliminary Estimates" (2008). *US Fish & Wildlife Publications.* Paper 356.
http://digitalcommons.unl.edu/usfwspubs/356

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 during the 2006 and 2007 hunting seasons

Preliminary Estimates

July 2008

Kenneth D. Richkus, Khristi A. Wilkins, Robert V. Raftovich, Sheri S. Williams, and Howard L. Spriggs

Division of Migratory Bird Management
Branch of Harvest Surveys
Laurel, Maryland

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

This report should be cited as: Richkus, K.D., K. A. Wilkins, R.V. Raftovich, S.S. Williams, and H.L. Spriggs. 2008. Migratory bird hunting activity and harvest during the 2006 and 2007 hunting seasons: Preliminary estimates. U.S. Fish and Wildlife Service. Laurel, Maryland. USA

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

Table of Contents

Abstract 1

Introduction 1

Design and Methods 2

Survey Results 3

Acknowledgements 5

References 6

Waterfowl harvest estimates
- Species, state, flyway 8
- Special seasons 29
- Canada harvest 33
- Long-term trend graphs. 35

Waterfowl age and sex ratios 37
- Long-term trend graphs. 49

Dove and pigeon estimates. 53

Woodcock estimates 55

Snipe, coot, gallinule, and rail estimates. 56

Species-specific rail estimates. 62

List of Tables

Table 1a: Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway 8
Table 1b: Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway 14
Table 1c: Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway 19
Table 1d: Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway 23
Table 1e: Preliminary estimates of waterfowl harvest and hunter activity in the Alaska & the US 26
Table 2: Flyway-specific point estimates of duck and goose harvest in Colorado, Montana, New Mexico, and Wyoming 28
Table 3: Preliminary estimates of sea duck harvest and hunter activity for states with special sea duck seasons or sea duck permits 29
Table 4: Preliminary estimates of Brant harvest and hunter activity along the Atlantic and Pacific coasts 30
Table 5: Preliminary harvest estimates for special September teal/duck seasons 31
Table 6: Preliminary estimates of the number of Canada geese harvested during the special September, regular, and special late seasons 32
Table 7: Waterfowl harvest estimates in Canada 33
Table 8: Preliminary weighted age ratios of mallards in state harvests 37
Table 9: Preliminary weighted age ratios of ducks by species and flyway. 39
Table 10: Preliminary weighted sex ratios of mallards in state harvests. 43
Table 11: Preliminary weighted sex ratios of ducks by species and flyway. 45
Table 12: Preliminary weighted age ratios of geese by species and flyway 48
Table 13: Preliminary estimates of mourning dove harvest and hunter activity. 53
Table 14: Preliminary estimates of white-winged dove harvest and hunter activity. 54
Table 15: Preliminary estimates of band-tailed pigeon harvest and hunter activity. 54
Table 16: Preliminary estimates of woodcock harvest and hunter activity. 55
Table 17: Preliminary estimates of snipe harvest and hunter activity. 56
Table 18: Preliminary estimates of coot harvest and hunter activity 58
Table 19: Preliminary estimates of gallinule harvest and hunter activity 60
Table 20: Preliminary estimates of rail harvest and hunter activity. 61
Table 21: Preliminary species-specific estimates of rail harvest. 62

List of Figures

Figure 1: Number of ducks harvested by hunters in the United States 35
Figure 2: Number of geese harvested by hunters in the United States. 36
Figure 3: Age ratios of mallards harvested in the United States. 49
Figure 4: Age ratios of Northern pintails harvested in the United States. 50
Figure 5: Age ratios of American black ducks and wood ducks harvested in the United States 51
Figure 6: Age ratios of lesser scaup harvested in the United States. 52

Abstract: National surveys of migratory bird hunters were conducted during the 2006 and 2007 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 moorhen [*Gallinula chloropus*] and purple gallinule [*Porzana carolina*]), and rails (king rail [*Rallus elegans*], clapper rail [*R. longirostris*], Virginia rail [*R. limicola*], and sora [*Coturnicops noveboracensis*]). About 1.2 million waterfowl hunters harvested 13,808,100 (±4%) ducks and 3,579,100 (±5%) geese in 2006, and harvested 14,578,900 (±4%) ducks and 3,666,100 (±6%) geese in 2007. Mallard (*Anas platyrhynchos*), green-winged teal (*A. crecca*), gadwall (*A. strepera*), blue-winged/cinnamon teal (*A. discors*/*A. cyanoptera*), and wood duck (*Aix sponsa*) were the most-harvested duck species, and Canada goose (*Branta canadensis*) was the predominant goose species in the harvest. About 1.1 million dove hunters harvested 19,272,400 (±5%) mourning doves in 2006 and 20,550,000 (±5%) in 2007. Woodcock hunters numbered about 121,000 in 2006 and 116,900 in 2007, and harvested 311,800 (±14%) birds in 2006 and 290,000 (±14%) in 2007. About 19,900 people hunted snipe in 2006 and 29,800 in 2007, and they harvested 76,700 (±24%) and 119,400 (±29%) snipe in 2006 and 2007, respectively. Coot hunters (about 39,400 in 2006 and 33,700 in 2007) harvested 199,100 (±29%) coots in 2006 and 198,300 (+29%) in 2007. Gallinule hunters (about 5,200 in 2006 and 2,000 in 2007) harvested 13,700 (±57%) gallinules in 2006 and 4,500 (±103%) in 2007. About 8,700 rail hunters harvested 28,500 (±39%) rails in 2006 and 8,000 rail hunters harvested 24,500 (±39%) rails in 2007.

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 2006-07 and 2007-08 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.

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 also 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 1963-2007 were reported in "American woodcock population status, 2008" (Cooper et al. 2008). This survey was expanded in 1997 to include rail wings to determine the species composition of the rail harvest, and band-tailed pigeon wings to obtain age ratio estimates.

Survey Results

Waterfowl Hunter Activity and Harvest (Tables 1-7, Figures 1-3). HIP waterfowl harvest survey sample sizes and response rates were 78,334 hunters and 55% for the 2006-07 survey,

and 73,898 hunters and a 56% for the 2007-08 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 1999-2007.

Waterfowl Age and Sex Ratios (Tables 8-12, Figures 3-6). The 2006-07 Waterfowl Parts Survey collected 86,233 duck wings and 20,767 goose tails and primary tips; the 2007-08 sample consisted of 93,375 duck wings and 20,797 goose tails and primary wing tips. State-specific mallard age ratios and flyway-level age ratios for other ducks species are reported in Tables 8 and 9, respectively, followed by state-specific mallard sex ratios (Table 10) and flyway-level sex ratios for other duck species (Table 11). Table 12 gives age ratios for geese. Figures 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 46,118 hunters in 2006-07 (60% response rate) and 43,967 hunters in 2007-08 (59% response rate). Estimated numbers of active hunters, days afield, harvest and birds harvested per hunter are given in Table 13 for mourning doves, Table 14 for white-winged doves and Table 15 for band-tailed pigeons.

Woodcock Hunter Activity and Harvest (Table 16). Results of the HIP woodcock harvest survey are presented in Table 16. The 2006-07 survey had a sample size of 23,903 hunters and a

63% response rate; the 2007-08 survey sample size and response rate were 19,399 hunters and 63%.

Snipe, Coot, Gallinule, and Rail Hunter Activity and Harvest (Tables 17-21). The sample for the 2006-07 snipe, coot, gallinule, and rail harvest survey was 25,002 hunters (59% response rate) and 21,988 hunters (59% response rate) for the 2007-08 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 2006-07 estimates are based on the species composition of 1,730 rail wings collected from 2002-2006, and the 2007-08 estimates are based on 2,157 rail wings collected from 2003-2007.

Alaska Sandhill Crane Hunter Activity and Harvest Estimates. The estimates presented below were derived from surveys of 380 (2006-07, 71% response rate) and 589 (2007-08, 72% response rate) Alaska migratory bird hunters. For Alaska's 2006 season, we estimated that 1,000 active sandhill crane hunters spent 3,400 days hunting cranes and harvested 400 birds. In 2007, an estimated 1,000 active hunters spent 2,600 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 2006 and 2007 seasons were reported in, "Status and harvests of sandhill cranes: Mid-continent and Rocky Mountain populations" (Kruse et al. 2008).

Acknowledgments

The Harvest Surveys Section's survey clerks (Ellen Griffin-Pollard, Robert Mack, and Pamela Mathias), mail clerk (Joe Duncan), biological technicians (Amy Croft, Lyle Hancock, and Paul Walfoort), and secretary (Susane Finucane) were major contributors to this project. Thanks also to Paul Padding for reviewing drafts of this report and providing useful comments.

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

Stacey Norris and Julie Perry, Alabama Department of Conservation and Natural Resources
Karen Dinnan and Devin Lando, Alaska Department of Fish and Game
Amber Munig, Arizona Game and Fish Department
Alice Browning, Arkansas Game and Fish Commission
Amanda Palacios and Kim Shepherd, California Department of Fish and Game
Lyn Stevens, Colorado Division of Wildlife
Min Huang, Connecticut Department of Environmental Protection
Carla Cassell-Carter, Delaware Department of Natural Resources and Environmental Control

Susan Weaver, Florida Fish and Wildlife Conservation Commission
James Eager, Georgia Department of Natural Resources
Craig Weidmeier and Gary Rasco, Idaho Department of Fish and Game
Don Newton, Illinois Department of Natural Resources
John Olson, Indiana Department of Natural Resources
Steve Weaver, Iowa Department of Natural Resources
Vicki Shanley, Kansas Department of Wildlife and Parks
Sherry Kefauver and Jeff Kays, Kentucky Department of Fish and Wildlife Resources
Janis Landry, Louisiana Department of Wildlife and Fisheries
Bill Swan, Maine Department of Inland Fisheries and Wildlife
Brent Evans, Maryland Department of Natural Resources
Rick Kennedy, Massachusetts Division of Fisheries and Wildlife
Lisa Jackson, Michigan Department of Natural Resources
Margaret Dexter, Minnesota Department of Natural Resources
Patrick Welch and Curtis Thornhill, Mississippi Department of Wildlife, Fisheries and Parks
Tom Kulowiec, Missouri Department of Conservation
Barry Beardslee, Montana Department of Fish, Wildlife and Parks
Kit Hams, Nebraska Game and Parks Commission
Donald Sefton, Nevada Department of Wildlife
Bryan Murray, New Hampshire Fish and Game Department
Verna Gengler and Paul Castelli, New Jersey Division of Fish and Wildlife
Tim Mitchusson, New Mexico Department of Game and Fish
Art Jacobsen, New York Department of Environmental Conservation
Bobby Dunn, North Carolina Wildlife Resources Commission
Jerry Gulke, North Dakota Game and Fish Department
Jeff Rowley, Ohio Department of Natural Resources
Rodney Derrick, Oklahoma Department of Wildlife Conservation
Valerie Finger and David Enfield, Oregon Department of Fish and Wildlife
Valerie Kazakavage and Terry Heckrote, Pennsylvania Game Commission
Margaret McGrath and Ed Ferris, Rhode Island Division of Fish and Wildlife Resources
Phoebe Carter and Sandra Hartly, South Carolina Department of Natural Resources
Corey Huxoll, South Dakota Game, Fish and Parks Department
Gary Clouse, Tennessee Wildlife Resources Agency
Kevin Kraii, Texas Parks and Wildlife Department
Tom Aldrich, Utah Division of Wildlife Resources
Tom Merrifield, Vermont Fish and Wildlife Department
Bob Ellis, Virginia Department of Game and Inland Fisheries
Wan-ying Chang and Don Kraage, Washington Department of Wildlife
Joyce Newcomer and Larry Rucker, West Virginia Department of Natural Resources
Brian Dhuey, Wisconsin Department of Natural Resources
Jerome Espinoza, Wyoming Game and Fish Department

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., K. Parker, and R.D. Rau. 2008. American woodcock population status, 2008. U.S. Fish and Wildlife Service, Laurel, Maryland. 15 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., D.E. Sharp, J.A Dubovsky. 2008. Status and harvests of sandhill cranes: Mid-continent and Rocky Mountain Populations. U.S. Fish and Wildlife Service, Denver Colorado 11 pp.

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 2006 and 2007 hunting seasons.

	Connecticut		Delaware		Florida	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	10,056	15,686	13,679	16,201	1,660	1,360
Domestic Mallard	85	39	406	175	266	680
Black Duck	2,970	3,390	6,298	5,849	0	0
Mallard x Black Duck Hybrid	424	473	339	643	66	68
Mottled Duck	0	0	0	0	13,146	11,493
Gadwall	0	236	880	2,690	398	1,156
Wigeon	170	276	1,761	643	2,921	2,244
Green-winged Teal	849	2,444	9,480	9,709	21,778	25,501
Blue-winged/Cinnamon Teal	0	39	271	234	47,606	66,371
Northern Shoveler	0	0	1,151	936	5,710	5,780
Northern Pintail	170	0	1,896	1,228	2,988	3,876
Wood Duck	2,461	2,562	2,776	5,088	9,561	8,432
Redhead	0	0	68	0	266	680
Canvasback	0	39	0	58	199	2,108
Greater Scaup	0	0	0	58	332	680
Lesser Scaup	0	39	474	117	6,905	12,105
Ring-necked Duck	170	709	1,219	760	45,149	49,030
Goldeneyes	127	709	0	175	0	0
Bufflehead	933	1,774	880	2,398	465	476
Ruddy Duck	0	0	135	58	465	476
Long-tailed Duck	54	846	0	720	0	0
Eiders	0	85	0	180	0	0
Scoters	246	169	1,000	1,800	0	0
Hooded Merganser	382	1,104	880	468	863	1,224
Other Mergansers	1,103	1,379	406	409	0	0
Other Ducks	0	0	0	0	2,855	4,760
Total Duck Harvest	20,200±32%	32,000±29%	44,000±14%	50,600±29%	163,600±19%	198,500±22%
Total Active Duck Hunters[a]	3,000±17%	3,000±19%	4,100±13%	3,700±13%	12,500±21%	12,200±20%
Total Duck Hunter Days Afield[a]	19,100±25%	20,100±21%	28,100±15%	28,200±16%	66,800±21%	80,500±22%
Seasonal Duck Harvest Per Hunter	6.8±36%	10.7±35%	10.6±19%	13.5±19%	13.1±28%	16.2±30%
Goose Species Composition						
Canada Goose	13,971	18,600	12,816	21,996	2,800	0
Snow Goose	29	0	6,907	7,911	0	0
Blue Goose	0	0	77	193	0	0
Ross's Goose	0	0	0	0	0	1,500
White-fronted Goose	0	0	0	0	0	0
Brant	0	200	800	900	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	14,000±25%	18,800±31%	20,600±17%	31,000±27%	2,800±159%	1,500±195%
Total Active Goose Hunters[b]	2,400±18%	2,100±24%	3,600±13%	4,100±12%	400±113%	700±87%
Total Goose Hunter Days Afield[b]	14,300±22%	14,400±31%	22,200±14%	25,400±18%	800±138%	1,700±92%
Seasonal Goose Harvest Per Hunter	5.8±31%	8.9±40%	5.7±21%	7.6±30%	6.7±195%	2.0±214%
Active Waterfowl Hunters	3,900±14%	3,600±18%	5,200±10%	5,200±10%	12,500±21%	12,500±20%
Sample Sizes						
Duck Wings	497	797	641	834	2,464	2,919
Goose Tails	523	594	272	322	2	1

Table 1A (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2006 and 2007 hunting seasons.

	Georgia		Maine		Maryland	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	6,594	3,211	12,231	12,733	54,254	41,217
Domestic Mallard	0	0	63	166	1,547	1,919
Black Duck	0	0	5,387	4,983	14,039	10,506
Mallard x Black Duck Hybrid	200	0	127	498	1,547	1,313
Mottled Duck	200	247	0	0	0	0
Gadwall	2,398	2,964	0	0	3,688	2,020
Wigeon	1,199	247	127	166	3,926	2,020
Green-winged Teal	9,592	7,656	4,309	6,145	12,017	13,133
Blue-winged/Cinnamon Teal	8,193	5,433	317	277	1,785	707
Northern Shoveler	0	494	0	0	238	404
Northern Pintail	200	0	127	277	1,547	1,010
Wood Duck	54,754	61,743	5,577	5,425	10,827	10,506
Redhead	0	0	0	0	0	404
Canvasback	0	247	0	0	119	1,919
Greater Scaup	400	0	190	0	1,904	3,132
Lesser Scaup	1,199	3,211	190	166	9,756	10,910
Ring-necked Duck	23,580	9,632	1,331	277	833	3,839
Goldeneyes	0	0	2,091	1,605	952	909
Bufflehead	1,199	2,964	760	1,661	14,277	17,477
Ruddy Duck	2,198	1,235	127	111	952	1,414
Long-tailed Duck	0	0	1,779	1,005	8,512	8,279
Eiders	0	0	18,133	13,067	0	0
Scoters	0	494	2,288	1,828	18,988	9,621
Hooded Merganser	7,394	2,223	1,394	2,048	1,785	2,526
Other Mergansers	200	0	2,852	1,661	1,309	1,313
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	119,500±34%	102,000±38%	59,400±21%	54,100±29%	164,799±14%	146,500±15%
Total Active Duck Hunters[a]	13,000±22%	12,000±24%	6,400±17%	5,500±18%	18,200±9%	16,900±11%
Total Duck Hunter Days Afield[a]	76,300±29%	67,000±30%	28,500±17%	30,300±26%	100,300±14%	90,900±14%
Seasonal Duck Harvest Per Hunter	9.2±40%	8.5±45%	9.2±27%	9.9±34%	9.1±17%	8.7±19%
Goose Species Composition						
Canada Goose	14,900	22,400	9,800	9,100	152,686	161,935
Snow Goose	0	0	0	0	1,814	10,452
Blue Goose	0	0	0	0	0	312
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	0	0	0	0	2,300	1,000
Other Geese	0	0	0	0	0	0
Total Goose Harvest	14,900±42%	22,400±49%	9,800±41%	9,100±35%	156,800±12%	173,700±12%
Total Active Goose Hunters[b]	6,200±31%	6,100±34%	4,000±21%	4,600±20%	23,400±7%	26,500±8%
Total Goose Hunter Days Afield[b]	14,400±34%	28,000±45%	16,800±44%	17,100±27%	135,500±12%	131,900±11%
Seasonal Goose Harvest Per Hunter	2.4±52%	3.7±60%	2.5±46%	2.0±40%	6.7±14%	6.6±15%
Active Waterfowl Hunters	13,500±22%	12,500±24%	7,400±16%	7,500±16%	31,200±5%	33,600±6%
Duck Wings	598	413	849	864	1,238	1,353
Goose Tails	89	53	133	176	1,032	1,109

Table 1A (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2006 and 2007 hunting seasons.

	Massachusetts		New Hampshire		New Jersey	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	10,291	7,171	6,212	5,985	15,824	20,301
Domestic Mallard	73	107	0	32	271	114
Black Duck	4,671	3,863	1,882	1,512	12,085	12,774
Mallard x Black Duck Hybrid	365	448	329	257	434	570
Mottled Duck	0	0	0	0	0	0
Gadwall	36	171	0	32	108	342
Wigeon	109	213	94	97	325	399
Green-winged Teal	2,482	1,409	1,176	1,126	7,533	10,664
Blue-winged/Cinnamon Teal	0	43	94	32	0	57
Northern Shoveler	0	0	0	0	217	456
Northern Pintail	146	107	94	129	488	855
Wood Duck	4,124	1,814	6,259	3,668	3,902	6,558
Redhead	0	0	0	0	0	0
Canvasback	0	0	0	0	0	0
Greater Scaup	0	107	47	0	759	1,255
Lesser Scaup	73	64	94	0	596	513
Ring-necked Duck	255	107	988	322	163	228
Goldeneyes	73	235	47	64	54	57
Bufflehead	1,314	1,003	141	225	8,237	10,835
Ruddy Duck	36	107	0	0	271	171
Long-tailed Duck	477	128	0	0	623	3,222
Eiders	5,386	3,399	0	500	0	0
Scoters	3,337	2,373	1,000	500	1,077	578
Hooded Merganser	438	320	518	354	2,384	2,281
Other Mergansers	912	512	424	64	1,951	969
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	34,600±29%	23,700±21%	19,400±18%	14,900±28%	57,300±17%	73,200±19%
Total Active Duck Hunters[a]	3,800±11%	2,700±15%	2,800±16%	2,300±15%	5,700±9%	6,300±11%
Total Duck Hunter Days Afield[a]	22,400±14%	17,700±20%	20,100±21%	15,500±19%	39,400±14%	45,100±15%
Seasonal Duck Harvest Per Hunter	9.1±31%	8.8±26%	7.0±24%	6.4±32%	10.1±20%	11.6±22%
Goose Species Composition						
Canada Goose	13,080	10,969	6,714	6,500	27,520	34,565
Snow Goose	21	31	43	0	4,896	6,935
Blue Goose	0	0	43	0	84	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	400	700	0	0	5,200	7,600
Other Geese	0	0	0	0	0	0
Total Goose Harvest	13,500±21%	11,700±25%	6,800±22%	6,500±29%	37,700±25%	49,100±25%
Total Active Goose Hunters[b]	2,400±13%	2,100±16%	2,200±17%	2,000±16%	3,700±13%	4,800±12%
Total Goose Hunter Days Afield[b]	14,100±17%	13,200±28%	16,400±22%	10,700±20%	21,600±23%	29,000±21%
Seasonal Goose Harvest Per Hunter	5.5±25%	5.7±30%	3.1±27%	3.3±33%	10.2±28%	10.3±27%
Active Waterfowl Hunters	4,900±8%	3,600±12%	3,200±16%	2,800±14%	6,500±8%	7,200±9%
Sample Sizes						
Duck Wings	889	926	396	434	1,056	1,263
Goose Tails	641	723	159	185	516	533

Table 1A (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2006 and 2007 hunting seasons.

	New York		North Carolina		Pennsylvania	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	83,448	92,049	32,467	32,889	65,495	92,323
Domestic Mallard	738	714	637	707	976	918
Black Duck	20,973	22,656	5,517	4,126	8,024	12,065
Mallard x Black Duck Hybrid	1,699	1,249	424	354	1,084	1,443
Mottled Duck	0	0	0	0	0	0
Gadwall	2,215	1,606	8,700	5,540	2,386	4,065
Wigeon	6,572	4,817	16,976	6,837	1,843	1,049
Green-winged Teal	14,327	17,215	28,647	20,511	6,398	11,409
Blue-winged/Cinnamon Teal	443	1,160	2,334	2,122	325	1,049
Northern Shoveler	369	892	1,698	2,004	217	262
Northern Pintail	2,954	2,587	7,639	4,126	217	1,967
Wood Duck	16,468	25,510	73,422	76,270	21,579	37,375
Redhead	665	3,211	849	2,476	108	262
Canvasback	148	446	212	707	0	131
Greater Scaup	3,766	4,192	1,061	707	542	1,574
Lesser Scaup	3,397	4,014	16,340	6,012	651	2,885
Ring-necked Duck	4,579	2,943	22,493	22,633	3,145	3,803
Goldeneyes	6,277	7,849	0	118	1,518	2,492
Bufflehead	7,606	13,468	7,851	9,195	4,663	9,704
Ruddy Duck	74	357	1,698	2,358	217	1,574
Long-tailed Duck	5,531	10,646	212	354	0	262
Eiders	357	0	0	0	0	0
Scoters	3,212	4,154	3,820	9,195	0	393
Hooded Merganser	2,068	2,497	4,881	8,134	2,494	4,852
Other Mergansers	3,914	4,371	1,910	825	1,518	3,541
Other Ducks	0	0	212	0	0	0
Total Duck Harvest	191,800±10%	228,600±14%	240,000±17%	218,200±18%	123,400±19%	195,400±35%
Total Active Duck Hunters[a]	20,600±6%	21,000±6%	21,900±14%	21,700±15%	25,200±15%	29,700±16%
Total Duck Hunter Days Afield[a]	128,600±8%	139,600±10%	149,400±17%	145,400±17%	126,000±18%	161,000±22%
Seasonal Duck Harvest Per Hunter	9.3±11%	10.9±15%	11.0±21%	10.0±23%	4.9±24%	6.6±39%
Goose Species Composition						
Canada Goose	113,856	138,122	43,300	54,360	160,553	276,047
Snow Goose	6,799	10,078	0	870	11,178	11,772
Blue Goose	164	0	0	435	169	240
Ross's Goose	82	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	3,400	4,800	3,600	4,200	0	0
Other Geese	0	0	0	435	0	240
Total Goose Harvest	124,300±11%	153,000±17%	46,900±23%	60,300±34%	171,900±16%	288,300±32%
Total Active Goose Hunters[b]	17,200±6%	17,700±6%	15,200±17%	15,700±18%	34,100±12%	37,500±13%
Total Goose Hunter Days Afield[b]	95,400±8%	106,100±11%	51,400±23%	62,300±28%	168,300±15%	244,800±18%
Seasonal Goose Harvest Per Hunter	7.2±13%	8.6±18%	3.1±28%	3.8±39%	5.0±20%	7.7±34%
Active Waterfowl Hunters	24,800±5%	25,600±5%	24,500±13%	24,100±14%	41,800±12%	45,400±13%
Sample Sizes						
Duck Wings	2,525	2,454	1,131	1,851	1,138	1,490
Goose Tails	1,539	1,313	182	134	1,015	1,200

Table 1A (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2006 and 2007 hunting seasons.

	Rhode Island		South Carolina		Vermont	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	2,135	2,580	35,874	26,790	7,987	7,640
Domestic Mallard	0	0	1,135	1,683	0	26
Black Duck	1,466	2,293	1,135	1,964	1,473	1,213
Mallard x Black Duck Hybrid	96	107	681	1,262	255	155
Mottled Duck	0	0	454	1,122	0	0
Gadwall	64	107	5,222	7,013	57	26
Wigeon	478	896	1,816	2,946	57	258
Green-winged Teal	223	287	21,116	21,741	3,286	2,452
Blue-winged/Cinnamon Teal	0	36	8,174	11,361	227	52
Northern Shoveler	0	36	2,043	2,946	28	26
Northern Pintail	32	36	1,135	1,823	170	206
Wood Duck	223	179	101,945	58,910	3,824	3,123
Redhead	0	0	0	0	28	0
Canvasback	0	0	0	421	0	0
Greater Scaup	0	394	0	421	57	129
Lesser Scaup	64	143	1,135	2,946	340	232
Ring-necked Duck	96	0	30,652	10,941	312	258
Goldeneyes	0	215	0	0	595	310
Bufflehead	191	824	1,589	1,262	283	129
Ruddy Duck	0	72	0	0	28	0
Long-tailed Duck	0	33	0	0	28	26
Eiders	1,600	1,300	0	0	0	0
Scoters	1,100	767	0	421	113	0
Hooded Merganser	382	394	6,357	3,507	198	258
Other Mergansers	351	502	681	281	255	181
Other Ducks	0	0	454	140	0	0
Total Duck Harvest	8,500±51%	11,200±27%	221,600±22%	159,900±20%	19,600±20%	16,700±23%
Total Active Duck Hunters[a]	500±44%	900±17%	19,900±16%	17,400±16%	2,000±15%	1,800±18%
Total Duck Hunter Days Afield[a]	4,500±54%	6,200±20%	128,800±24%	117,400±23%	13,800±14%	10,600±18%
Seasonal Duck Harvest Per Hunter	17.6±67%	11.9±32%	11.1±27%	9.2±25%	9.9±25%	9.2±29%
Goose Species Composition						
Canada Goose	5,300	5,100	27,100	24,800	7,750	6,298
Snow Goose	0	0	0	0	50	484
Blue Goose	0	0	0	0	0	18
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	400	1,200	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	5,700±52%	6,300±32%	27,100±32%	24,800±31%	7,800±23%	6,800±21%
Total Active Goose Hunters[b]	600±50%	900±21%	8,700±20%	8,300±20%	1,800±20%	1,800±18%
Total Goose Hunter Days Afield[b]	4,500±39%	5,300±23%	41,200±29%	27,800±27%	8,200±21%	6,900±21%
Seasonal Goose Harvest Per Hunter	10.0±72%	7.4±38%	3.1±38%	3.0±37%	4.4±30%	3.9±28%
Active Waterfowl Hunters	1,000±34%	1,200±13%	21,500±16%	18,900±16%	2,400±15%	2,400±16%
Sample Sizes						
Duck Wings	236	317	976	1,140	692	647
Goose Tails	187	137	116	169	310	380

Table 1A (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2006 and 2007 hunting seasons.

	Virginia		West Virginia		Flyway Total	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	39,942	47,541	1,502	4,241	399,651	429,917
Domestic Mallard	824	303	22	0	7,044	7,585
Black Duck	7,237	10,924	199	589	93,356	98,705
Mallard x Black Duck Hybrid	641	910	44	39	8,755	9,791
Mottled Duck	0	0	0	0	13,800	12,862
Gadwall	7,054	10,823	44	157	33,252	38,950
Wigeon	1,557	2,428	66	0	39,999	25,536
Green-winged Teal	11,268	5,361	133	275	154,612	157,037
Blue-winged/Cinnamon Teal	733	405	88	275	70,590	89,652
Northern Shoveler	824	809	0	0	12,496	15,045
Northern Pintail	458	809	22	39	20,282	19,076
Wood Duck	13,467	27,412	1,480	2,788	332,648	337,365
Redhead	0	202	0	0	1,984	7,235
Canvasback	550	910	0	0	1,228	6,988
Greater Scaup	1,466	506	0	0	10,523	13,154
Lesser Scaup	5,405	3,237	0	0	46,619	46,594
Ring-necked Duck	9,527	15,274	0	0	144,491	120,756
Goldeneyes	1,008	0	0	0	12,742	14,739
Bufflehead	10,535	5,867	0	79	60,927	79,340
Ruddy Duck	824	708	0	39	7,026	8,679
Long-tailed Duck	979	1,000	0	0	18,196	26,521
Eiders	0	0	0	0	25,476	18,531
Scoters	10,121	8,500	0	0	46,301	40,793
Hooded Merganser	4,764	5,867	0	79	37,182	38,135
Other Mergansers	2,015	405	0	0	19,801	16,413
Other Ducks	0	0	0	0	3,521	4,900
Total Duck Harvest	131,200±18%	150,200±29%	3,600±25%	8,600±32%	1,622,500±6%	1,684,300±7%
Total Active Duck Hunters[a]	16,300±13%	17,300±13%	700±21%	1,000±19%	176,500[c]	175,600[c]
Total Duck Hunter Days Afield[a]	91,100±18%	94,100±16%	3,200±23%	6,700±28%	1,046,200±6%	1,076,300±6%
Seasonal Duck Harvest Per Hunter	8.0±22%	8.7±32%	5.5±33%	8.7±37%		
Goose Species Composition						
Canada Goose	47,817	63,289	2,485	6,660	662,449	860,743
Snow Goose	983	1,010	0	0	32,719	49,544
Blue Goose	0	0	0	0	537	1,198
Ross's Goose	0	0	0	0	82	1,500
White-fronted Goose	0	0	0	0	0	0
Brant	2,400	1,700	0	0	18,500	22,300
Other Geese	0	0	15	40	15	715
Total Goose Harvest	51,200±15%	66,000±20%	2,500±31%	6,700±43%	714,300±6%	936,000±11%
Total Active Goose Hunters[b]	13,800±12%	15,200±12%	600±23%	1,100±21%	140,400[c]	151,100[c]
Total Goose Hunter Days Afield[b]	63,500±14%	70,100±15%	2,900±28%	6,700±37%	691,500±6%	801,600±7%
Seasonal Goose Harvest Per Hunter	3.5±20%	4.2±24%	4.0±39%	6.3±48%		
Active Waterfowl Hunters	21,100±11%	23,200±11%	900±19%	1,300±16%	226,200[c]	230,500[c]
Sample Sizes						
Duck Wings	1,345	1,410	163	219	16,834	19,331
Goose Tails	611	706	170	169	7,497	7,904

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2006 and 2007 hunting seasons.

	Alabama		Arkansas		Illinois	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	35,420	26,998	547,500	578,131	311,871	272,432
Domestic Mallard	0	643	1,177	668	2,111	733
Black Duck	1,801	321	784	0	3,921	2,932
Mallard x Black Duck Hybrid	200	0	0	334	905	977
Mottled Duck	200	0	0	0	0	0
Gadwall	60,835	29,890	169,819	198,941	55,196	37,872
Wigeon	5,403	4,500	19,610	19,360	13,573	11,239
Green-winged Teal	6,404	14,142	152,955	88,122	32,575	30,786
Blue-winged/Cinnamon Teal	7,804	17,034	33,336	12,350	16,589	10,018
Northern Shoveler	1,601	3,214	67,457	68,762	13,573	16,859
Northern Pintail	800	1,286	21,571	23,366	9,652	10,506
Wood Duck	34,220	37,925	81,968	68,094	21,716	19,302
Redhead	800	1,286	3,138	4,339	4,223	3,421
Canvasback	1,601	964	2,353	1,335	10,255	8,552
Greater Scaup	200	1,286	784	0	603	1,222
Lesser Scaup	200	1,928	9,413	10,681	6,937	14,416
Ring-necked Duck	12,807	18,641	20,002	29,374	13,271	18,325
Goldeneyes	1,401	321	784	0	905	4,154
Bufflehead	400	1,286	784	3,338	2,111	733
Ruddy Duck	400	321	5,883	1,001	302	733
Long-tailed Duck	0	0	0	0	302	244
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	0	0
Hooded Merganser	800	3,214	5,883	4,006	1,810	1,466
Other Mergansers	0	0	0	0	302	977
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	173,300±32%	165,200±67%	1,145,200±13%	1,112,200±11%	522,700±11%	467,900±11%
Total Active Duck Hunters	16,200±25%	8,900±22%	59,000±9%	59,900±9%	37,300±9%	39,000±9%
Total Duck Hunter Days Afield	95,200±29%	83,700±43%	483,500±11%	438,300±10%	342,100±10%	324,500±10%
Seasonal Duck Harvest Per Hunter	10.7±41%	18.5±70%	19.4±15%	18.6±14%	14.0±14%	12.0±14%
Goose Species Composition						
Canada Goose	19,664	18,754	39,894	16,632	158,224	168,464
Snow Goose	936	447	79,788	27,720	2,675	5,415
Blue Goose	0	0	34,690	14,207	2,293	4,512
Ross's Goose	0	0	6,938	2,426	1,911	301
White-fronted Goose	0	0	34,690	38,115	6,497	2,707
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	20,600±63%	19,200±69%	196,000±35%	99,100±19%	171,600±15%	181,400±14%
Total Active Goose Hunters	5,500±43%	4,600±36%	20,700±15%	17,800±16%	34,100±10%	33,700±10%
Total Goose Hunter Days Afield	15,900±49%	25,600±51%	119,600±26%	79,000±26%	258,400±13%	254,600±14%
Seasonal Goose Harvest Per Hunter	3.8±76%	4.2±78%	9.4±38%	5.6±25%	5.0±18%	5.4±17%
Active Waterfowl Hunters	16,200±25%	9,300±22%	59,600±9%	60,400±9%	45,100±8%	45,100±8%
Sample Sizes						
Duck Wings	866	514	2,920	3,332	1,733	1,915
Goose Tails	66	43	113	286	449	603

Table 1B (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2006 and 2007 hunting seasons.

	Indiana		Iowa		Kentucky	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	60,669	76,139	73,177	72,680	81,564	89,251
Domestic Mallard	114	341	0	0	0	0
Black Duck	2,618	2,731	290	0	2,302	3,514
Mallard x Black Duck Hybrid	114	455	0	481	0	0
Mottled Duck	0	0	0	0	0	0
Gadwall	7,968	9,674	16,374	14,761	15,129	18,272
Wigeon	2,504	1,480	6,231	3,048	3,947	4,217
Green-winged Teal	10,017	9,446	31,879	39,468	8,222	6,325
Blue-winged/Cinnamon Teal	10,927	8,081	27,822	40,271	6,578	4,217
Northern Shoveler	2,959	3,414	7,390	10,910	1,973	6,325
Northern Pintail	1,821	2,162	3,912	7,220	987	4,217
Wood Duck	15,708	15,478	26,662	34,174	23,680	27,056
Redhead	114	569	1,449	1,284	0	703
Canvasback	114	114	725	642	0	351
Greater Scaup	114	114	0	160	0	351
Lesser Scaup	228	569	2,029	1,604	658	3,514
Ring-necked Duck	3,529	2,276	3,188	3,690	987	4,568
Goldeneyes	114	683	0	160	329	351
Bufflehead	2,618	1,252	725	1,284	0	3,162
Ruddy Duck	228	228	0	321	0	351
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	228	0	0	0	351
Hooded Merganser	683	797	1,159	642	1,644	703
Other Mergansers	341	455	290	0	0	0
Other Ducks	0	114	0	0	0	0
Total Duck Harvest	123,500±14%	136,800±19%	203,300±13%	232,800±17%	148,000±38%	177,800±54%
Total Active Duck Hunters	14,300±11%	12,800±11%	18,000±10%	20,400±9%	9,200±21%	7,700±27%
Total Duck Hunter Days Afield	101,100±13%	92,400±15%	129,900±12%	151,400±15%	83,100±33%	80,500±43%
Seasonal Duck Harvest Per Hunter	8.7±18%	10.7±22%	11.3±16%	11.4±20%	16.0±43%	23.2±60%
Goose Species Composition						
Canada Goose	57,193	69,554	73,917	64,634	27,216	27,907
Snow Goose	2,295	0	242	266	0	0
Blue Goose	1,059	0	0	0	0	821
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	353	146	242	0	1,384	2,873
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	60,900±22%	69,700±23%	74,400±17%	64,900±18%	28,600±42%	31,600±64%
Total Active Goose Hunters	13,600±10%	11,100±10%	15,500±12%	13,900±12%	8,200±24%	7,400±33%
Total Goose Hunter Days Afield	89,500±13%	82,300±17%	106,500±14%	98,300±19%	60,700±32%	49,700±37%
Seasonal Goose Harvest Per Hunter	4.5±24%	6.3±25%	4.8±21%	4.7±22%	3.5±48%	4.2±72%
Active Waterfowl Hunters	16,500±10%	14,400±10%	21,300±10%	23,700±8%	10,200±20%	7,700±27%
Sample Sizes						
Duck Wings	1,085	1,202	1,403	1,451	450	506
Goose Tails	345	477	308	244	62	77

Table 1B (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2006 and 2007 hunting seasons.

	Louisiana		Michigan		Minnesota	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	86,787	142,526	173,160	168,461	215,727	178,969
Domestic Mallard	732	0	619	502	579	270
Black Duck	366	0	9,907	10,293	1,158	540
Mallard x Black Duck Hybrid	0	0	1,445	1,004	290	270
Mottled Duck	41,746	49,435	0	0	0	0
Gadwall	224,108	253,594	6,604	3,766	38,802	24,834
Wigeon	36,619	35,953	5,779	6,025	20,849	12,417
Green-winged Teal	188,222	334,166	31,577	26,863	47,199	49,399
Blue-winged/Cinnamon Teal	293,318	373,971	5,572	3,515	54,438	60,196
Northern Shoveler	70,675	85,387	1,238	753	13,610	10,798
Northern Pintail	26,732	46,546	3,921	6,025	7,818	13,227
Wood Duck	131,828	114,920	43,961	48,203	81,658	80,981
Redhead	9,887	9,630	11,971	12,051	24,613	18,896
Canvasback	6,958	18,297	2,270	2,008	13,030	8,098
Greater Scaup	366	642	13,415	9,791	1,737	1,890
Lesser Scaup	29,295	11,235	10,526	6,779	21,717	12,147
Ring-necked Duck	164,053	37,237	10,319	9,289	80,499	68,024
Goldeneyes	732	963	5,160	4,017	3,185	9,448
Bufflehead	2,197	963	34,467	26,110	6,950	9,718
Ruddy Duck	2,563	321	1,445	3,766	1,158	1,350
Long-tailed Duck	366	0	4,128	1,004	290	0
Eiders	0	0	0	0	0	0
Scoters	0	0	1,445	1,506	0	0
Hooded Merganser	6,225	9,630	2,064	3,264	5,791	1,890
Other Mergansers	732	963	3,509	251	0	540
Other Ducks	7,690	6,420	0	251	0	0
Total Duck Harvest	1,332,200±14%	1,532,800±13%	384,500±14%	355,500±20%	641,100±11%	563,900±11%
Total Active Duck Hunters	56,000±9%	62,300±9%	38,000±10%	39,200±10%	73,800±9%	70,200±9%
Total Duck Hunter Days Afield	484,000±12%	539,500±12%	244,700±11%	252,800±14%	407,900±10%	414,700±10%
Seasonal Duck Harvest Per Hunter	23.8±16%	24.6±15%	10.1±17%	9.1±22%	8.7±14%	8.0±14%
Goose Species Composition						
Canada Goose	1,335	3,128	157,292	149,200	240,703	203,469
Snow Goose	25,366	27,106	0	0	1,011	0
Blue Goose	32,041	35,446	208	0	1,686	331
Ross's Goose	1,335	4,170	0	0	0	0
White-fronted Goose	96,123	118,850	0	0	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	156,200±25%	188,700±48%	157,500±16%	149,200±15%	243,400±14%	203,800±13%
Total Active Goose Hunters	18,000±13%	18,700±15%	37,200±10%	34,000±10%	60,300±9%	56,400±10%
Total Goose Hunter Days Afield	115,500±20%	111,300±28%	206,000±12%	177,400±13%	325,500±13%	329,400±13%
Seasonal Goose Harvest Per Hunter	8.7±29%	10.1±51%	4.2±19%	4.4±19%	4.0±16%	3.6±16%
Active Waterfowl Hunters	57,000±9%	62,700±9%	48,400±9%	46,000±9%	86,900±8%	77,200±9%
Sample Sizes						
Duck Wings	3,638	4,775	1,863	1,416	2,214	2,089
Goose Tails	117	181	758	593	722	615

Table 1B (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2006 and 2007 hunting seasons.

	Mississippi		Missouri		Ohio	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	131,924	119,572	221,725	232,435	75,660	101,036
Domestic Mallard	380	0	0	175	676	496
Black Duck	380	1,100	765	175	4,898	8,192
Mallard x Black Duck Hybrid	0	275	0	175	844	745
Mottled Duck	760	2,199	0	0	0	0
Gadwall	93,905	98,131	49,238	55,358	6,080	6,454
Wigeon	6,843	8,521	12,386	9,605	3,209	745
Green-winged Teal	41,440	57,999	42,816	46,103	14,862	10,923
Blue-winged/Cinnamon Teal	4,562	19,516	18,044	35,450	5,067	8,937
Northern Shoveler	15,207	20,341	15,903	32,132	2,364	2,979
Northern Pintail	6,083	5,772	8,563	9,779	2,195	4,220
Wood Duck	19,009	44,255	12,080	13,796	10,977	11,419
Redhead	760	275	2,600	2,270	1,182	1,241
Canvasback	0	0	765	1,222	169	496
Greater Scaup	380	275	153	0	0	496
Lesser Scaup	4,182	4,123	2,905	2,619	1,520	3,475
Ring-necked Duck	2,281	6,047	12,080	7,684	4,053	2,731
Goldeneyes	0	0	306	524	1,013	496
Bufflehead	380	825	153	0	5,911	3,227
Ruddy Duck	0	0	765	0	676	0
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	153	0	0	496
Hooded Merganser	1,521	4,673	2,447	1,222	676	745
Other Mergansers	0	0	0	175	169	248
Other Ducks	0	0	153	0	0	0
Total Duck Harvest	330,000±32%	393,900±23%	404,000±18%	450,900±19%	142,200±18%	169,800±67%
Total Active Duck Hunters	16,800±16%	16,400±14%	29,900±12%	34,600±11%	22,300±19%	20,000±22%
Total Duck Hunter Days Afield	130,400±26%	134,200±18%	211,600±19%	218,800±15%	139,400±18%	157,500±35%
Seasonal Duck Harvest Per Hunter	19.6±36%	24.0±27%	13.5±22%	13.0±22%	6.4±26%	8.5±71%
Goose Species Composition						
Canada Goose	10,026	13,660	70,418	42,158	86,600	78,286
Snow Goose	6,016	13,660	8,690	4,382	0	0
Blue Goose	7,353	3,643	5,394	2,487	0	307
Ross's Goose	0	1,821	300	118	0	0
White-fronted Goose	2,005	10,017	1,199	355	0	307
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	25,400±31%	42,800±33%	86,000±40%	49,500±19%	86,600±21%	78,900±24%
Total Active Goose Hunters	6,000±26%	7,200±20%	15,100±16%	14,000±16%	21,400±17%	19,900±19%
Total Goose Hunter Days Afield	21,400±35%	31,500±29%	99,500±29%	60,300±26%	162,500±27%	124,100±23%
Seasonal Goose Harvest Per Hunter	4.2±40%	5.9±38%	5.7±43%	3.5±25%	4.1±27%	4.0±31%
Active Waterfowl Hunters	17,100±16%	16,500±13%	32,200±12%	37,300±10%	24,700±18%	22,100±21%
Sample Sizes						
Duck Wings	868	1,433	2,642	2,582	842	684
Goose Tails	38	47	287	418	286	257

Table 1B (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2006 and 2007 hunting seasons.

	Tennessee		Wisconsin		Flyway Total	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	127,435	284,440	144,024	171,048	2,286,643	2,514,119
Domestic Mallard	681	0	1,423	0	8,493	3,828
Black Duck	4,089	7,038	2,562	1,856	35,840	38,692
Mallard x Black Duck Hybrid	681	0	0	530	4,479	5,246
Mottled Duck	0	0	0	0	42,706	51,634
Gadwall	42,933	71,550	16,793	19,094	803,785	842,192
Wigeon	16,355	20,527	10,531	11,138	163,839	148,774
Green-winged Teal	23,852	29,910	27,609	48,530	659,628	792,182
Blue-winged/Cinnamon Teal	4,770	2,932	25,048	30,232	513,876	626,720
Northern Shoveler	6,133	18,181	5,408	9,016	225,492	289,071
Northern Pintail	6,815	16,421	3,416	11,668	104,286	162,416
Wood Duck	59,288	38,121	72,297	67,889	635,053	621,615
Redhead	1,363	1,759	7,400	5,304	69,500	63,027
Canvasback	0	5,865	7,400	8,486	45,640	56,432
Greater Scaup	0	1,759	3,700	3,978	21,454	21,964
Lesser Scaup	1,363	5,865	10,247	5,834	101,219	84,791
Ring-necked Duck	2,726	18,767	23,909	14,586	353,705	241,239
Goldeneyes	0	586	5,977	4,773	19,906	26,478
Bufflehead	3,407	0	18,786	8,486	78,889	60,383
Ruddy Duck	0	1,173	6,831	1,326	20,250	10,891
Long-tailed Duck	0	0	3,985	1,591	9,070	2,840
Eiders	0	0	0	0	0	0
Scoters	0	0	285	1,856	1,882	4,438
Hooded Merganser	3,407	3,519	3,131	2,917	37,241	38,686
Other Mergansers	0	0	854	1,061	6,197	4,670
Other Ducks	0	586	285	0	8,128	7,371
Total Duck Harvest	305,300±43%	529,000±35%	401,900±12%	431,200±10%	6,257,200±5%	6,719,700±6%
Total Active Duck Hunters	12,900±25%	22,100±19%	60,000±10%	60,900±10%	463,700[c]	474,400[c]
Total Duck Hunter Days Afield	142,700±35%	206,500±26%	368,700±14%	384,300±11%	3,364,300±4%	3,479,100±4%
Seasonal Duck Harvest Per Hunter	23.7±50%	24.0±40%	6.7±15%	7.1±14%		
Goose Species Composition						
Canada Goose	23,575	26,632	112,593	114,200	1,078,650	996,677
Snow Goose	1,025	6,146	254	0	128,297	85,141
Blue Goose	0	2,049	254	0	84,977	63,803
Ross's Goose	0	0	0	0	10,484	8,836
White-fronted Goose	0	3,073	0	0	142,493	176,444
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	24,600±32%	37,900±54%	113,100±15%	114,200±15%	1,444,900±7%	1,330,900±9%
Total Active Goose Hunters	10,600±27%	12,300±24%	48,600±9%	46,700±10%	314,800[c]	297,700[c]
Total Goose Hunter Days Afield	75,800±42%	97,300±42%	293,400±15%	286,800±15%	1,950,400±6%	1,807,700±6%
Seasonal Goose Harvest Per Hunter	2.3±41%	3.1±59%	2.3±18%	2.4±18%		
Active Waterfowl Hunters	13,300±25%	22,900±19%	77,600±9%	83,300±8%	526,200[c]	528,700[c]
Sample Sizes						
Duck Wings	448	902	1,412	1,626	22,384	24,427
Goose Tails	24	37	446	521	4,021	4,399

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2006 and 2007 hunting seasons.

	Colorado		Kansas		Nebraska	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	55,111	52,021	55,780	61,203	86,754	91,047
Domestic Mallard	0	0	169	0	185	160
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	0	0	0	0	0	80
Mottled Duck	0	0	0	0	0	0
Gadwall	9,844	9,248	30,594	27,687	12,459	10,820
Wigeon	7,988	5,869	7,944	6,638	10,798	9,377
Green-winged Teal	11,619	14,317	15,889	26,716	20,581	31,257
Blue-winged/Cinnamon Teal	8,311	14,850	24,847	26,878	20,212	40,795
Northern Shoveler	3,389	5,780	6,254	4,210	5,353	7,053
Northern Pintail	888	1,956	2,704	2,591	1,477	4,328
Wood Duck	1,130	1,156	2,874	1,133	1,938	5,530
Redhead	2,179	3,023	4,226	1,619	3,784	2,404
Canvasback	161	267	338	324	831	240
Greater Scaup	161	89	169	0	92	0
Lesser Scaup	565	356	845	648	831	561
Ring-necked Duck	3,712	1,956	8,113	4,048	2,030	1,362
Goldeneyes	2,259	1,956	507	486	369	1,362
Bufflehead	81	89	0	648	554	160
Ruddy Duck	81	0	0	0	369	160
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	89	0	0	0	0
Hooded Merganser	161	0	338	810	92	641
Other Mergansers	161	178	507	0	92	160
Other Ducks	0	0	0	162	0	0
Total Duck Harvest	107,800±13%	113,200±13%	162,100±21%	165,800±24%	168,800±12%	207,500±20%
Total Active Duck Hunters	12,400±14%	11,900±13%	12,700±16%	13,000±16%	16,000±12%	14,800±15%
Total Duck Hunter Days Afield	65,000±15%	66,100±12%	85,400±20%	82,100±21%	111,500±14%	121,500±28%
Seasonal Duck Harvest Per Hunter	8.7±19%	9.5±18%	12.8±27%	12.7±29%	10.6±17%	14.1±25%
Goose Species Composition						
Canada Goose	69,176	66,461	59,566	59,968	56,988	63,794
Snow Goose	10,769	9,962	15,884	6,785	5,965	4,424
Blue Goose	1,267	427	6,774	2,845	3,681	1,427
Ross's Goose	6,461	1,708	5,840	1,313	1,777	714
White-fronted Goose	127	142	2,336	13,788	888	1,142
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	87,800±24%	78,700±13%	90,400±32%	84,700±23%	69,300±15%	71,500±20%
Total Active Goose Hunters	13,000±14%	14,600±13%	12,000±17%	14,300±16%	13,700±12%	12,500±13%
Total Goose Hunter Days Afield	76,800±22%	84,200±14%	61,000±17%	79,700±20%	99,200±14%	106,800±22%
Seasonal Goose Harvest Per Hunter	6.8±27%	5.4±18%	7.5±37%	5.9±28%	5.1±19%	5.7±24%
Active Waterfowl Hunters	18,100±12%	18,500±11%	16,000±15%	17,000±15%	18,100±11%	17,100±13%
Sample Sizes						
Duck Wings	1,336	1,273	959	1,024	1,829	2,589
Goose Tails	693	553	387	387	546	501

Table 1C (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2006 and 2007 hunting seasons.

	New Mexico		North Dakota		Oklahoma	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	13,808	14,258	162,300	171,224	126,446	219,572
Domestic Mallard	0	0	748	509	137	0
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	0	0	0	127	0	210
Mottled Duck	0	0	0	0	0	0
Gadwall	3,945	3,550	63,324	57,159	68,983	87,577
Wigeon	3,199	4,237	16,704	12,476	21,394	15,504
Green-winged Teal	13,168	7,272	18,199	18,077	35,520	55,941
Blue-winged/Cinnamon Teal	2,985	4,123	18,199	26,097	11,246	23,256
Northern Shoveler	3,039	2,119	16,080	19,987	6,720	10,476
Northern Pintail	1,706	1,317	10,596	11,585	2,331	5,447
Wood Duck	906	744	2,368	1,528	4,251	12,571
Redhead	480	687	20,069	21,387	2,469	3,562
Canvasback	160	573	8,227	6,111	274	1,467
Greater Scaup	0	115	249	0	137	1,676
Lesser Scaup	267	573	20,568	16,168	2,057	2,514
Ring-necked Duck	533	973	12,465	4,965	15,360	12,361
Goldeneyes	693	115	748	255	1,097	1,467
Bufflehead	107	172	6,482	3,437	2,331	2,095
Ruddy Duck	426	0	997	1,528	0	629
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	127	0	0
Hooded Merganser	53	115	249	255	1,509	1,676
Other Mergansers	480	115	0	0	137	0
Other Ducks	746	344	125	0	0	0
Total Duck Harvest	46,700±64%	41,400±46%	378,700±10%	373,000±8%	302,400±31%	458,000±32%
Total Active Duck Hunters	2,400±22%	2,800±20%	29,700±6%	32,200±6%	14,200±19%	19,400±16%
Total Duck Hunter Days Afield	15,600±44%	18,700±34%	150,000±8%	157,600±7%	110,700±28%	154,600±24%
Seasonal Duck Harvest Per Hunter	19.3±67%	14.7±50%	12.8±12%	11.6±10%	21.2±36%	23.6±35%
Goose Species Composition						
Canada Goose	1,698	8,206	120,355	108,922	42,436	48,696
Snow Goose	1,969	1,770	13,416	13,599	6,665	4,092
Blue Goose	98	0	17,845	14,523	889	409
Ross's Goose	910	724	912	528	3,110	1,637
White-fronted Goose	25	0	1,172	528	2,000	7,366
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	4,700±36%	10,700±80%	153,700±14%	138,100±16%	55,100±37%	62,200±33%
Total Active Goose Hunters	1,800±26%	1,700±27%	24,000±6%	23,100±7%	9,000±22%	10,800±17%
Total Goose Hunter Days Afield	5,800±30%	6,600±33%	110,200±9%	99,300±9%	49,300±31%	49,400±24%
Seasonal Goose Harvest Per Hunter	2.6±45%	6.3±84%	6.4±15%	6.0±18%	6.1±44%	5.7±37%
Active Waterfowl Hunters	2,700±21%	3,500±19%	34,800±5%	36,900±5%	15,500±18%	20,000±15%
Sample Sizes						
Duck Wings	876	723	3,038	2,930	2,205	2,186
Goose Tails	191	133	1,180	1,046	248	152

Table 1C (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2006 and 2007 hunting seasons.

	South Dakota		Texas		Wyoming	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	72,734	83,640	111,196	86,931	25,114	32,396
Domestic Mallard	114	0	623	239	0	0
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	114	0	0	0	0	0
Mottled Duck	0	0	9,967	8,861	0	0
Gadwall	34,033	25,697	236,409	169,790	3,848	3,343
Wigeon	11,382	6,298	115,868	93,396	4,253	3,708
Green-winged Teal	19,919	14,234	145,458	202,359	3,308	3,039
Blue-winged/Cinnamon Teal	11,838	9,951	184,081	198,048	1,688	1,580
Northern Shoveler	7,285	10,455	55,754	80,465	608	669
Northern Pintail	4,781	5,794	41,426	54,840	405	912
Wood Duck	3,984	4,031	30,836	47,417	1,013	486
Redhead	9,675	9,447	35,508	42,148	473	669
Canvasback	2,049	630	5,918	5,987	135	122
Greater Scaup	0	126	1,869	958	68	122
Lesser Scaup	7,057	4,157	18,688	15,806	270	182
Ring-necked Duck	5,236	3,401	40,803	47,656	878	122
Goldeneyes	569	630	934	1,916	2,633	1,276
Bufflehead	1,594	3,149	4,361	3,592	405	912
Ruddy Duck	797	630	2,180	718	68	61
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	311	0	0	182
Hooded Merganser	114	630	2,803	3,353	68	0
Other Mergansers	228	0	311	0	68	122
Other Ducks	0	0	2,492	9,819	0	0
Total Duck Harvest	193,500±14%	182,900±14%	1,047,800±22%	1,074,300±21%	45,300±26%	49,900±49%
Total Active Duck Hunters	15,300±10%	14,500±11%	84,200±18%	80,200±18%	4,000±17%	4,600±17%
Total Duck Hunter Days Afield	92,200±15%	84,300±14%	424,900±22%	418,500±17%	22,500±20%	23,900±29%
Seasonal Duck Harvest Per Hunter	12.6±18%	12.7±18%	12.4±29%	13.4±28%	11.4±31%	10.9±52%
Goose Species Composition						
Canada Goose	129,985	87,342	62,362	47,066	22,900	12,957
Snow Goose	14,666	6,277	111,984	173,436	0	0
Blue Goose	13,276	4,304	30,846	30,948	0	0
Ross's Goose	463	0	16,764	22,566	0	43
White-fronted Goose	309	1,076	76,444	87,040	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	645	0	0
Total Goose Harvest	158,700±20%	99,000±20%	298,400±27%	361,700±30%	22,900±53%	13,000±21%
Total Active Goose Hunters	17,500±9%	14,000±11%	56,500±18%	63,600±18%	3,900±16%	3,900±17%
Total Goose Hunter Days Afield	106,600±13%	83,000±15%	193,700±25%	197,400±27%	20,100±24%	20,300±28%
Seasonal Goose Harvest Per Hunter	9.1±22%	7.1±22%	5.3±32%	5.7±34%	5.9±55%	3.3±27%
Active Waterfowl Hunters	22,800±8%	19,500±9%	111,700±17%	94,100±17%	5,900±12%	6,300±12%
Sample Sizes						
Duck Wings	1,700	1,452	3,364	4,486	671	821
Goose Tails	1,028	552	445	561	356	301

Table 1C (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2006 and 2007 hunting seasons.

	Flyway Total	
Duck Species Composition	2006	2007
Mallard	709,241	812,291
Domestic Mallard	1,975	909
Black Duck	0	0
Mallard x Black Duck Hybrid	114	417
Mottled Duck	9,967	8,861
Gadwall	463,440	394,872
Wigeon	199,531	157,504
Green-winged Teal	283,662	373,212
Blue-winged/Cinnamon Teal	283,407	345,579
Northern Shoveler	104,481	141,212
Northern Pintail	66,313	88,770
Wood Duck	49,300	74,596
Redhead	78,862	84,947
Canvasback	18,093	15,719
Greater Scaup	2,746	3,085
Lesser Scaup	51,148	40,963
Ring-necked Duck	89,131	76,845
Goldeneyes	9,810	9,462
Bufflehead	15,914	14,254
Ruddy Duck	4,918	3,726
Long-tailed Duck	0	0
Eiders	0	0
Scoters	311	399
Hooded Merganser	5,388	7,479
Other Mergansers	1,984	574
Other Ducks	3,363	10,324
Total Duck Harvest	2,453,100±11%	2,666,000±11%
Total Active Duck Hunters	190,900[c]	193,400[c]
Total Duck Hunter Days Afield	1,077,700±10%	1,127,400±8%
Seasonal Duck Harvest Per Hunter		
Goose Species Composition		
Canada Goose	565,467	503,413
Snow Goose	181,318	220,345
Blue Goose	74,676	54,883
Ross's Goose	36,238	29,233
White-fronted Goose	83,300	111,083
Brant	0	0
Other Geese	0	645
Total Goose Harvest	941,000±11%	919,600±13%
Total Active Goose Hunters	151,500[c]	158,600[c]
Total Goose Hunter Days Afield	722,700±8%	726,700±9%
Seasonal Goose Harvest Per Hunter		
Active Waterfowl Hunters	245,500[c]	233,000[c]
Sample Sizes		
Duck Wings	15,978	17,484
Goose Tails	5,074	4,186

Table 1D. Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2006 and 2007 hunting seasons.

	Arizona		California		Idaho	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	6,318	10,260	349,054	270,300	167,536	155,506
Domestic Mallard	0	42	985	438	315	628
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	5,366	2,638	124,231	122,226	20,390	8,317
Wigeon	5,626	3,225	166,216	219,628	40,465	24,793
Green-winged Teal	12,637	10,050	331,324	402,894	16,712	13,573
Blue-winged/Cinnamon Teal	692	2,638	56,883	43,371	526	1,491
Northern Shoveler	4,155	6,910	224,576	275,265	2,733	3,766
Northern Pintail	2,337	2,554	123,246	137,851	5,781	4,551
Wood Duck	173	293	31,273	33,733	5,991	3,609
Redhead	1,645	838	9,111	9,492	1,261	863
Canvasback	346	1,256	17,483	32,564	631	157
Greater Scaup	0	42	862	4,819	105	549
Lesser Scaup	87	419	4,679	18,400	1,787	706
Ring-necked Duck	4,760	2,931	24,501	35,923	1,787	1,334
Goldeneyes	87	251	3,201	6,133	10,405	7,767
Bufflehead	779	1,256	7,387	12,851	1,156	863
Ruddy Duck	260	1,005	3,571	2,921	0	0
Long-tailed Duck	0	0	0	146	105	78
Eiders	0	0	0	0	0	0
Scoters	0	0	123	1,460	0	0
Hooded Merganser	0	168	862	2,044	210	392
Other Mergansers	87	628	862	438	105	157
Other Ducks	346	796	369	0	0	0
Total Duck Harvest	45,700±25%	48,200±17%	1,480,800±16%	1,632,900±16%	278,000±18%	229,100±46%
Total Active Duck Hunters	3,800±17%	3,800±14%	46,400±10%	53,200±11%	18,400±12%	17,500±21%
Total Duck Hunter Days Afield	22,200±23%	23,100±15%	521,100±17%	552,900±15%	112,500±14%	93,700±36%
Seasonal Duck Harvest Per Hunter	12.0±30%	12.7±22%	31.9±19%	30.7±19%	15.1±22%	13.1±50%
Goose Species Composition						
Canada Goose	2,462	1,869	41,381	50,484	77,678	40,754
Snow Goose	492	288	43,296	51,455	122	0
Blue Goose	0	0	255	583	0	0
Ross's Goose	0	144	5,875	7,961	0	0
White-fronted Goose	246	0	52,492	59,416	0	146
Brant	0	0	2,900	1,800	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	3,200±54%	2,300±12%	146,200±30%	171,700±26%	77,800±32%	40,900±51%
Total Active Goose Hunters	1,100±28%	1,300±22%	30,500±12%	33,300±12%	13,700±12%	11,200±23%
Total Goose Hunter Days Afield	6,600±51%	7,900±33%	258,200±21%	247,900±15%	85,300±19%	47,900±46%
Seasonal Goose Harvest Per Hunter	2.9±61%	1.8±48%	4.8±32%	5.2±29%	5.7±34%	3.7±56%
Active Waterfowl Hunters	4,100±15%	3,800±14%	48,200±10%	55,100±10%	21,400±11%	19,800±19%
Sample Sizes						
Duck Wings	528	1,151	12,027	11,182	2,645	2,920
Goose Tails	13	16	1,171	913	636	560

Table 1D (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2006 and 2007 hunting seasons.

	Montana		Nevada		Oregon	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	77,003	74,502	22,099	12,936	261,381	271,041
Domestic Mallard	0	259	0	0	0	267
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	83	0	0	0	0	0
Mottled Duck	0	0	0	0	0	0
Gadwall	6,910	8,019	8,137	5,169	25,654	17,456
Wigeon	5,827	9,744	3,093	3,278	108,356	119,663
Green-winged Teal	5,494	6,812	8,778	8,742	79,114	96,743
Blue-winged/Cinnamon Teal	3,247	4,053	307	532	897	1,066
Northern Shoveler	2,164	3,535	6,577	5,818	30,139	32,114
Northern Pintail	2,331	2,414	2,619	2,983	47,540	57,433
Wood Duck	1,249	1,725	84	236	13,455	10,527
Redhead	1,831	1,207	1,338	354	1,615	400
Canvasback	916	517	307	1,447	1,794	2,932
Greater Scaup	166	0	0	0	6,458	22,787
Lesser Scaup	583	1,035	84	236	10,764	15,724
Ring-necked Duck	583	1,121	1,338	768	21,169	10,127
Goldeneyes	3,496	1,983	223	354	5,741	4,397
Bufflehead	250	517	195	502	14,172	15,458
Ruddy Duck	83	431	111	325	718	400
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	83	86	0	30	200	200
Hooded Merganser	166	86	84	30	897	2,932
Other Mergansers	333	1,552	0	59	538	2,399
Other Ducks	0	0	28	0	0	133
Total Duck Harvest	112,800±21%	119,600±22%	55,400±16%	43,800±15%	630,600±18%	684,200±20%
Total Active Duck Hunters	12,900±14%	11,300±15%	4,000±16%	2,900±19%	24,700±9%	22,300±8%
Total Duck Hunter Days Afield	60,000±23%	58,000±19%	23,000±22%	18,600±20%	238,000±15%	244,500±15%
Seasonal Duck Harvest Per Hunter	8.7±25%	10.6±26%	14.0±23%	15.1±24%	25.5±20%	30.6±22%
Goose Species Composition						
Canada Goose	49,460	52,974	5,902	5,108	65,327	83,193
Snow Goose	2,005	3,565	79	243	11,160	9,021
Blue Goose	84	166	0	0	0	0
Ross's Goose	167	580	79	0	272	0
White-fronted Goose	84	415	40	49	2,041	3,787
Brant	0	0	0	0	9	43
Other Geese	0	0	0	0	0	0
Total Goose Harvest	51,800±26%	57,700±20%	6,100±20%	5,400±31%	78,800±16%	96,000±20%
Total Active Goose Hunters	11,200±15%	11,900±14%	2,100±21%	1,600±22%	14,400±11%	11,900±11%
Total Goose Hunter Days Afield	48,700±23%	51,100±17%	9,400±27%	8,500±28%	80,800±14%	89,800±19%
Seasonal Goose Harvest Per Hunter	4.6±30%	4.8±24%	2.8±29%	3.3±38%	5.5±19%	8.1±23%
Active Waterfowl Hunters	17,500±12%	15,900±13%	4,200±15%	3,300±18%	26,300±8%	23,500±8%
Sample Sizes						
Duck Wings	1,355	1,387	1,988	1,483	3,539	5,161
Goose Tails	620	696	154	111	580	862

Table 1D (continued). Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2006 and 2007 hunting seasons.

	Utah		Washington		Flyway Total	
Duck Species Composition	2006	2007	2006	2007	2006	2007
Mallard	96,987	72,160	269,881	235,351	1,250,260	1,102,055
Domestic Mallard	310	0	98	185	1,709	1,818
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	0	0	0	0	83	0
Mottled Duck	0	0	0	0	0	0
Gadwall	38,567	24,907	14,029	9,514	243,284	198,246
Wigeon	29,675	20,174	81,033	75,094	440,292	475,598
Green-winged Teal	59,454	39,649	39,339	41,842	552,852	620,307
Blue-winged/Cinnamon Teal	10,443	5,897	98	92	73,092	59,139
Northern Shoveler	19,335	24,907	9,222	15,610	298,900	367,925
Northern Pintail	26,883	19,010	21,092	24,939	231,830	251,736
Wood Duck	207	78	6,769	4,064	59,200	54,265
Redhead	7,755	4,190	2,256	1,478	26,812	18,822
Canvasback	3,516	4,733	1,864	2,032	26,856	45,639
Greater Scaup	207	310	4,709	3,510	12,507	32,017
Lesser Scaup	3,826	4,966	12,165	9,606	33,973	51,092
Ring-necked Duck	1,551	1,862	12,459	10,068	68,148	64,135
Goldeneyes	4,963	2,793	8,927	5,265	37,044	28,945
Bufflehead	2,068	3,724	8,731	7,112	34,739	42,284
Ruddy Duck	2,378	698	294	462	7,415	6,242
Long-tailed Duck	0	0	196	462	301	686
Eiders	0	0	0	0	0	0
Scoters	103	0	2,158	2,771	2,668	4,547
Hooded Merganser	207	78	294	1,201	2,720	6,930
Other Mergansers	1,965	466	687	1,847	4,576	7,546
Other Ducks	0	0	98	92	842	1,021
Total Duck Harvest	310,400±17%	230,600±11%	496,400±19%	452,600±20%	3,410,100±9%	3,441,000±9%
Total Active Duck Hunters	17,100±13%	16,000±12%	20,500±11%	20,500±9%	148,000[c]	147,500[c]
Total Duck Hunter Days Afield	120,500±16%	107,200±14%	177,700±20%	171,800±19%	1,275,000±8%	1,269,900±8%
Seasonal Duck Harvest Per Hunter	18.1±22%	14.4±16%	24.2±22%	22.1±22%		
Goose Species Composition						
Canada Goose	20,319	19,670	71,581	55,717	334,109	309,769
Snow Goose	651	0	13,334	22,404	71,140	86,975
Blue Goose	0	0	0	97	339	846
Ross's Goose	0	0	234	97	6,627	8,782
White-fronted Goose	130	130	351	584	55,384	64,527
Brant	0	0	900	100	3,809	1,943
Other Geese	0	0	0	0	0	0
Total Goose Harvest	21,100±17%	19,800±17%	86,400±15%	79,000±18%	471,400±12%	472,800±12%
Total Active Goose Hunters	10,700±12%	10,100±12%	15,100±11%	13,400±10%	98,900[c]	94,700[c]
Total Goose Hunter Days Afield	59,900±17%	59,500±18%	84,200±16%	72,100±16%	633,000±10%	584,800±9%
Seasonal Goose Harvest Per Hunter	2.0±21%	2.0±21%	5.7±19%	5.9±21%		
Active Waterfowl Hunters	17,800±12%	17,200±11%	24,700±10%	22,900±8%	169,700[c]	161,600[c]
Sample Sizes						
Duck Wings	3,002	2,972	5,060	4,900	30,144	31,156
Goose Tails	162	152	735	819	4,071	4,129

Table 1E. Preliminary estimates of waterfowl harvest and hunter activity in Alaska and the United States during the 2006 and 2007 hunting seasons.

	Alaska		United States Total	
Duck Species Composition	2006	2007	2006	2007
Mallard	22,616	20,039	4,668,411	4,878,421
Domestic Mallard	0	0	19,220	14,139
Black Duck	0	0	129,197	137,397
Mallard x Black Duck Hybrid	0	0	13,431	15,454
Mottled Duck	0	0	66,474	73,356
Gadwall	1,031	1,042	1,544,792	1,475,301
Wigeon	12,442	13,665	856,103	821,078
Green-winged Teal	7,974	8,457	1,658,727	1,951,194
Blue-winged/Cinnamon Teal	0	61	940,965	1,121,151
Northern Shoveler	2,681	1,532	644,051	814,786
Northern Pintail	7,630	7,170	430,342	529,168
Wood Duck	0	0	1,076,200	1,087,841
Redhead	0	0	177,157	174,031
Canvasback	69	429	91,885	125,207
Greater Scaup	550	613	47,780	70,833
Lesser Scaup	550	613	233,508	224,053
Ring-necked Duck	1,100	858	656,574	503,833
Goldeneyes	1,994	2,696	81,496	82,321
Bufflehead	894	1,226	191,362	197,487
Ruddy Duck	0	0	39,609	29,538
Long-tailed Duck	215	0	27,783	30,047
Eiders	0	0	25,476	18,531
Scoters	2,800	3,958	53,963	54,135
Hooded Merganser	69	0	82,600	91,230
Other Mergansers	1,723	3,167	34,281	32,370
Other Ducks	862	2,375	16,715	25,992
Total Duck Harvest	65,200±16%	67,900±12%	13,808,100±4%	14,578,900±4%
Total Active Duck Hunters[a]	5,100±9%	4,800±8%	984,200[c]	995,700[c]
Total Duck Hunter Days Afield[a]	25,200±15%	25,800±15%	6,788,400±3%	6,978,400±3%
Seasonal Duck Harvest Per Hunter	12.8±18%	14.0±14%		
Goose Species Composition				
Canada Goose	4,990	5,592	2,645,664	2,676,193
Snow Goose	0	0	413,474	442,005
Blue Goose	0	0	160,529	120,730
Ross's Goose	0	0	53,431	48,351
White-fronted Goose	1,310	308	282,487	352,361
Brant	1,200	900	23,509	25,143
Other Geese	0	0	15	1,360
Total Goose Harvest	7,500±37%	6,800±25%	3,579,100±5%	3,666,100±6%
Total Active Goose Hunters[b]	1,700±19%	1,900±15%	707,300[c]	704,100[c]
Total Goose Hunter Days Afield[b]	9,600±34%	10,800±28%	4,007,100±4%	3,931,600±4%
Seasonal Goose Harvest Per Hunter	4.3±42%	3.6±29%		
Active Waterfowl Hunters	5,500±9%	5,300±8%	1,167,600[c]	1,159,100[c]
Sample Sizes				
Duck Wings	893	977	86,233	93,375
Goose Tails	104	179	20,767	20,797

[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, 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 2006 and 2007 hunting seasons.

	2006		2007	
	Central Flyway	Pacific Flyway	Central Flyway	Pacific Flyway
Duck Harvest				
Colorado	90,500	17,300	93,200	20,000
Montana	29,300	83,500	33,500	86,100
New Mexico	44,200	2,500	31,200	10,200
Wyoming	31,200	14,100	37,000	12,900
Goose Harvest				
Colorado	82,900	4,900	74,400	4,300
Montana	25,500	26,300	24,200	33,500
New Mexico	3,900	800	6,500	4,200
Wyoming	21,200	1,700	11,900	1,100

Table 3. Preliminary estimates of sea duck harvest and hunter activity for states with special sea duck seasons or sea duck permits during the 2006 and 2007 hunting seasons.[a]

	Sea Duck Harvest [b]		Active Sea Duck Hunters [c]		Sea Duck Hunter Days Afield		Seasonal Harvest Per Hunter	
State / Flyway	2006	2007	2006	2007	2006	2007	2006	2007
Connecticut	300 ± 145%	1,100 ± 195%	200 ± 137%	300 ± 137%	600 ± 145%	600 ± 137%	1.5 ± 199%	4.0 ± 238%
Delaware	1,000 ± 63%	2,700 ± 107%	200 ± 56%	300 ± 46%	500 ± 51%	2,300 ± 90%	5.0 ± 85%	7.9 ± 117%
Maine	22,200 ± 38%	15,900 ± 47%	2,800 ± 29%	1,800 ± 33%	8,500 ± 45%	6,200 ± 45%	8.0 ± 48%	8.6 ± 57%
Maryland	27,500 ± 39%	17,900 ± 38%	4,100 ± 21%	3,200 ± 25%	12,100 ± 34%	9,700 ± 37%	6.7 ± 44%	5.6 ± 46%
Massachusetts	9,200 ± 24%	5,900 ± 39%	1,200 ± 21%	800 ± 26%	4,700 ± 29%	3,200 ± 25%	7.5 ± 32%	7.1 ± 47%
New Hampshire	1,000 ± 79%	1,000 ± 50%	200 ± 53%	200 ± 51%	800 ± 96%	900 ± 60%	4.7 ± 95%	6.2 ± 71%
New Jersey	1,700 ± 75%	3,800 ± 73%	500 ± 53%	800 ± 46%	1,000 ± 64%	1,800 ± 52%	3.5 ± 91%	4.9 ± 86%
New York	9,100 ± 37%	14,800 ± 47%	1,400 ± 25%	2,000 ± 22%	7,000 ± 35%	9,300 ± 31%	6.3 ± 44%	7.4 ± 52%
Rhode Island	2,700 ± 85%	2,100 ± 46%	200 ± 75%	300 ± 30%	1,000 ± 111%	1,100 ± 40%	11.8 ± 114%	6.6 ± 55%
Virginia	11,100 ± 46%	9,500 ± 39%	2,400 ± 29%	2,500 ± 28%	6,800 ± 49%	7,300 ± 47%	4.7 ± 51%	3.9 ± 48%
Atlantic Flyway Total	85,900 ± 18%	74,700 ± 19%	13,200	12,200	43,000 ± 17%	42,500 ± 16%		
Oregon	200 ± 30%	200 ± 14%	<50 ± 19%	<50 ± 7%	200 ± 32%	200 ± 11%	5.3 ± 35%	4.9 ± 15%
Pacific Flyway	200 ± 30%	200 ± 14%	<50 ± 19%		200 ± 32%	200 ± 11%		
Alaska [d]	5,600 ± 73%	9,500 ± 32%	800 ± 38%	1,100 ± 24%	3,700 ± 54%	5,300 ± 34%	7.0 ± 80%	8.7 ± 40%
U.S. Total	91,700 ± 17%	84,300 ± 17%	14,000	13,400	46,900 ± 16%	48,000 ± 15%		

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

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

[c] 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.

[d] 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 2006 and 2007 hunting seasons. [a]

	Brant Harvest		Active Brant Hunters [b]		Brant Hunter Days Afield		Seasonal Harvest Per Hunter	
State / Flyway	2006	2007	2006	2007	2006	2007	2006	2007
Connecticut	0	200 ± 195%	100 ± 137%	100 ± 195%	600 ± 172%	100 ± 195%	0	2.0 ± 276%
Delaware	800 ± 47%	900 ± 54%	300 ± 41%	300 ± 44%	900 ± 59%	1,400 ± 96%	2.6 ± 62%	2.8 ± 70%
Maryland	2,300 ± 91%	1,000 ± 111%	500 ± 56%	300 ± 68%	2,000 ± 83%	1,300 ± 73%	4.8 ± 107%	3.1 ± 130%
Massachusetts	400 ± 51%	700 ± 39%	300 ± 47%	400 ± 41%	800 ± 67%	1,300 ± 38%	1.5 ± 69%	1.6 ± 57%
New Hampshire	0	100 ± 156%	0	100 ± 95%	0	300 ± 99%	0	1.3 ± 183%
New Jersey	5,200 ± 35%	7,600 ± 59%	1,400 ± 27%	1,500 ± 31%	4,500 ± 32%	7,700 ± 44%	3.8 ± 44%	5.0 ± 67%
New York	3,400 ± 29%	4,800 ± 23%	1,300 ± 28%	1,600 ± 23%	5,100 ± 29%	6,300 ± 25%	2.7 ± 40%	2.9 ± 33%
North Carolina	3,600 ± 79%	4,200 ± 52%	1,800 ± 59%	2,400 ± 40%	4,000 ± 66%	6,700 ± 51%	2.0 ± 99%	1.8 ± 65%
Rhode Island	400 ± 98%	1,200 ± 50%	100 ± 73%	300 ± 41%	500 ± 106%	1,300 ± 42%	3.5 ± 123%	3.4 ± 65%
Virginia	2,400 ± 34%	1,700 ± 59%	1,400 ± 33%	1,500 ± 37%	3,800 ± 46%	4,800 ± 66%	1.8 ± 47%	1.2 ± 70%
Atlantic Flyway Total	18,500 ± 23%	22,300 ± 24%	7,200	8,600	22,100 ± 20%	31,300 ± 20%		
California	2,900 ± 64%	1,800 ± 88%	1,000 ± 64%	600 ± 91%	2,800 ± 64%	2,900 ± 113%	2.9 ± 91%	2.8 ± 126%
Oregon	<50 ± 109%	<50 ± 194%	<50 ± 62%	200 ± 95%	<50 ± 69%	200 ± 98%	2.0 ± 126%	0.2 ± 216%
Washington	900 ± 122%	100 ± 195%	600 ± 97%	300 ± 112%	1,100 ± 121%	1,200 ± 129%	1.5 ± 156%	0.3 ± 225%
Pacific Flyway Total	3,800 ± 57%	1,900 ± 82%	1,600	1,200	3,900 ± 57%	4,300 ± 84%		
Alaska	1,200 ± 73%	900 ± 47%	300 ± 53%	400 ± 36%	1,700 ± 76%	1,800 ± 46%	3.7 ± 90%	2.5 ± 59%
U.S. Total	23,500 ± 20%	25,200 ± 22%	9,100	10,100	27,800 ± 18%	37,300 ± 19%		

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

[b] 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 2006 and 2007 hunting seasons.

	Harvest										Number of	
	Green-winged Teal		Blue-winged/Cinnamon Teal		Wood Duck		Other Ducks		Total Duck Harvest		Wings Received	
State	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
September Teal Season												
Delaware	2,167	351	271	117	0	0	0	0	2,438	468	36	8
Georgia	0	247	6,395	5,186	200	0	0	0	6,594	5,433	33	22
Maryland	476	505	1,071	303	0	0	0	0	1,547	808	13	8
North Carolina	1,485	0	637	472	0	0	0	0	2,122	472	10	4
South Carolina	681	140	1,362	7,574	0	0	0	0	2,043	7,714	9	55
Virginia	92	101	275	101	0	101	0	0	366	303	4	3
Subtotal	4,901	1,344	10,010	13,753	200	101	0	0	15,111	15,199	105	100
Alabama	0	0	7,804	14,463	0	0	0	0	7,804	14,463	39	45
Arkansas	8,628	668	30,983	7,677	0	0	1,177	0	40,788	8,345	104	25
Illinois	3,619	3,421	14,779	6,353	0	0	0	0	18,399	9,773	61	40
Indiana	1,594	455	8,765	6,715	341	0	0	0	10,700	7,170	94	63
Louisiana	7,324	8,667	167,715	205,764	0	0	0	0	175,039	214,431	478	668
Mississippi	0	1,100	2,661	15,668	0	0	0	0	2,661	16,768	7	61
Missouri	3,211	3,493	17,279	33,180	0	0	0	0	20,490	36,673	134	210
Ohio	3,209	1,738	4,560	6,951	0	0	0	0	7,769	8,689	46	35
Subtotal	27,585	19,541	254,547	296,771	341	0	1,177	0	283,650	316,312	963	1,147
Colorado	1,130	2,757	2,340	6,047	0	0	0	0	3,470	8,803	43	99
Kansas	4,733	4,534	23,664	25,582	0	0	0	162	28,397	30,278	168	187
Nebraska	2,030	4,809	11,167	27,010	92	0	0	160	13,290	31,979	144	399
New Mexico	1,013	401	2,079	3,321	0	0	0	0	3,092	3,722	58	65
Oklahoma	3,429	2,514	10,971	22,209	0	0	0	0	14,400	24,723	105	118
Texas	17,443	14,369	133,622	144,405	0	239	311	718	151,376	159,732	486	667
Subtotal	29,777	29,383	183,844	228,574	92	239	311	1,041	214,025	259,237	1,004	1,535
Total	62,263	50,268	448,401	539,098	634	341	1,488	1,041	512,786	590,747	2,072	2,782
September Duck Season												
Florida	0	0	7,835	8,228	1,726	2,312	0	0	9,561	10,540	144	155
Kentucky	0	1,054	6,578	4,217	13,156	14,407	0	0	19,733	19,677	60	56
Tennessee	0	0	4,089	2,932	19,763	14,075	0	0	23,852	17,008	35	29
Total	0	1,054	18,501	15,377	34,645	30,794	0	0	53,146	47,226	239	240
U.S. Total	62,263	51,322	466,903	554,475	35,278	31,135	1,488	1,041	565,932	637,973	2,311	3,022

Table 6. Preliminary estimates of the number of Canada geese harvested during the special September, regular, and special late seasons during the 2006 and 2007 hunting seasons.

	September		Regular		Late		Total	
State / Flyway	2006	2007	2006	2007	2006	2007	2006	2007
Connecticut	5,900	3,700	7,400	13,400	700	1,400	14,000	18,600
Delaware	1,100	2,100	11,700	19,900	0	---	12,800	22,000
Florida	0	0	2,800	0	---	---	2,800	0
Georgia	2,700	5,100	12,200	17,300	---	---	14,900	22,400
Maine	2,100	3,400	7,700	5,700	---	---	9,800	9,100
Maryland	12,700	10,500	140,000	151,500	0	---	152,700	161,900
Massachusetts	3,800	2,600	6,200	6,100	3,100	2,300	13,100	11,000
New Hampshire	2,400	2,400	4,300	4,100	---	---	6,700	6,500
New Jersey	7,500	2,800	19,400	27,900	600	3,900	27,500	34,600
New York	52,300	56,900	61,500	81,200	0	---	113,900	138,100
North Carolina	23,600	22,200	19,700	32,200	---	---	43,300	54,400
Pennsylvania	67,600	93,700	92,300	180,800	700	1,500	160,600	276,000
Rhode Island	400	200	4,500	4,800	400	100	5,300	5,100
South Carolina	6,800	13,600	20,300	11,200	---	---	27,100	24,800
Vermont	3,400	2,900	4,400	3,400	---	---	7,800	6,300
Virginia	11,100	13,600	21,000	37,800	15,700	11,800	47,800	63,300
West Virginia	1,100	2,800	1,400	3,800	0	---	2,500	6,700
Atlantic Flyway Total	204,300	238,500	436,800	601,100	21,200	21,000	662,500	860,700
Alabama	11,200	8,000	8,400	10,700	---	---	19,700	18,800
Arkansas	---	6,900	39,900	9,700	---	---	39,900	16,600
Illinois	22,200	14,400	136,100	154,000	---	---	158,200	168,500
Indiana	20,800	15,800	36,400	47,500	---	6,300	57,200	69,600
Iowa	12,300	11,200	61,600	53,500	---	---	73,900	64,600
Kentucky	1,400	2,900	25,800	25,000	---	---	27,200	27,900
Louisiana	---	---	1,300	3,100	---	---	1,300	3,100
Michigan	79,600	55,100	70,000	86,300	7,700	7,800	157,300	149,200
Minnesota	80,900	105,400	144,000	80,900	15,800	17,200	240,700	203,500
Mississippi	6,700	4,600	3,300	9,100	---	---	10,000	13,700
Missouri	---	---	70,400	42,200	---	---	70,400	42,200
Ohio	24,500	13,500	53,000	62,900	9,100	1,800	86,600	78,300
Tennessee	2,100	13,300	21,500	13,300	---	---	23,600	26,600
Wisconsin	37,300	37,000	75,300	77,200	---	---	112,600	114,200
Mississippi Flyway Total	299,000	288,100	747,000	675,400	32,600	33,100	1,078,700	996,700
Kansas	0	---	59,600	60,000	---	---	59,600	60,000
Nebraska	300	2,000	56,700	61,800	---	---	57,000	63,800
North Dakota	37,900	34,300	82,500	74,600	---	---	120,400	108,900
Oklahoma	700	1,200	41,800	47,500	---	---	42,400	48,700
South Dakota	32,000	27,300	98,000	60,100	---	---	130,000	87,300
Colorado	0	0	4,900	4,300	---	---	4,900	4,300
Oregon	12,800	8,000	52,500	75,200	---	---	65,300	83,200
Washington	2,000	3,000	68,900	50,700	700	1,900	71,600	55,700
Wyoming	300	300	1,400	900	---	---	1,700	1,100

Table 7. Waterfowl harvest estimates in Canada during the 2006 and 2007[a] hunting seasons (estimates courtesy of the Canadian Wildlife Service).

	Newfoundland		Prince Edward Isl.		Nova Scotia		New Brunswick		Quebec		Ontario		Manitoba	
Duck Species Composition	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
Mallard	753		1,122		5,490		6,389		72,245		124,751		111,026	
Black Duck	16,529		5,168		20,630		11,159		33,900		16,644		0	
Gadwall	0		103		17		291		2,611		3,767		5,329	
Wigeon	0		51		745		997		2,601		11,479		3,120	
Green-winged Teal	3,460		3,644		4,399		6,095		22,863		15,245		5,884	
Blue-winged/Cinnamon Teal	0		195		114		614		933		5,413		5,824	
Northern Shoveler	0		0		76		89		837		845		2,281	
Northern Pintail	176		939		90		382		5,067		4,861		8,579	
Wood Duck	121		130		1,285		3,399		10,550		42,226		1,320	
Redhead	0		0		0		0		476		6,044		8,626	
Canvasback	0		0		0		0		0		3,173		4,131	
Greater Scaup	705		287		191		449		4,002		3,010		0	
Lesser Scaup	250		0		172		436		7,219		16,425		4,459	
Ring-necked Duck	4,442		521		1,512		2,329		7,658		24,939		7,202	
Goldeneyes	2,481		233		945		3,208		2,618		6,802		3,321	
Bufflehead	0		0		412		0		498		9,071		2,018	
Ruddy Duck	0		0		0		0		151		1,473		162	
Long-tailed Duck	287		0		413		0		320		842		0	
Eiders	15,038		0		4,284		524		2,505		0		0	
Scoters	522		0		2,278		146		3,575		692		0	
Hooded Merganser	37		0		511		626		2,961		4,482		455	
Other Mergansers	3,337		287		1,087		0		2,464		1,798		0	
Other Ducks	0		0		0		0		0		0		0	
Total Duck Harvest	48,138		12,680		44,651		37,133		186,054		303,982		173,737	
Goose Species Composition														
Canada Goose	4,364		11,245		4,769		6,940		74,358		174,626		105,625	
Snow Goose	0		0		135		0		79,199		1,365		10,138	
Blue Goose	131		0		0		0		959		0		21,576	
Ross's Goose	0		0		0		0		0		0		2,138	
White-fronted Goose	0		0		0		0		48		0		0	
Brant	0		0		0		0		119		0		0	
Total Goose Harvest	4,495		11,245		4,904		6,940		154,683		175,991		139,477	
Migratory Bird Permits Sold	14,221		1,474		5,382		5,331		28,034		54,404		14,246	

[a] Estimates for 2007 not available at this time.

Table 7 (continued). Waterfowl harvest estimates in Canada during the 2006 and 2007[a] hunting seasons (estimates courtesy of the Canadian Wildlife Service).

	Saskatchewan		Alberta		British Columbia		Nunavut		Northwest Terr.		Yukon Territory		Canada Total	
Duck Species Composition	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
Mallard	174,174		88,533		28,928		0		215		0		613,626	
Black Duck	0		0		0		0		0		0		104,030	
Gadwall	11,053		10,838		929		0		0		0		34,938	
Wigeon	9,433		7,927		6,809		0		97		0		43,259	
Green-winged Teal	4,012		3,074		1,152		0		0		0		69,828	
Blue-winged/Cinnamon Teal	11,872		12,237		51		0		0		0		37,253	
Northern Shoveler	10,863		9,230		303		0		0		0		24,524	
Northern Pintail	11,853		12,527		2,004		0		39		0		46,517	
Wood Duck	0		0		113		0		0		0		59,144	
Redhead	3,966		661		0		0		0		0		19,773	
Canvasback	2,633		320		15		0		19		0		10,291	
Greater Scaup	0		0		0		0		19		0		8,663	
Lesser Scaup	865		2,058		46		0		97		0		32,027	
Ring-necked Duck	813		2,249		125		0		0		0		51,790	
Goldeneyes	129		2,296		152		0		0		0		22,185	
Bufflehead	1,422		0		380		0		38		0		13,839	
Ruddy Duck	0		604		0		0		0		0		2,390	
Long-tailed Duck	0		0		0		0		0		0		1,862	
Eiders	0		0		0		0		0		0		22,351	
Scoters	0		0		0		0		0		0		7,213	
Hooded Merganser	0		0		0		0		0		0		9,072	
Other Mergansers	0		913		0		0		0		0		9,886	
Other Ducks	0		0		0		0		0		0		0	
Total Duck Harvest	243,088		153,467		41,007		0		524		167		1,244,628	
Goose Species Composition														
Canada Goose	145,648		114,988		9,420		0		0		0		651,983	
Snow Goose	77,122		22,975		3,094		0		0		0		194,028	
Blue Goose	51,794		223		0		0		0		0		74,683	
Ross's Goose	24,264		1,680		0		0		0		0		28,082	
White-fronted Goose	34,809		15,838		281		0		0		0		50,976	
Brant	0		0		0		0		0		0		119	
Total Goose Harvest	333,637		155,704		12,795		0		19		233		1,000,123	
Migratory Bird Permits Sold	18,647		19,403		5,833		20		202		167		167,367	

[a] Estimates for 2007 not available at this time.

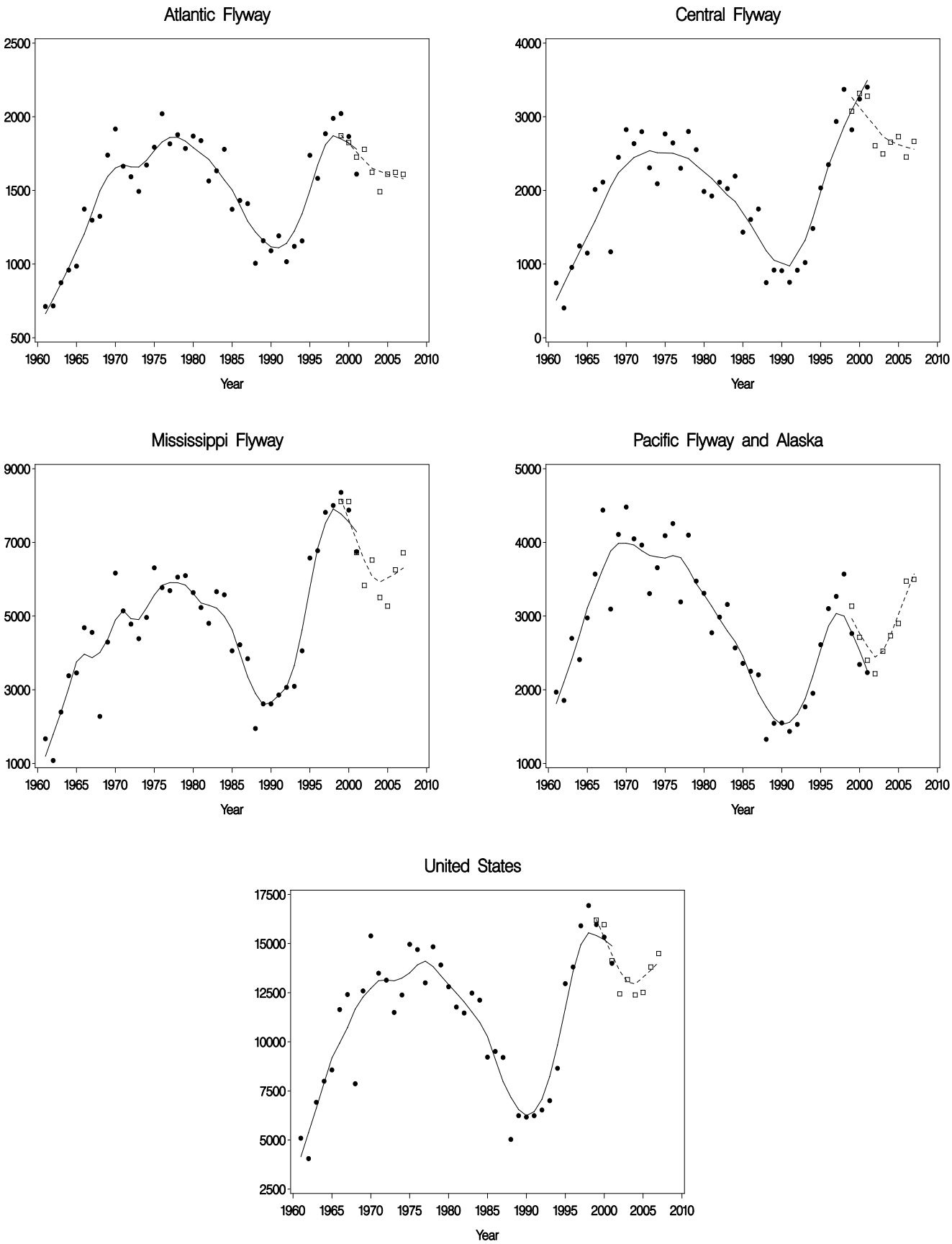

Figure 1. Number of ducks harvested (in thousands) by hunters in the United States, 1961-2007. (Federal Duck Stamp survey - circles and solid line; HIP survey - squares and dashed line.)

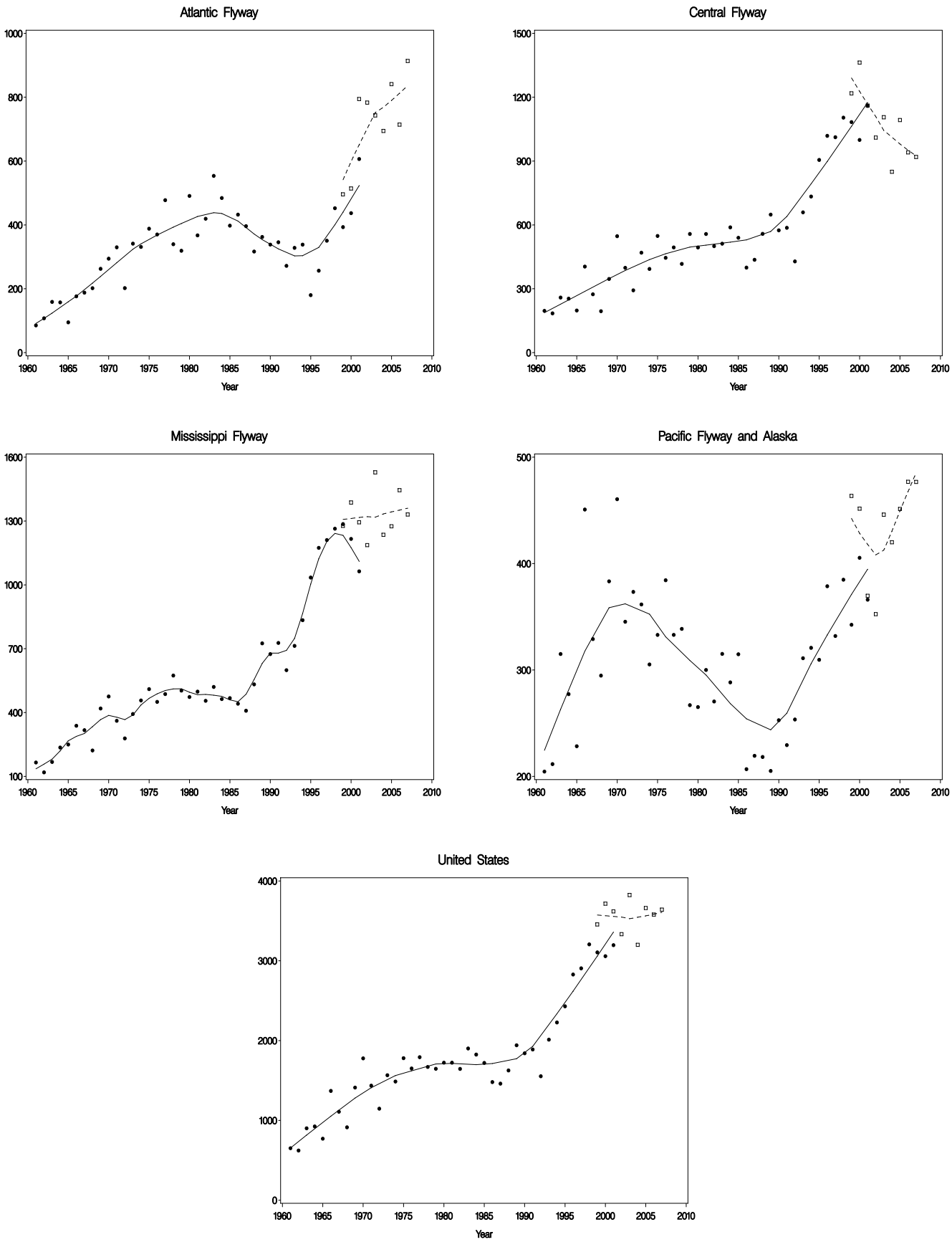

Figure 2. Number of geese harvested (in thousands) by hunters in the United States, 1961-2007. (Federal Duck Stamp survey - circles and solid line; HIP survey - squares and dashed line.)

Table 8. Preliminary weighted age ratios of mallards in state harvests during the 2003-2007 hunting seasons as determined from Waterfowl Parts Collection Survey.

	Immatures per adult [a]				
State and Flyway	2003	2004	2005	2006	2007
Connecticut	1.0	1.4	1.5	1.2	1.8
Delaware	1.9	1.8	1.6	1.4	1.9
Florida	---	0.3	3.7	4.0	3.0
Georgia	0.9	1.1	1.5	1.8	0.4
Maine	1.6	1.3	1.9	1.7	1.9
Maryland	1.5	1.7	1.9	1.3	1.7
Massachusetts	1.0	1.2	1.1	1.4	1.2
New Hampshire	1.4	1.9	1.4	1.5	1.9
New Jersey	1.2	1.3	1.3	1.0	1.2
New York	1.4	1.5	1.9	1.8	1.3
North Carolina	1.1	1.5	2.5	1.7	1.2
Pennsylvania	1.0	1.0	1.0	1.0	1.2
Rhode Island	0.7	0.7	0.9	0.7	0.4
South Carolina	1.3	1.7	1.7	2.3	1.9
Vermont	2.1	3.9	1.8	1.8	2.6
Virginia	0.9	0.9	0.9	0.7	0.9
West Virginia	1.1	0.8	1.0	0.6	0.7
Atlantic Flyway Total [b]	1.26	1.37	1.54	1.35	1.31
Alabama	0.9	1.0	1.8	1.1	1.1
Arkansas	0.8	0.8	0.8	0.8	0.7
Illinois	1.9	1.2	2.3	2.0	1.4
Indiana	1.4	1.6	1.4	1.5	1.2
Iowa	2.0	0.9	2.8	1.8	1.9
Kentucky	1.3	0.9	2.0	1.2	1.1
Louisiana	1.0	0.6	2.3	1.2	1.3
Michigan	2.1	1.6	1.7	2.2	1.7
Minnesota	2.8	1.5	2.7	3.0	2.1
Mississippi	0.8	0.5	1.7	0.9	1.1
Missouri	1.7	1.0	2.0	1.4	1.6
Ohio	1.8	1.4	1.3	1.8	1.4
Tennessee	0.9	1.0	2.0	1.5	1.0
Wisconsin	1.8	1.8	2.7	2.8	1.7
Mississippi Flyway Total [b]	1.40	1.03	1.63	1.44	1.20

Table 8 (continued). Preliminary weighted age ratios of mallards in state harvests during the 2003-2007 hunting seasons as determined from Waterfowl Parts Collection Survey.

	Immatures per adult [a]				
State and Flyway	2003	2004	2005	2006	2007
Colorado	0.9	0.7	1.0	0.7	1.1
Kansas	0.7	0.6	1.1	0.8	1.0
Montana	0.8	0.6	0.9	1.0	1.2
Nebraska	0.8	0.5	1.1	1.0	1.0
New Mexico	1.1	1.2	1.9	0.8	1.7
North Dakota	1.4	1.2	2.6	2.4	2.1
Oklahoma	0.5	0.6	0.5	0.6	0.6
South Dakota	1.3	1.2	2.0	1.6	1.8
Texas	0.4	0.5	1.0	0.7	0.7
Wyoming	0.9	0.6	0.8	0.9	0.8
Central Flyway Total [b]	0.87	0.74	1.26	1.05	1.07
Arizona	1.4	1.1	1.7	1.6	1.4
California	2.4	1.9	3.0	2.5	1.3
Colorado	1.2	1.6	2.0	1.8	1.3
Idaho	1.4	1.2	1.6	1.5	1.2
Montana	0.9	0.8	0.9	1.0	0.9
Nevada	1.8	1.5	2.5	2.1	0.8
New Mexico	1.0	1.6	0.9	0.1	0.9
Oregon	1.4	1.3	1.9	2.1	1.5
Utah	1.5	1.6	2.2	1.5	1.1
Washington	1.1	1.2	1.6	1.5	1.1
Wyoming	1.8	1.3	2.9	2.4	3.3
Pacific Flyway Total [b]	1.51	1.43	1.98	1.82	1.23
Alaska	4.1	4.8	5.5	2.2	2.7
U.S. Total [b]	1.29	1.06	1.62	1.45	1.20

[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 2003-2007 hunting seasons, by species and flyway.

	Immatures per adult [a, b]				
Species and Flyway	2003	2004	2005	2006	2007
Mallard					
Atlantic	1.26	1.37	1.54	1.35	1.31
Mississippi	1.40	1.03	1.63	1.44	1.20
Central	0.87	0.74	1.26	1.05	1.07
Pacific	1.51	1.43	1.98	1.82	1.23
U.S. Total	1.29	1.06	1.62	1.45	1.20
Black duck					
Atlantic	1.12	0.87	1.56	1.39	1.31
Mississippi	1.11	1.20	1.63	1.69	1.02
U.S. Total	1.11	0.97	1.58	1.47	1.22
Mottled duck					
Atlantic	1.31	1.18	1.30	1.67	1.17
Mississippi	1.63	0.92	2.63	1.82	1.44
Central	1.82	1.40	0.85	1.91	1.12
U.S. Total	1.60	1.07	1.60	1.80	1.34
Gadwall					
Atlantic	0.86	0.73	1.30	1.35	1.35
Mississippi	1.23	0.93	1.81	1.39	1.37
Central	1.62	0.92	1.17	0.94	1.29
Pacific	1.41	0.96	1.78	1.13	0.79
U.S. Total	1.34	0.93	1.52	1.19	1.25
American wigeon					
Atlantic	0.90	0.75	0.84	1.95	1.22
Mississippi	1.31	1.30	1.85	2.62	1.65
Central	1.34	0.80	0.80	0.83	0.82
Pacific	1.11	1.23	2.05	1.38	1.31
U.S. Total	1.21	1.09	1.48	1.40	1.26
Green-winged teal					
Atlantic	1.83	1.30	1.67	2.00	1.90
Mississippi	1.91	1.07	1.96	2.30	1.98
Central	2.10	1.82	1.37	1.97	1.83
Pacific	1.14	1.28	1.74	1.45	1.22
U.S. Total	1.71	1.29	1.72	1.89	1.66
Blue-winged/Cinnamon teal					
Atlantic	1.29	0.88	1.36	1.39	1.24
Mississippi	1.95	1.34	2.47	1.75	1.87
Central	2.69	1.57	2.28	2.10	2.85
Pacific	1.50	0.87	1.41	1.07	1.73
U.S. Total	2.04	1.29	2.09	1.74	2.03

Table 9 (continued). Preliminary weighted age ratios of ducks harvested during the 2003-2007 hunting seasons, by species and flyway.

	Immatures per adult [a, b]				
Species and Flyway	2003	2004	2005	2006	2007
Northern shoveler					
Atlantic	1.30	0.83	2.87	1.55	1.38
Mississippi	1.74	1.15	1.94	1.80	1.66
Central	3.07	1.37	1.84	2.02	2.04
Pacific	1.11	1.09	2.05	1.40	1.50
U.S. Total	1.63	1.16	1.99	1.62	1.64
Northern pintail					
Atlantic	2.29	0.76	2.07	1.66	1.70
Mississippi	2.49	1.03	1.29	1.28	1.43
Central	1.53	1.06	1.27	0.94	0.82
Pacific	0.97	0.69	1.38	0.98	1.03
U.S. Total	1.54	0.89	1.38	1.09	1.13
Wood duck					
Atlantic	1.59	1.28	1.27	0.99	0.97
Mississippi	1.65	1.53	1.32	1.61	1.28
Central	1.07	1.36	1.01	1.08	1.64
Pacific	1.57	2.39	2.41	2.06	1.12
U.S. Total	1.58	1.47	1.32	1.37	1.18
Redhead					
Atlantic	0.54	0.29	2.18	1.47	1.47
Mississippi	1.58	0.80	3.15	2.32	2.45
Central	1.64	0.81	2.63	2.13	2.21
Pacific	1.69	1.54	2.11	1.50	1.18
U.S. Total	1.53	0.89	2.70	2.07	2.09
Canvasback					
Atlantic	0.56	0.36	1.53	---	1.42
Mississippi	1.11	0.31	1.07	2.57	1.15
Central	1.51	0.73	3.02	1.71	1.50
Pacific	1.02	0.65	3.23	1.30	0.99
U.S. Total	1.07	0.50	1.67	1.91	1.14
Greater scaup					
Atlantic	0.98	2.06	0.87	1.81	0.78
Mississippi	1.37	3.05	2.58	1.80	1.26
Central	---	8.65	---	---	---
Pacific	0.72	1.71	1.06	0.56	1.23
U.S. Total	0.96	2.39	1.49	1.33	1.19

Table 9 (continued). Preliminary weighted age ratios of ducks harvested during the 2003-2007 hunting seasons, by species and flyway.

	Immatures per adult [a, b]				
Species and Flyway	2003	2004	2005	2006	2007
Lesser scaup					
Atlantic	0.77	0.37	0.50	0.85	0.77
Mississippi	1.33	0.89	0.57	1.79	1.05
Central	0.95	1.16	0.54	1.13	1.08
Pacific	1.58	1.74	2.11	1.77	1.36
U.S. Total	1.16	0.92	0.63	1.39	1.05
Ring-necked duck					
Atlantic	1.17	1.02	2.63	1.93	1.01
Mississippi	2.08	1.44	1.71	2.30	1.81
Central	0.82	1.70	0.93	0.95	0.96
Pacific	1.44	1.46	1.91	1.59	1.49
U.S. Total	1.52	1.40	1.71	1.86	1.38
Common goldeneye					
Atlantic	0.67	0.71	0.54	0.79	0.55
Mississippi	1.19	0.60	1.17	1.16	1.11
Central	0.66	0.62	1.50	1.15	0.51
Pacific	0.71	0.78	0.80	0.98	0.78
U.S. Total	0.81	0.71	0.88	1.02	0.81
Bufflehead					
Atlantic	0.78	0.68	0.88	0.97	0.81
Mississippi	1.50	1.27	0.76	1.07	1.26
Central	0.29	1.09	1.20	0.70	0.84
Pacific	0.93	1.18	1.13	0.78	1.06
U.S. Total	1.01	1.01	0.93	0.95	1.00
Ruddy duck					
Atlantic	1.49	1.33	3.08	3.62	2.15
Mississippi	1.41	2.19	4.11	4.40	3.61
Central	---	---	---	4.31	2.94
Pacific	1.10	0.64	1.80	1.26	1.49
U.S. Total	1.39	1.23	2.62	3.18	2.44
Hooded merganser					
Atlantic	0.77	0.92	1.00	0.78	0.88
Mississippi	1.09	1.05	1.56	0.93	0.87
Central	1.17	0.46	1.77	1.42	1.40
Pacific	2.54	1.05	1.24	1.00	0.87
U.S. Total	1.03	0.95	1.29	0.88	0.91

Table 9 (continued). Preliminary weighted age ratios of ducks harvested during the 2003-2007 hunting seasons, by species and flyway.

	Immatures per adult [a, b]				
Species and Flyway	2003	2004	2005	2006	2007
Common merganser					
Atlantic	1.76	1.23	1.39	1.04	0.74
Mississippi	---	---	---	---	---
Central	---	0.77	---	---	---
Pacific	0.78	0.84	0.92	0.93	1.04
U.S. Total	1.52	1.31	1.40	1.38	0.78
Red-breasted merganser					
Atlantic	1.06	0.46	0.91	0.96	1.11
U.S. Total	1.09	0.31	0.89	1.11	1.21
Long-tailed duck					
Atlantic	0.53	0.30	0.52	0.76	0.86
Mississippi	---	---	0.53	1.18	---
U.S. Total	0.67	0.56	0.54	0.87	0.79
Common eider					
Atlantic	0.26	0.18	0.10	0.06	0.19
U.S. Total	0.26	0.18	0.10	0.06	0.19
Black scoter					
Atlantic	0.92	0.31	0.34	1.37	0.44
U.S. Total	1.03	0.46	0.48	1.54	0.75
White-winged scoter					
Atlantic	2.55	0.13	0.65	2.21	0.82
U.S. Total	2.36	0.67	1.25	2.95	1.56
Surf scoter					
Atlantic	1.13	0.24	0.25	0.36	0.43
Pacific	---	1.22	0.43	0.41	1.63
U.S. Total	1.21	0.31	0.34	0.38	0.58

[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 2003-2007 hunting seasons as determined from Waterfowl Parts Collection Survey.

	Males per female [a]				
State and Flyway	2003	2004	2005	2006	2007
Connecticut	2.5	2.1	2.2	2.2	2.0
Delaware	1.6	1.5	1.6	1.6	1.5
Florida	---	---	---	3.0	---
Georgia	1.6	1.6	0.7	2.2	---
Maine	1.7	1.6	1.5	1.7	1.7
Maryland	2.1	2.0	1.8	1.9	1.7
Massachusetts	2.4	1.9	2.1	1.7	1.9
New Hampshire	1.4	1.6	1.4	1.3	1.4
New Jersey	2.1	1.8	2.2	1.7	1.7
New York	1.9	1.9	1.9	1.9	1.7
North Carolina	1.9	1.7	2.6	2.2	2.5
Pennsylvania	2.2	2.0	2.3	2.1	2.0
Rhode Island	2.8	2.5	2.0	2.7	2.1
South Carolina	2.3	2.2	2.6	2.0	1.9
Vermont	2.2	1.3	1.6	1.7	1.8
Virginia	2.0	2.2	1.9	2.2	1.9
West Virginia	2.8	2.5	1.4	2.0	2.5
Atlantic Flyway Total [b]	2.02	1.91	2.00	1.96	1.87
Alabama	1.9	2.6	1.6	2.0	1.6
Arkansas	3.2	3.3	3.1	3.2	3.9
Illinois	2.8	2.7	2.5	2.1	2.3
Indiana	2.0	1.6	2.3	2.6	2.5
Iowa	2.4	3.1	2.3	2.3	2.4
Kentucky	2.1	2.4	2.7	2.8	3.0
Louisiana	2.1	2.5	1.5	1.6	2.4
Michigan	2.0	2.1	2.3	2.1	2.3
Minnesota	1.7	1.5	1.8	2.2	2.2
Mississippi	2.7	3.2	2.3	4.2	2.8
Missouri	2.3	2.7	2.5	2.8	2.7
Ohio	1.6	2.2	1.8	2.6	2.6
Tennessee	2.2	2.6	2.2	2.2	2.3
Wisconsin	1.5	2.0	1.8	2.0	2.1
Mississippi Flyway Total [b]	2.25	2.51	2.35	2.51	2.65

Table 10 (continued). Preliminary weighted sex ratios of mallards in state harvests during the 2003-2007 hunting seasons as determined from Waterfowl Parts Collection Survey.

	Males per female [a]				
State and Flyway	2003	2004	2005	2006	2007
Colorado	3.3	3.0	2.9	3.4	3.1
Kansas	6.4	5.8	5.6	3.8	4.8
Montana	4.4	3.4	3.8	4.7	2.9
Nebraska	4.3	4.3	4.6	4.0	4.1
New Mexico	2.2	2.4	2.1	3.5	2.2
North Dakota	2.6	2.5	2.5	3.2	3.4
Oklahoma	3.2	4.0	3.7	3.6	3.6
South Dakota	3.3	3.8	3.2	4.1	3.5
Texas	2.7	3.1	2.2	2.8	3.3
Wyoming	4.8	7.0	4.1	7.1	6.6
Central Flyway Total [b]	3.30	3.51	3.06	3.52	3.62
Arizona	1.1	1.4	1.4	1.9	1.9
California	2.0	2.7	2.5	2.1	2.3
Colorado	5.8	3.0	2.4	3.6	2.3
Idaho	2.6	3.5	2.8	2.7	3.3
Montana	3.1	3.4	3.6	3.5	3.5
Nevada	1.8	2.0	1.8	2.8	1.8
New Mexico	2.4	2.9	2.1	2.3	4.1
Oregon	2.0	1.8	1.8	1.9	1.7
Utah	1.9	2.1	2.2	2.2	2.4
Washington	2.4	2.6	2.0	2.1	2.6
Wyoming	1.8	1.6	2.2	2.9	1.4
Pacific Flyway Total [b]	2.23	2.60	2.30	2.19	2.33
Alaska	1.1	0.9	1.1	1.5	1.5
U.S. Total [b]	2.37	2.62	2.40	2.47	2.60

[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 2003-2007 hunting seasons, by species and flyway.

	Males per female [a]				
Species and Flyway	2003	2004	2005	2006	2007
Mallard					
Atlantic	2.02	1.91	2.00	1.96	1.87
Mississippi	2.25	2.51	2.35	2.51	2.65
Central	3.30	3.51	3.06	3.52	3.62
Pacific	2.23	2.60	2.30	2.19	2.33
U.S. Total	2.37	2.62	2.40	2.47	2.60
Black duck					
Atlantic	0.99	1.21	1.23	1.17	1.08
Mississippi	1.24	1.82	1.31	0.69	0.80
U.S. Total	1.05	1.37	1.25	1.01	0.99
Mottled duck					
Atlantic	0.63	0.85	0.81	0.92	0.99
Mississippi	0.73	0.64	0.71	0.94	0.62
Central	1.15	1.27	1.57	1.13	0.94
U.S. Total	0.77	0.80	0.90	0.96	0.71
Gadwall					
Atlantic	1.91	1.81	1.38	1.52	1.81
Mississippi	1.83	1.72	1.73	1.79	1.93
Central	1.52	1.65	1.54	1.78	1.76
Pacific	1.72	1.97	1.50	1.54	1.64
U.S. Total	1.72	1.73	1.62	1.74	1.84
American wigeon					
Atlantic	1.73	1.64	1.60	1.56	2.12
Mississippi	1.55	1.27	1.65	1.45	1.36
Central	1.52	1.79	1.73	1.92	1.80
Pacific	1.66	1.70	1.50	1.48	1.48
U.S. Total	1.60	1.61	1.58	1.57	1.52
Green-winged teal					
Atlantic	1.24	1.26	1.34	1.26	1.12
Mississippi	1.61	1.70	2.12	1.88	1.95
Central	1.61	1.56	1.93	1.82	2.07
Pacific	1.74	1.63	1.59	1.59	1.53
U.S. Total	1.59	1.59	1.79	1.69	1.73
Blue-winged/Cinnamon teal					
Atlantic	1.41	1.60	1.32	1.31	1.28
Mississippi	1.09	1.14	1.16	1.33	1.39
Central	1.15	1.31	1.41	1.29	1.12
Pacific	1.27	1.88	1.21	1.27	1.29
U.S. Total	1.13	1.29	1.26	1.31	1.29

Table 11 (continued). Preliminary weighted sex ratios of ducks harvested during the 2003-2007 hunting seasons, by species and flyway.

	Males per female [a]				
Species and Flyway	2003	2004	2005	2006	2007
Northern shoveler					
Atlantic	1.43	1.72	1.51	1.13	1.47
Mississippi	1.51	1.69	1.50	1.78	1.82
Central	1.24	1.53	1.44	1.39	1.71
Pacific	1.84	1.85	1.70	1.50	1.44
U.S. Total	1.54	1.72	1.54	1.56	1.61
Northern pintail					
Atlantic	1.36	1.31	1.59	1.29	2.10
Mississippi	1.73	2.05	1.98	2.52	1.98
Central	1.63	2.09	2.60	2.34	2.41
Pacific	2.57	3.62	2.54	2.79	2.36
U.S. Total	1.93	2.53	2.31	2.48	2.20
Wood duck					
Atlantic	1.92	1.84	1.88	2.05	1.97
Mississippi	1.78	1.72	1.88	1.76	1.77
Central	1.78	2.17	2.17	1.50	2.11
Pacific	1.35	1.46	1.75	1.51	1.72
U.S. Total	1.80	1.76	1.89	1.81	1.85
Redhead					
Atlantic	1.96	1.59	1.10	1.23	1.96
Mississippi	1.18	1.33	1.61	1.50	1.08
Central	1.28	2.23	1.43	1.26	1.55
Pacific	1.51	1.85	1.47	1.77	1.81
U.S. Total	1.32	1.73	1.47	1.42	1.39
Canvasback					
Atlantic	1.66	3.21	1.10	---	0.74
Mississippi	2.19	1.03	1.34	1.89	2.05
Central	0.84	1.11	1.46	1.63	1.80
Pacific	1.45	1.42	0.88	1.02	1.17
U.S. Total	1.45	1.46	1.27	1.52	1.54
Greater scaup					
Atlantic	1.23	0.91	1.13	1.13	1.79
Mississippi	1.35	0.79	1.13	1.06	0.96
Central	---	1.06	---	---	---
Pacific	1.28	1.67	2.42	1.22	1.90
U.S. Total	1.27	1.05	1.32	1.10	1.51

Table 11 (continued). Preliminary weighted sex ratios of ducks harvested during the 2003-2007 hunting seasons, by species and flyway.

	Males per female [a]				
Species and Flyway	2003	2004	2005	2006	2007
Lesser scaup					
Atlantic	2.01	2.35	2.57	2.14	2.53
Mississippi	1.83	1.64	2.56	1.53	1.93
Central	1.21	1.71	2.80	1.45	1.53
Pacific	1.37	1.48	1.54	1.83	1.55
U.S. Total	1.67	1.73	2.43	1.65	1.85
Ring-necked duck					
Atlantic	2.14	1.67	1.58	1.62	1.89
Mississippi	1.58	2.05	1.77	1.71	1.94
Central	2.49	1.62	2.18	2.27	2.79
Pacific	1.69	1.38	1.79	1.61	1.83
U.S. Total	1.82	1.81	1.78	1.74	2.02
Common goldeneye					
Atlantic	1.11	1.08	2.05	1.69	1.38
Mississippi	1.50	2.09	1.23	1.61	1.32
Central	2.00	1.17	2.13	2.31	1.73
Pacific	1.19	1.62	2.47	1.37	1.29
U.S. Total	1.33	1.58	1.80	1.53	1.36
Bufflehead					
Atlantic	1.58	2.26	1.53	1.66	1.65
Mississippi	1.13	1.35	1.35	2.17	1.79
Central	1.49	0.92	1.36	1.88	1.42
Pacific	1.57	1.17	1.69	1.84	1.63
U.S. Total	1.36	1.46	1.48	1.90	1.66
Hooded merganser					
Atlantic	2.01	1.74	3.14	1.59	2.97
Mississippi	2.51	1.42	4.49	3.04	2.86
Central	3.14	1.16	---	---	---
Pacific	---	2.17	---	---	0.87
U.S. Total	2.29	1.51	3.24	2.07	2.55
Common merganser					
Atlantic	0.81	0.70	0.78	0.63	1.13
Mississippi	---	---	---	---	---
Central	---	0.63	---	---	---
Pacific	1.10	1.53	2.00	1.06	0.92
U.S. Total	1.06	0.86	1.46	0.83	1.06

[a] Ratio not shown if based on a sample of less than 20 wings

[b] In estimating Flyway and U.S. ratios, the ratio for each state was 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 2003-2007 hunting seasons, by species and flyway.

	Immatures per adult [a, b]				
Species and Flyway	2003	2004	2005	2006	2007
Canada goose					
Atlantic	0.56	0.46	0.62	0.53	0.40
Mississippi	0.55	0.38	0.52	0.54	0.50
Central	0.53	0.40	0.54	0.47	0.40
Pacific	0.71	0.61	0.47	0.45	0.44
U.S. Total	0.56	0.43	0.54	0.51	0.44
Snow goose					
Atlantic	1.13	1.02	0.81	0.53	0.56
Mississippi	0.72	0.15	0.39	0.75	0.34
Central	0.43	0.20	0.41	0.49	0.20
Pacific	0.86	0.51	1.36	0.70	0.64
U.S. Total	0.62	0.26	0.52	0.60	0.33
Blue goose					
Mississippi	0.86	0.31	0.48	0.62	0.35
Central	0.58	0.17	0.81	0.53	0.43
U.S. Total	0.76	0.26	0.59	0.58	0.39
Ross' goose					
Mississippi	2.07	0.93	---	---	---
Central	2.22	0.34	1.55	1.37	0.91
Pacific	1.25	0.24	0.91	0.90	0.22
U.S. Total	1.93	0.35	1.60	1.79	0.64
Greater white-fronted goose					
Mississippi	0.82	0.44	0.58	0.91	0.31
Central	1.27	0.65	0.81	1.16	0.70
Pacific	0.53	0.72	1.16	0.86	0.68
U.S. Total	0.92	0.55	0.77	0.97	0.48
Brant					
Atlantic	0.54	0.32	0.15	0.27	0.67
Pacific	0.45	1.19	1.63	0.27	0.74
U.S. Total	0.54	0.38	0.20	0.27	0.68

[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.

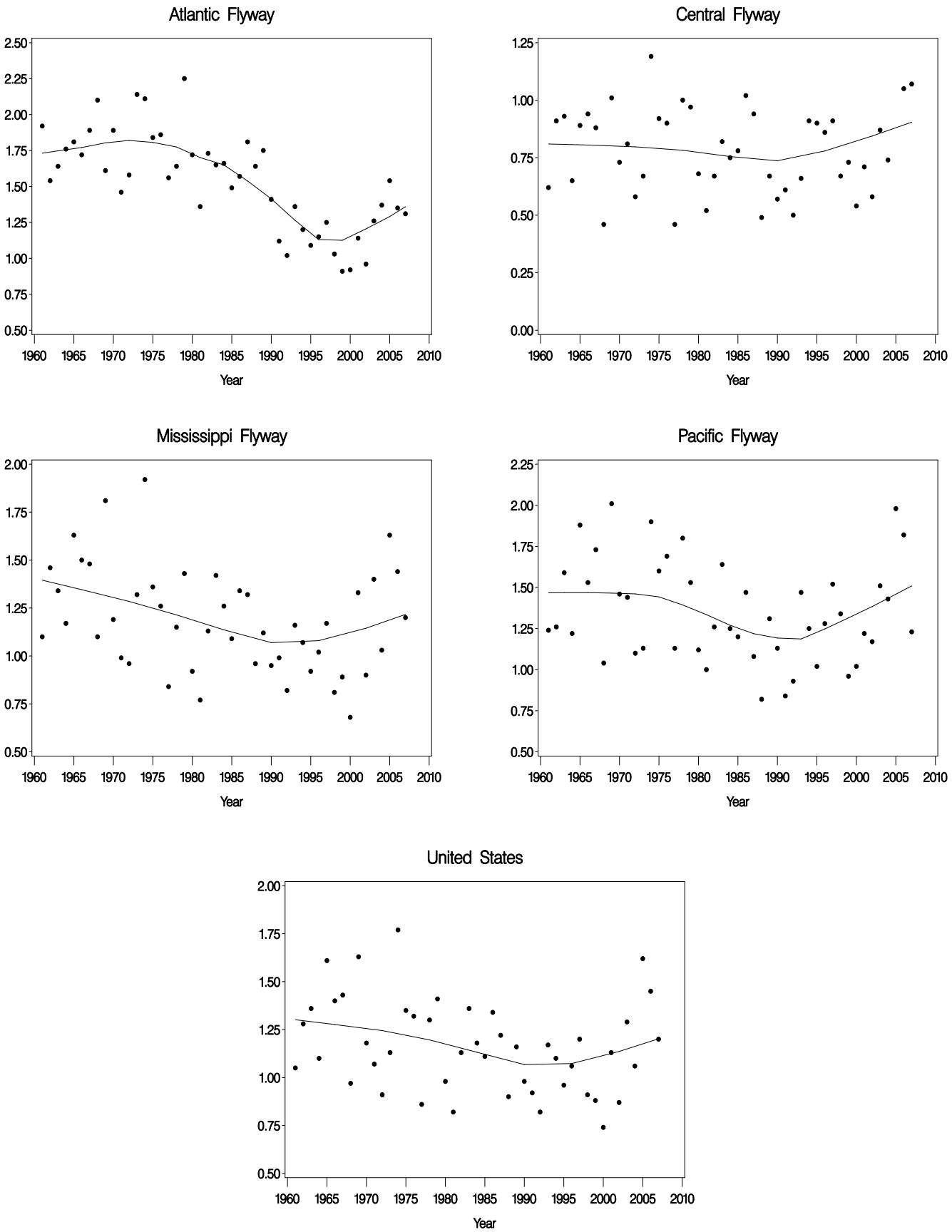

Figure 3. Age ratios of mallards harvested in the United States, 1961-2007.

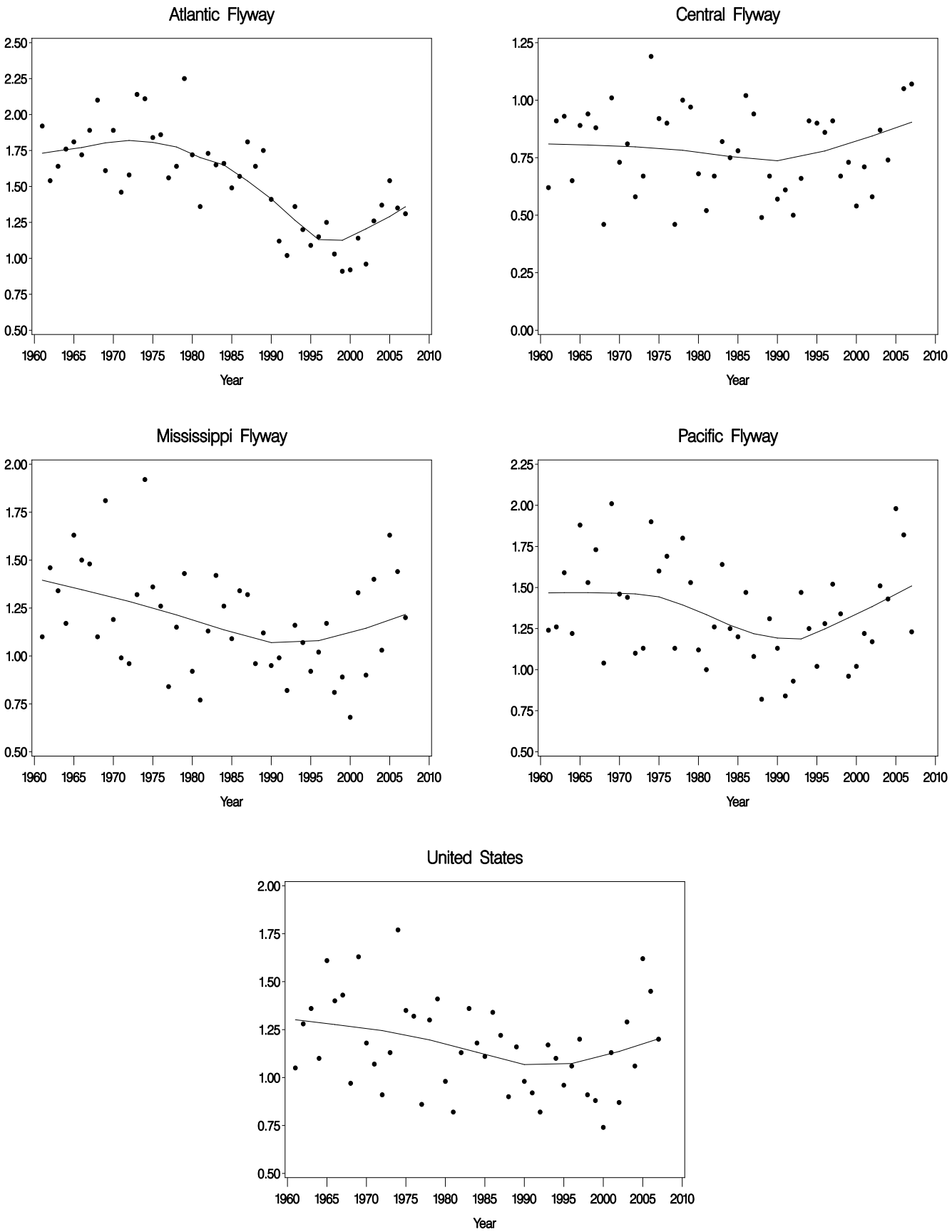

Figure 4. Age ratios of Northern pintails harvested in the United States, 1961-2007.

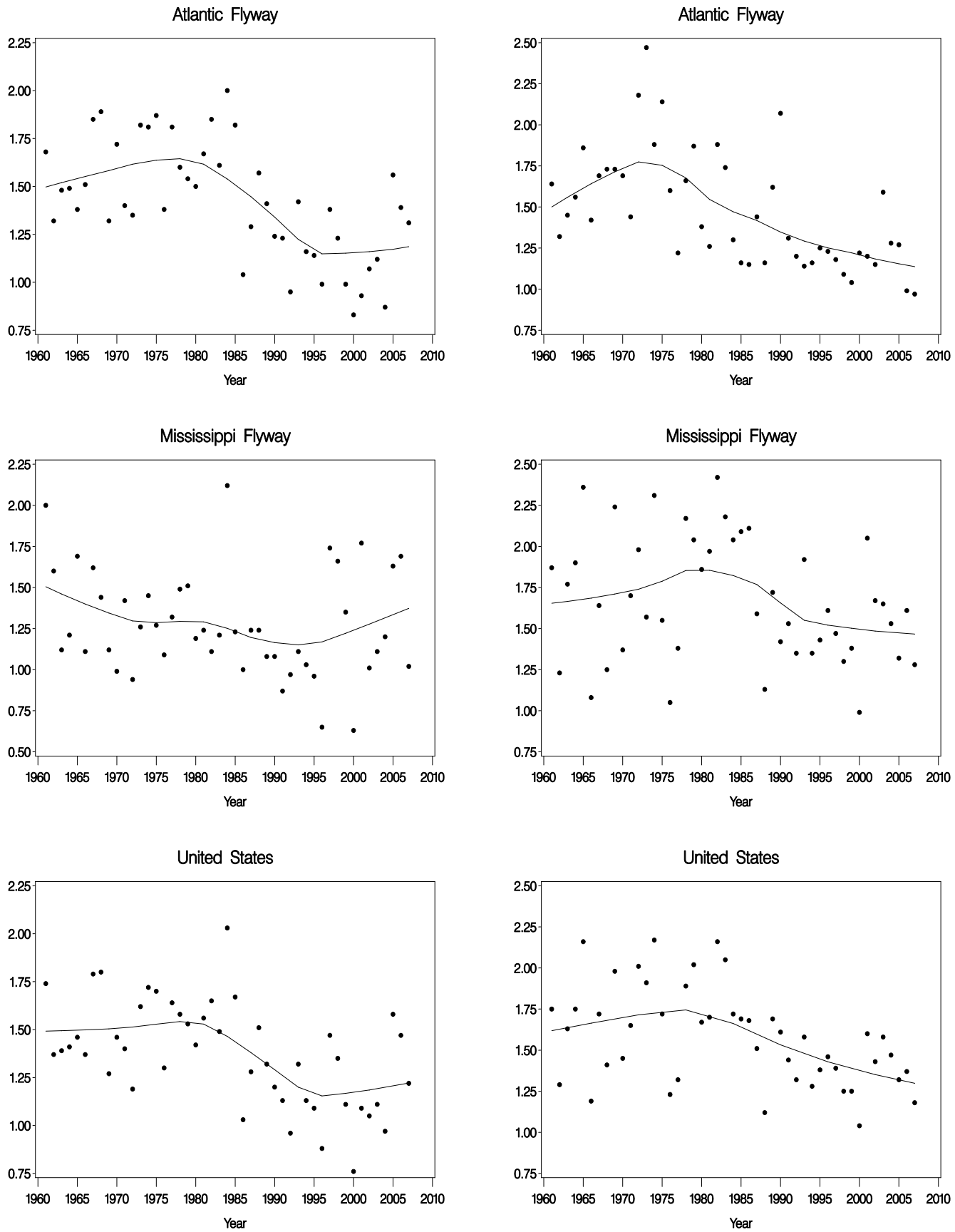

Figure 5. Age ratios of American black ducks (left column) and wood ducks (right column) harvested in the United States, 1961-2007.

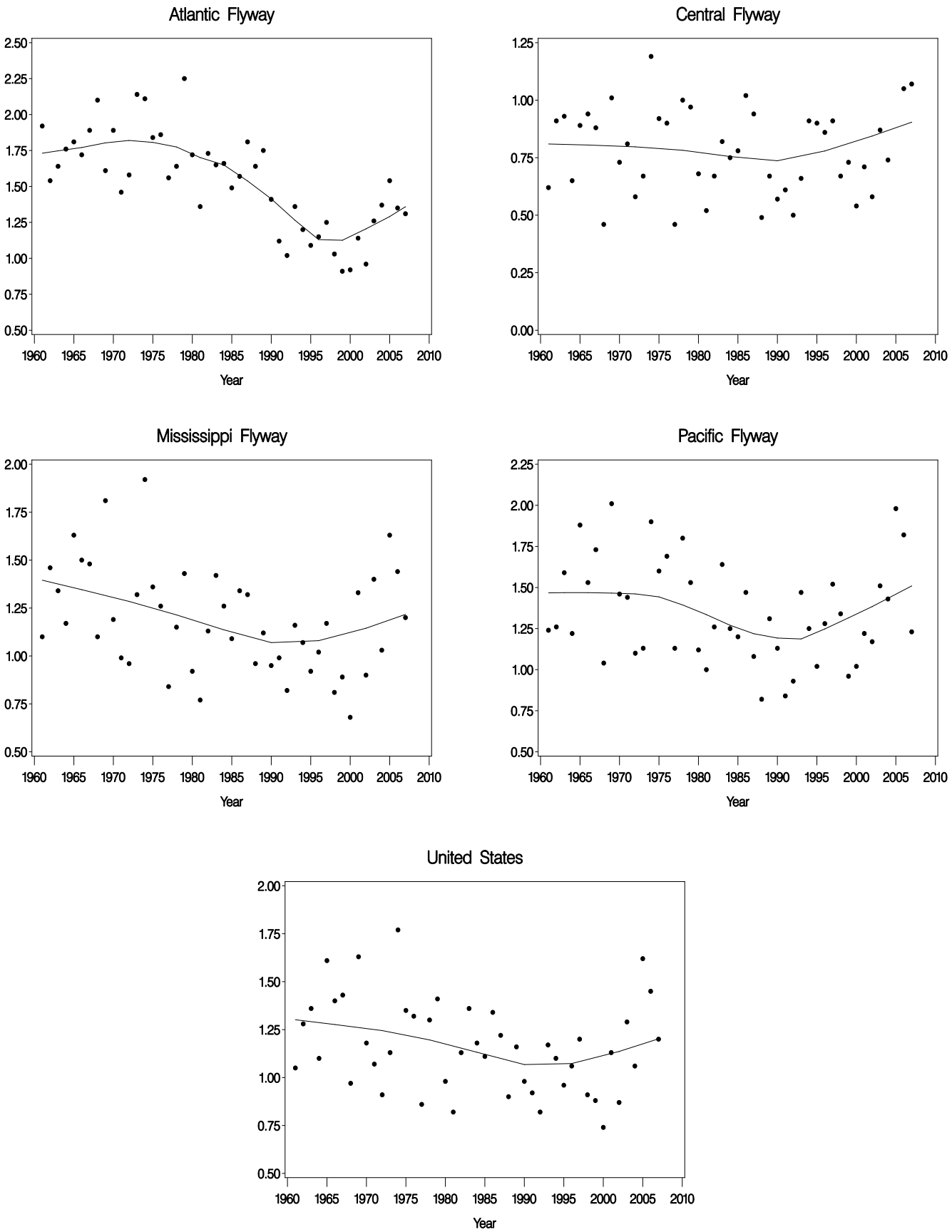

Figure 6. Age ratios of lesser scuap harvested in the united States, 1961-2007.

Table 13. Preliminary estimates of mourning dove harvest and hunter activity during the 2006 and 2007 hunting seasons[a].

State and Management Unit	Mourning Dove Harvest		Active Hunters [b]		Mourning Dove Days Afield		Seasonal Harvest Per Hunter	
	2006	2007	2006	2007	2006	2007	2006	2007
Alabama	1,015,300 ± 20%	829,300 ± 11%	56,300 ± 12%	48,500 ± 8%	141,800 ± 17%	127,500 ± 12%	18.0 ± 23%	17.1 ± 14%
Delaware	39,400 ± 20%	50,900 ± 22%	2,400 ± 19%	2,600 ± 20%	7,000 ± 24%	8,100 ± 20%	16.1 ± 28%	19.4 ± 30%
Florida	298,800 ± 24%	372,600 ± 24%	15,900 ± 19%	21,600 ± 18%	53,600 ± 21%	66,000 ± 24%	18.8 ± 31%	17.3 ± 29%
Georgia	851,500 ± 22%	1,107,500 ± 32%	38,600 ± 14%	37,900 ± 16%	120,200 ± 20%	145,600 ± 26%	22.1 ± 26%	29.2 ± 36%
Illinois	948,700 ± 13%	912,300 ± 16%	40,500 ± 10%	41,400 ± 10%	129,200 ± 15%	137,200 ± 15%	23.4 ± 17%	22.0 ± 19%
Indiana	190,500 ± 23%	258,400 ± 17%	13,200 ± 18%	15,000 ± 26%	40,200 ± 22%	46,000 ± 23%	14.5 ± 29%	17.2 ± 31%
Kentucky	491,300 ± 24%	278,100 ± 41%	20,700 ± 19%	10,600 ± 38%	64,000 ± 28%	34,100 ± 48%	23.8 ± 31%	26.2 ± 56%
Louisiana	373,700 ± 23%	412,900 ± 29%	22,700 ± 19%	24,600 ± 23%	65,800 ± 24%	63,700 ± 25%	16.5 ± 30%	16.8 ± 37%
Maryland	162,700 ± 28%	212,900 ± 26%	9,300 ± 19%	11,800 ± 20%	29,500 ± 25%	36,600 ± 24%	17.6 ± 34%	18.0 ± 33%
Mississippi	492,800 ± 21%	612,000 ± 21%	23,000 ± 15%	30,100 ± 12%	60,100 ± 18%	82,000 ± 18%	21.5 ± 26%	20.4 ± 24%
North Carolina	861,500 ± 19%	854,000 ± 24%	40,400 ± 14%	50,900 ± 16%	125,500 ± 16%	144,800 ± 22%	21.3 ± 24%	16.8 ± 29%
Ohio	284,400 ± 20%	307,700 ± 35%	14,300 ± 19%	17,500 ± 21%	70,000 ± 26%	60,600 ± 33%	19.9 ± 28%	17.6 ± 40%
Pennsylvania	372,200 ± 23%	509,100 ± 27%	31,600 ± 18%	37,500 ± 17%	113,700 ± 21%	159,000 ± 20%	11.8 ± 30%	13.6 ± 32%
Rhode Island	500 ± 123%	2,000 ± 55%	100 ± 108%	300 ± 66%	600 ± 155%	1,100 ± 71%	5.3 ± 164%	8.0 ± 86%
South Carolina	696,200 ± 13%	865,900 ± 18%	36,200 ± 13%	43,400 ± 12%	118,500 ± 15%	139,400 ± 16%	19.2 ± 19%	20.0 ± 21%
Tennessee	656,100 ± 26%	682,700 ± 32%	37,800 ± 17%	33,000 ± 19%	101,000 ± 24%	85,500 ± 24%	17.3 ± 31%	20.7 ± 37%
Virginia	304,200 ± 14%	418,100 ± 21%	20,400 ± 12%	26,500 ± 11%	52,500 ± 12%	78,600 ± 18%	14.9 ± 19%	15.8 ± 24%
West Virginia	14,600 ± 24%	20,200 ± 32%	1,100 ± 21%	1,800 ± 16%	2,700 ± 24%	4,300 ± 29%	13.5 ± 32%	11.0 ± 36%
Wisconsin	100,900 ± 38%	202,000 ± 38%	11,200 ± 26%	13,600 ± 24%	40,100 ± 29%	61,600 ± 29%	9.0 ± 46%	14.9 ± 45%
Eastern Unit Total	8,155,400 ± 6%	8,908,400 ± 7%	424,500	468,600	1,336,000 ± 5%	1,481,697 ± 6%		
Arkansas	621,500 ± 20%	791,700 ± 24%	31,300 ± 16%	37,000 ± 16%	77,500 ± 18%	115,900 ± 23%	19.8 ± 26%	21.4 ± 29%
Colorado	270,300 ± 19%	315,000 ± 14%	19,800 ± 11%	21,800 ± 11%	45,700 ± 13%	57,800 ± 14%	13.6 ± 22%	14.5 ± 17%
Kansas	711,800 ± 12%	725,100 ± 13%	35,400 ± 8%	36,300 ± 8%	116,400 ± 11%	119,100 ± 11%	20.1 ± 14%	20.0 ± 16%
Minnesota	50,000 ± 46%	67,400 ± 52%	8,000 ± 33%	7,700 ± 35%	24,200 ± 39%	27,600 ± 49%	6.3 ± 56%	8.7 ± 62%
Missouri	709,500 ± 15%	603,300 ± 15%	44,700 ± 7%	42,600 ± 8%	129,800 ± 12%	124,400 ± 13%	15.9 ± 17%	14.2 ± 17%
Montana	14,800 ± 33%	20,900 ± 43%	1,800 ± 36%	1,700 ± 31%	3,900 ± 38%	4,000 ± 34%	8.5 ± 49%	12.3 ± 53%
Nebraska	249,700 ± 12%	319,600 ± 18%	15,000 ± 12%	17,000 ± 12%	43,000 ± 12%	55,300 ± 16%	16.7 ± 17%	18.8 ± 22%
New Mexico	226,900 ± 33%	198,700 ± 25%	7,100 ± 20%	8,600 ± 18%	33,900 ± 28%	40,100 ± 33%	31.8 ± 39%	23.1 ± 31%
North Dakota	56,400 ± 25%	48,700 ± 27%	4,000 ± 23%	3,200 ± 27%	10,800 ± 24%	9,900 ± 26%	14.3 ± 34%	15.4 ± 38%
Oklahoma	704,400 ± 24%	480,000 ± 24%	36,100 ± 9%	24,600 ± 14%	108,300 ± 17%	73,100 ± 19%	19.5 ± 26%	19.5 ± 27%
South Dakota	130,300 ± 18%	104,000 ± 30%	8,100 ± 16%	6,000 ± 20%	24,700 ± 17%	18,200 ± 25%	16.2 ± 24%	17.2 ± 36%
Texas	5,138,700 ± 14%	5,463,300 ± 14%	258,900 ± 10%	275,200 ± 10%	986,200 ± 14%	1,149,600 ± 13%	19.8 ± 17%	19.9 ± 17%
Wyoming	29,500 ± 37%	42,600 ± 27%	2,300 ± 29%	4,000 ± 20%	6,500 ± 36%	8,800 ± 24%	12.9 ± 47%	10.6 ± 33%
Central Unit Total	8,914,000 ± 9%	9,180,200 ± 9%	472,500	485,800	1,611,000 ± 9%	1,803,800 ± 9%		
Arizona	750,700 ± 14%	792,800 ± 11%	37,300 ± 9%	39,500 ± 8%	130,100 ± 21%	125,500 ± 10%	20.1 ± 16%	20.0 ± 14%
California	1,020,400 ± 12%	1,162,100 ± 11%	63,300 ± 8%	63,800 ± 6%	215,900 ± 18%	201,100 ± 10%	16.1 ± 15%	18.2 ± 12%
Idaho	98,100 ± 22%	192,300 ± 35%	10,100 ± 16%	22,800 ± 21%	26,900 ± 22%	68,500 ± 36%	9.7 ± 28%	8.4 ± 41%
Nevada	38,900 ± 27%	38,500 ± 43%	4,100 ± 21%	2,800 ± 26%	9,400 ± 25%	9,600 ± 42%	9.4 ± 34%	13.8 ± 50%
Oregon	84,300 ± 37%	96,900 ± 55%	7,700 ± 24%	6,800 ± 49%	21,600 ± 32%	27,600 ± 60%	11.0 ± 44%	14.2 ± 74%
Utah	77,600 ± 20%	90,000 ± 20%	11,900 ± 11%	14,200 ± 12%	28,900 ± 16%	36,400 ± 24%	6.5 ± 23%	6.4 ± 23%
Washington	132,900 ± 14%	88,900 ± 19%	10,500 ± 12%	7,400 ± 18%	26,000 ± 12%	18,500 ± 21%	12.6 ± 19%	11.9 ± 26%
Western Unit Total	2,202,900 ± 8%	2,461,500 ± 7%	144,900	157,400	458,800 ± 10%	487,200 ± 8%		
U.S. Total	19,272,400 ± 5%	20,550,000 ± 5%	1,041,900	1,111,800	3,405,800 ± 5%	3,772,697 ± 5%		

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

[b] 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 2006 and 2007 hunting seasons [a].

State and	White-winged Dove Harvest		Active Hunters [b]		White-winged Dove Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2006	2007	2006	2007	2006	2007	2006	2007
Alabama	9,900 ± 86%	10,100 ± 75%	3,800 ± 56%	2,900 ± 43%	6,200 ± 66%	9,900 ± 70%	2.6 ± 103%	3.5 ± 86%
Florida	29,500 ± 70%	29,100 ± 44%	3,400 ± 44%	4,100 ± 42%	12,100 ± 46%	15,900 ± 63%	8.6 ± 82%	7.1 ± 61%
Kentucky	700 ± 153%	200 ± 196%	100 ± 137%	300 ± 146%	400 ± 138%	800 ± 153%	6.0 ± 206%	0.7 ± 244%
Louisiana	3,400 ± 95%	11,800 ± 81%	1,100 ± 92%	2,700 ± 75%	6,500 ± 144%	9,900 ± 79%	3.2 ± 132%	4.4 ± 110%
Mississippi	3,200 ± 90%	2,100 ± 111%	1,200 ± 83%	1,900 ± 74%	2,100 ± 75%	3,600 ± 82%	2.6 ± 122%	1.1 ± 134%
Eastern Unit Total	46,800 ± 48%	53,400 ± 33%	9,600	9,000	27,300 ± 43%	40,000 ± 37%		
Colorado	900 ± 67%	3,300 ± 86%	1,100 ± 57%	2,300 ± 40%	2,500 ± 55%	19,700 ± 114%	0.8 ± 88%	1.4 ± 95%
Kansas	2,100 ± 103%	8,800 ± 66%	600 ± 100%	1,800 ± 55%	4,300 ± 126%	6,200 ± 53%	3.7 ± 143%	4.9 ± 86%
Missouri	1,000 ± 112%	2,200 ± 106%	700 ± 86%	1,600 ± 61%	1,200 ± 72%	4,100 ± 61%	1.5 ± 141%	1.4 ± 123%
Nebraska	800 ± 102%	900 ± 101%	200 ± 68%	200 ± 64%	600 ± 83%	1,000 ± 70%	4.7 ± 122%	3.6 ± 119%
New Mexico	66,100 ± 46%	64,000 ± 39%	3,600 ± 33%	5,000 ± 27%	17,500 ± 41%	26,400 ± 49%	18.2 ± 57%	12.7 ± 48%
Oklahoma	5,500 ± 93%	17,100 ± 106%	1,900 ± 67%	2,900 ± 55%	8,700 ± 92%	11,200 ± 71%	2.9 ± 115%	5.9 ± 119%
Texas	974,500 ± 17%	1,522,100 ± 21%	105,300 ± 16%	133,200 ± 16%	459,400 ± 28%	519,500 ± 18%	9.3 ± 23%	11.4 ± 26%
Central Unit Total	1,050,900 ± 16%	1,618,400 ± 20%	113,400	147,100	494,000 ± 26%	588,000 ± 17%		
Arizona	107,400 ± 23%	127,600 ± 25%	18,300 ± 15%	23,200 ± 14%	56,500 ± 16%	68,700 ± 14%	5.9 ± 27%	5.5 ± 28%
California	55,200 ± 30%	67,900 ± 40%	11,700 ± 23%	10,000 ± 20%	31,000 ± 23%	30,400 ± 26%	4.7 ± 38%	6.8 ± 45%
Nevada	600 ± 168%	0	200 ± 133%	100 ± 73%	600 ± 158%	200 ± 86%	3.1 ± 214%	0
Utah	1,000 ± 107%	800 ± 148%	300 ± 86%	1,400 ± 52%	1,600 ± 97%	2,900 ± 57%	3.1 ± 137%	0.6 ± 157%
Western Unit Total	164,300 ± 18%	196,300 ± 21%	30,500	34,700	89,700 ± 13%	102,100 ± 12%		
U.S. Total	1,262,000 ± 14%	1,868,100 ± 17%	153,500	190,900	611,100 ± 21%	730,200 ± 14%		

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

[b] 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 2006 and 2007 hunting seasons [a].

State and	Band-tailed Pigeon Harvest		Active Hunters[b]		Band-tailed Pigeon Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2006	2007	2006	2007	2006	2007	2006	2007
Arizona	500 ± 56%	1,000 ± 101%	600 ± 73%	2,100 ± 43%	1,100 ± 70%	5,000 ± 57%	0.9 ± 92%	0.5 ± 110%
Colorado	600 ± 76%	900 ± 102%	900 ± 52%	1,400 ± 45%	1,700 ± 63%	3,800 ± 56%	0.7 ± 92%	0.6 ± 112%
New Mexico	100 ± 109%	2,800 ± 113%	100 ± 172%	800 ± 47%	300 ± 163%	3,600 ± 62%	0.4 ± 204%	3.5 ± 123%
Utah	400 ± 95%	200 ± 195%	200 ± 92%	300 ± 86%	200 ± 87%	400 ± 73%	2.5 ± 133%	0.6 ± 213%
Four Corners Total	1,600 ± 42%	4,800 ± 71%	1,800	4,600	3,300 ± 43%	12,800 ± 33%		
California	12,500 ± 40%	9,700 ± 39%	6,000 ± 35%	4,900 ± 33%	13,500 ± 47%	10,600 ± 37%	2.1 ± 53%	2.0 ± 51%
Oregon	1,500 ± 25%	1,400 ± 74%	400 ± 13%	700 ± 113%	1,200 ± 20%	1,200 ± 69%	3.5 ± 28%	2.1 ± 135%
Washington	900 ± 97%	1,700 ± 61%	500 ± 61%	900 ± 44%	700 ± 68%	1,800 ± 60%	1.8 ± 115%	1.9 ± 75%
Pacific Coast Total	14,900 ± 34%	12,700 ± 32%	6,900	6,400	15,400 ± 41%	13,500 ± 30%		
U.S. Total	16,600 ± 31%	17,600 ± 30%	8,700	11,000	18,800 ± 35%	26,300 ± 22%		

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

[b] 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 2006 and 2007 hunting seasons[a].

State and Management Unit	Woodcock Harvest		Active Hunters[b]		Woodcock Days Afield		Seasonal Harvest Per Hunter	
	2006	2007	2006	2007	2006	2007	2006	2007
Connecticut	3,500 ± 39%	1,700 ± 76%	1,300 ± 27%	800 ± 45%	5,500 ± 33%	3,200 ± 44%	2.8 ± 48%	2.1 ± 88%
Delaware	300 ± 93%	1,600 ± 134%	200 ± 101%	400 ± 75%	500 ± 64%	1,700 ± 92%	1.6 ± 138%	3.9 ± 154%
Florida	200 ± 151%	5,600 ± 165%	1,100 ± 178%	2,900 ± 107%	2,200 ± 178%	4,800 ± 98%	0.2 ± 234%	1.9 ± 197%
Georgia	500 ± 105%	7,800 ± 196%	1,400 ± 172%	1,600 ± 196%	5,600 ± 173%	6,200 ± 196%	0.3 ± 201%	5.0 ± 277%
Maine	15,600 ± 31%	13,700 ± 43%	7,800 ± 23%	5,200 ± 36%	33,200 ± 34%	22,600 ± 41%	2.0 ± 39%	2.7 ± 56%
Maryland	2,000 ± 117%	400 ± 54%	800 ± 121%	1,000 ± 121%	1,800 ± 105%	2,700 ± 130%	2.6 ± 169%	0.4 ± 132%
Massachussetts	3,100 ± 31%	2,100 ± 38%	1,300 ± 23%	900 ± 27%	5,900 ± 23%	5,000 ± 34%	2.3 ± 39%	2.2 ± 47%
New Hampshire	5,900 ± 31%	5,400 ± 28%	1,600 ± 34%	2,300 ± 25%	6,800 ± 24%	11,500 ± 37%	3.8 ± 46%	2.3 ± 37%
New Jersey	2,000 ± 42%	1,600 ± 57%	1,000 ± 47%	800 ± 58%	4,000 ± 56%	3,400 ± 56%	2.0 ± 63%	1.9 ± 81%
New York	10,200 ± 30%	9,800 ± 31%	4,400 ± 23%	5,000 ± 24%	18,700 ± 29%	23,100 ± 27%	2.3 ± 38%	2.0 ± 39%
North Carolina	4,600 ± 126%	7,500 ± 67%	1,600 ± 118%	2,400 ± 90%	6,400 ± 120%	11,200 ± 84%	2.8 ± 172%	3.1 ± 112%
Pennsylvania	18,400 ± 63%	11,100 ± 59%	10,100 ± 33%	10,600 ± 31%	36,600 ± 38%	41,100 ± 44%	1.8 ± 71%	1.1 ± 67%
Rhode Island	0	200 ± 193%	200 ± 134%	100 ± 135%	500 ± 134%	100 ± 152%	0	2.5 ± 236%
South Carolina	6,100 ± 96%	1,200 ± 89%	2,300 ± 88%	700 ± 141%	8,400 ± 111%	1,500 ± 70%	2.7 ± 131%	1.7 ± 167%
Vermont	3,000 ± 33%	2,000 ± 28%	1,000 ± 33%	700 ± 28%	4,300 ± 40%	3,000 ± 31%	3.0 ± 47%	2.9 ± 40%
Virginia	3,100 ± 101%	2,600 ± 117%	1,600 ± 69%	500 ± 98%	5,300 ± 98%	2,400 ± 86%	1.9 ± 122%	5.1 ± 153%
West Virginia	900 ± 58%	1,700 ± 87%	200 ± 52%	400 ± 53%	800 ± 47%	1,500 ± 54%	3.5 ± 78%	4.2 ± 102%
Eastern Unit Total	79,300 ± 20%	75,900 ± 28%	37,900	36,300	146,300 ± 17%	145,000 ± 19%		
Alabama	300 ± 86%	700 ± 98%	200 ± 66%	100 ± 57%	400 ± 84%	700 ± 72%	2.0 ± 108%	7.0 ± 113%
Arkansas	2,900 ± 146%	10,500 ± 116%	3,000 ± 110%	2,600 ± 121%	6,800 ± 143%	9,300 ± 105%	1.0 ± 182%	4.0 ± 167%
Illinois	2,200 ± 160%	3,800 ± 149%	2,000 ± 87%	3,100 ± 73%	8,900 ± 115%	7,600 ± 72%	1.1 ± 182%	1.2 ± 166%
Indiana	2,400 ± 69%	1,200 ± 53%	1,000 ± 58%	1,800 ± 71%	4,400 ± 75%	3,300 ± 58%	2.4 ± 90%	0.7 ± 89%
Iowa	1,500 ± 77%	100 ± 56%	2,100 ± 54%	1,100 ± 89%	4,300 ± 59%	4,600 ± 117%	0.7 ± 94%	0.1 ± 105%
Kansas	100 ± 89%	<50 ± 174%	300 ± 185%	600 ± 137%	300 ± 168%	3,100 ± 173%	0.2 ± 205%	<0.1 ± 221%
Kentucky	300 ± 104%	300 ± 105%	100 ± 45%	800 ± 164%	900 ± 86%	3,400 ± 127%	2.6 ± 113%	0.3 ± 195%
Louisiana	19,000 ± 68%	21,700 ± 90%	4,000 ± 65%	4,800 ± 62%	10,900 ± 66%	17,200 ± 73%	4.8 ± 94%	4.6 ± 110%
Michigan	116,200 ± 27%	86,800 ± 17%	30,000 ± 14%	28,400 ± 13%	155,300 ± 17%	138,900 ± 15%	3.9 ± 30%	3.1 ± 21%
Minnesota	38,700 ± 41%	34,400 ± 38%	14,900 ± 24%	15,300 ± 29%	60,200 ± 31%	62,800 ± 36%	2.6 ± 47%	2.2 ± 48%
Mississippi	600 ± 131%	600 ± 75%	1,200 ± 128%	600 ± 163%	3,900 ± 145%	1,800 ± 155%	0.5 ± 183%	1.0 ± 179%
Missouri	400 ± 52%	900 ± 55%	1,500 ± 96%	200 ± 30%	3,800 ± 118%	900 ± 45%	0.3 ± 109%	4.5 ± 62%
Nebraska	100 ± 93%	200 ± 122%	600 ± 133%	500 ± 168%	700 ± 117%	13,800 ± 186%	0.1 ± 162%	0.3 ± 208%
Ohio	4,100 ± 51%	2,600 ± 68%	2,200 ± 68%	2,600 ± 73%	9,800 ± 67%	9,300 ± 72%	1.8 ± 85%	1.0 ± 100%
Oklahoma	<50 ± 141%	0	500 ± 189%	0	600 ± 174%	0	0.2 ± 235%	0
Tennessee	700 ± 115%	800 ± 108%	100 ± 95%	100 ± 95%	800 ± 104%	400 ± 105%	5.3 ± 149%	6.0 ± 144%
Texas	0	1,500 ± 196%	0	600 ± 129%	0	2,100 ± 144%	0	2.5 ± 235%
Wisconsin	43,000 ± 25%	48,000 ± 31%	19,400 ± 22%	17,300 ± 23%	72,400 ± 25%	79,100 ± 31%	2.2 ± 33%	2.8 ± 39%
Central Unit Total	232,600 ± 17%	214,200 ± 16%	83,100	80,600	344,300 ± 12%	358,500 ± 14%		
U.S. Total	311,800 ± 14%	290,000 ± 14%	121,000	116,900	490,600 ± 10%	503,500 ± 12%		

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

[b] 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 17. Preliminary estimates of snipe harvest and hunter activity during the 2006 and 2007 hunting seasons [a].

State and Management Unit	Snipe Harvest		Active Hunters[b]		Snipe Days Afield		Seasonal Harvest Per Hunter	
	2006	2007	2006	2007	2006	2007	2006	2007
Connecticut	600 ± 168%	<50 ± 148%	100 ± 127%	<50 ± 96%	300 ± 135%	100 ± 108%	6.5 ± 211%	1.7 ± 176%
Delaware	200 ± 137%	0	100 ± 179%	<50 ± 118%	200 ± 168%	<50 ± 125%	2.9 ± 226%	0
Florida	23,500 ± 46%	38,900 ± 61%	3,200 ± 63%	3,500 ± 61%	10,900 ± 59%	10,500 ± 54%	7.4 ± 78%	11.1 ± 87%
Georgia	2,100 ± 194%	200 ± 194%	100 ± 136%	100 ± 194%	500 ± 174%	300 ± 194%	19.5 ± 237%	4.0 ± 275%
Maine	0	0	<50 ± 193%	0	100 ± 193%	0	0	0
Maryland	2,500 ± 195%	0	600 ± 191%	0	1,900 ± 194%	0	3.9 ± 273%	0
Massachusetts	200 ± 113%	100 ± 142%	100 ± 101%	100 ± 152%	600 ± 118%	100 ± 152%	1.4 ± 152%	1.1 ± 208%
New Hampshire	<50 ± 104%	100 ± 119%	100 ± 158%	<50 ± 81%	400 ± 165%	100 ± 98%	0.3 ± 189%	9.5 ± 143%
New Jersey	100 ± 194%	400 ± 183%	100 ± 137%	400 ± 128%	200 ± 153%	500 ± 138%	0.5 ± 237%	1.0 ± 223%
New York	300 ± 85%	200 ± 74%	300 ± 155%	300 ± 128%	500 ± 93%	900 ± 98%	1.3 ± 176%	0.6 ± 148%
North Carolina	500 ± 196%	3,500 ± 196%	1,500 ± 138%	2,600 ± 114%	2,800 ± 148%	16,200 ± 122%	0.3 ± 240%	1.4 ± 227%
Pennsylvania	100 ± 127%	2,200 ± 182%	<50 ± 106%	1,200 ± 170%	200 ± 119%	10,600 ± 189%	2.7 ± 165%	1.9 ± 249%
Rhode Island	0	<50 ± 181%	0	<50 ± 169%	0	100 ± 133%	0	0.1 ± 248%
South Carolina	3,200 ± 96%	8,600 ± 96%	500 ± 163%	1,500 ± 104%	800 ± 111%	5,600 ± 105%	6.7 ± 189%	5.7 ± 141%
Vermont	100 ± 194%	400 ± 158%	100 ± 194%	<50 ± 98%	100 ± 194%	100 ± 130%	1.0 ± 274%	22.7 ± 186%
Virginia	300 ± 100%	2,100 ± 117%	<50 ± 72%	600 ± 91%	300 ± 120%	1,700 ± 135%	7.7 ± 124%	3.4 ± 149%
West Virginia	0	100 ± 136%	0	100 ± 110%	0	700 ± 126%	0	0.7 ± 175%
Atlantic Flyway Total	33,700 ± 39%	56,800 ± 47%	6,800	10,400	19,600 ± 44%	47,600 ± 62%		
Alabama	400 ± 109%	500 ± 137%	100 ± 84%	100 ± 76%	200 ± 105%	100 ± 91%	4.2 ± 138%	6.2 ± 156%
Arkansas	900 ± 194%	3,600 ± 196%	<50 ± 194%	1,200 ± 196%	1,100 ± 194%	1,200 ± 196%	18.0 ± 274%	3.0 ± 277%
Illinois	0	4,400 ± 155%	1,100 ± 138%	1,500 ± 129%	2,800 ± 161%	4,900 ± 142%	0	3.0 ± 201%
Indiana	1,800 ± 157%	100 ± 87%	700 ± 106%	700 ± 128%	1,400 ± 100%	2,000 ± 136%	2.4 ± 189%	0.2 ± 154%
Iowa	1,500 ± 113%	300 ± 66%	600 ± 124%	100 ± 44%	1,200 ± 103%	200 ± 49%	2.5 ± 168%	3.6 ± 79%
Kentucky	200 ± 189%	0	<50 ± 189%	<50 ± 190%	100 ± 189%	<50 ± 190%	16.0 ± 267%	0
Louisiana	7,100 ± 87%	16,800 ± 81%	1,000 ± 109%	2,200 ± 95%	1,900 ± 78%	5,000 ± 78%	7.3 ± 140%	7.6 ± 125%
Michigan	3,200 ± 114%	500 ± 160%	1,700 ± 125%	300 ± 111%	5,000 ± 132%	2,500 ± 159%	1.9 ± 169%	1.7 ± 195%
Minnesota	5,300 ± 114%	1,400 ± 170%	2,300 ± 92%	1,200 ± 79%	2,900 ± 94%	5,700 ± 94%	2.3 ± 146%	1.2 ± 187%
Mississippi	2,300 ± 164%	0	200 ± 95%	0	900 ± 119%	0	12.5 ± 190%	0
Missouri	100 ± 192%	4,500 ± 139%	<50 ± 192%	1,100 ± 132%	<50 ± 192%	1,100 ± 121%	4.0 ± 271%	4.3 ± 191%
Ohio	500 ± 195%	100 ± 195%	200 ± 137%	100 ± 137%	600 ± 137%	100 ± 137%	3.5 ± 238%	0.5 ± 238%
Tennessee	0	0	0	0	0	0	0	0
Wisconsin	1,400 ± 158%	3,600 ± 127%	1,300 ± 126%	4,500 ± 76%	2,100 ± 120%	12,500 ± 85%	1.1 ± 202%	0.8 ± 148%
Mississippi Flyway Total	24,800 ± 45%	35,800 ± 52%	9,200	12,900	20,200 ± 47%	35,500 ± 43%		

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

[b] 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 17 (continued). Preliminary estimates of snipe harvest and hunter activity during the 2006 and 2007 hunting seasons [a].

State and	Snipe Harvest		Active Hunters[b]		Snipe Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2006	2007	2006	2007	2006	2007	2006	2007
Colorado	900 ± 194%	100 ± 194%	200 ± 111%	100 ± 194%	500 ± 116%	200 ± 194%	5.0 ± 224%	2.0 ± 275%
Kansas	200 ± 196%	0	200 ± 196%	0	900 ± 196%	0	1.0 ± 277%	0
Nebraska	700 ± 194%	900 ± 156%	100 ± 137%	300 ± 96%	300 ± 139%	500 ± 107%	6.5 ± 238%	3.5 ± 183%
New Mexico	0	<50 ± 174%	<50 ± 166%	<50 ± 174%	<50 ± 166%	<50 ± 174%	0	1.0 ± 246%
North Dakota	200 ± 56%	200 ± 52%	100 ± 34%	500 ± 166%	200 ± 42%	2,600 ± 176%	3.3 ± 66%	0.4 ± 174%
Oklahoma	600 ± 144%	6,500 ± 106%	100 ± 84%	500 ± 96%	200 ± 135%	3,400 ± 132%	8.3 ± 167%	12.5 ± 143%
South Dakota	200 ± 78%	200 ± 170%	<50 ± 47%	200 ± 172%	100 ± 67%	300 ± 150%	6.2 ± 88%	1.0 ± 241%
Texas	6,400 ± 79%	4,000 ± 88%	300 ± 57%	300 ± 49%	1,400 ± 68%	1,200 ± 64%	22.9 ± 98%	12.0 ± 100%
Wyoming	100 ± 170%	200 ± 182%	100 ± 142%	100 ± 172%	300 ± 174%	100 ± 136%	1.7 ± 222%	2.8 ± 250%
Central Flyway Total	9,300 ± 60%	12,200 ± 64%	1,100	1,900	3,900 ± 55%	8,300 ± 79%		
Arizona	100 ± 168%	100 ± 187%	<50 ± 132%	<50 ± 187%	400 ± 139%	<50 ± 187%	4.5 ± 213%	5.0 ± 264%
California	2,800 ± 57%	7,800 ± 74%	400 ± 41%	2,700 ± 71%	1,100 ± 49%	5,800 ± 72%	6.4 ± 71%	2.9 ± 102%
Idaho	400 ± 180%	0	100 ± 136%	0	300 ± 143%	0	7.5 ± 226%	0
Montana	800 ± 112%	4,900 ± 107%	500 ± 169%	1,100 ± 73%	500 ± 146%	3,200 ± 72%	1.6 ± 203%	4.5 ± 130%
Nevada	<50 ± 161%	200 ± 122%	<50 ± 161%	100 ± 169%	<50 ± 161%	700 ± 176%	1.0 ± 228%	1.9 ± 208%
Oregon	700 ± 150%	200 ± 195%	100 ± 111%	200 ± 195%	300 ± 112%	1,600 ± 195%	7.3 ± 186%	1.0 ± 276%
Utah	300 ± 144%	800 ± 122%	300 ± 86%	300 ± 86%	800 ± 123%	700 ± 120%	1.2 ± 168%	2.6 ± 149%
Washington	2,500 ± 111%	300 ± 52%	1,100 ± 99%	100 ± 37%	1,900 ± 86%	300 ± 47%	2.2 ± 149%	2.8 ± 64%
Pacific Flyway Total	7,700 ± 47%	14,100 ± 55%	2,500	4,500	5,300 ± 43%	12,400 ± 48%		
Alaska	1,200 ± 85%	600 ± 86%	300 ± 46%	100 ± 46%	800 ± 58%	500 ± 60%	4.6 ± 97%	4.1 ± 98%
U.S. Total	76,700 ± 24%	119,400 ± 29%	19,900	29,800	49,700 ± 26%	104,200 ± 33%		

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

[b] 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 18. Preliminary estimates of coot harvest and hunter activity during the 2006 and 2007 hunting seasons[a].

State and	Coot Harvest		Active Hunters[b]		Coot Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2006	2007	2006	2007	2006	2007	2006	2007
Connecticut	500 ± 189%	100 ± 143%	<50 ± 180%	200 ± 125%	100 ± 160%	300 ± 114%	10.5 ± 261%	0.7 ± 189%
Delaware	1,100 ± 118%	400 ± 137%	100 ± 122%	100 ± 168%	700 ± 91%	300 ± 174%	10.0 ± 169%	6.6 ± 217%
Florida	8,500 ± 69%	3,200 ± 107%	2,300 ± 83%	700 ± 134%	6,600 ± 93%	3,500 ± 121%	3.6 ± 108%	4.4 ± 172%
Georgia	3,700 ± 196%	0	1,200 ± 196%	0	3,700 ± 196%	0	3.0 ± 277%	0
Maine	<50 ± 193%	200 ± 148%	<50 ± 193%	100 ± 136%	<50 ± 193%	200 ± 139%	1.0 ± 273%	3.5 ± 201%
Maryland	1,300 ± 192%	<50 ± 188%	600 ± 191%	<50 ± 188%	700 ± 168%	100 ± 188%	2.0 ± 270%	2.0 ± 266%
Massachusetts	700 ± 107%	200 ± 152%	200 ± 87%	100 ± 142%	1,200 ± 126%	100 ± 109%	3.5 ± 138%	2.8 ± 208%
New Hampshire	400 ± 120%	300 ± 194%	200 ± 132%	<50 ± 194%	400 ± 142%	1,400 ± 194%	2.2 ± 178%	6.0 ± 274%
New Jersey	100 ± 138%	3,400 ± 137%	100 ± 138%	300 ± 137%	100 ± 138%	1,900 ± 178%	1.0 ± 195%	10.0 ± 194%
New York	1,500 ± 91%	1,100 ± 90%	300 ± 145%	500 ± 113%	1,100 ± 114%	6,200 ± 137%	5.4 ± 171%	2.0 ± 144%
North Carolina	14,800 ± 119%	500 ± 196%	1,300 ± 86%	200 ± 196%	8,500 ± 97%	200 ± 196%	11.8 ± 147%	2.0 ± 277%
Pennsylvania	2,800 ± 137%	500 ± 119%	1,000 ± 181%	1,200 ± 170%	2,400 ± 154%	3,500 ± 174%	2.7 ± 227%	0.5 ± 208%
Rhode Island	<50 ± 191%	100 ± 176%	<50 ± 191%	100 ± 136%	100 ± 191%	200 ± 109%	1.0 ± 270%	2.3 ± 223%
South Carolina	<50 ± 190%	3,900 ± 148%	<50 ± 190%	500 ± 188%	<50 ± 190%	1,200 ± 154%	1.0 ± 269%	8.3 ± 239%
Vermont	0	200 ± 179%	0	<50 ± 179%	0	<50 ± 179%	0	33.0 ± 253%
Virginia	2,100 ± 114%	2,500 ± 138%	500 ± 100%	500 ± 100%	2,500 ± 127%	2,200 ± 119%	4.3 ± 152%	5.2 ± 170%
West Virginia	200 ± 192%	<50 ± 137%	<50 ± 192%	100 ± 127%	100 ± 192%	500 ± 176%	6.0 ± 272%	0.7 ± 187%
Atlantic Flyway Total	37,800 ± 55%	16,700 ± 54%	7,800	4,500	28,400 ± 49%	21,900 ± 57%		
Alabama	1,100 ± 99%	1,100 ± 81%	100 ± 84%	100 ± 65%	300 ± 87%	300 ± 72%	11.6 ± 130%	11.1 ± 104%
Arkansas	8,700 ± 152%	13,900 ± 145%	1,800 ± 175%	2,000 ± 142%	5,700 ± 102%	4,700 ± 139%	2.7 ± 232%	7.1 ± 203%
Illinois	1,700 ± 144%	2,900 ± 188%	600 ± 177%	700 ± 190%	1,000 ± 139%	1,400 ± 190%	2.8 ± 228%	4.1 ± 267%
Indiana	4,400 ± 113%	400 ± 46%	800 ± 98%	100 ± 31%	1,500 ± 76%	500 ± 40%	5.5 ± 150%	4.8 ± 56%
Iowa	1,300 ± 94%	9,700 ± 127%	600 ± 123%	1,300 ± 90%	1,000 ± 123%	3,400 ± 92%	2.1 ± 155%	7.4 ± 156%
Kentucky	2,900 ± 145%	<50 ± 190%	900 ± 130%	<50 ± 190%	3,600 ± 160%	<50 ± 190%	3.2 ± 195%	1.0 ± 269%
Louisiana	70,300 ± 67%	71,100 ± 62%	5,600 ± 51%	7,100 ± 53%	13,500 ± 46%	28,700 ± 71%	12.6 ± 85%	9.9 ± 82%
Michigan	3,900 ± 103%	800 ± 133%	3,100 ± 97%	300 ± 111%	34,500 ± 140%	800 ± 118%	1.3 ± 141%	2.7 ± 173%
Minnesota	9,600 ± 100%	5,100 ± 130%	2,500 ± 77%	1,000 ± 87%	11,200 ± 104%	2,700 ± 88%	3.8 ± 126%	5.2 ± 156%
Mississippi	3,100 ± 194%	2,500 ± 185%	<50 ± 194%	<50 ± 134%	600 ± 194%	300 ± 135%	65.0 ± 274%	58.5 ± 228%
Missouri	900 ± 138%	3,000 ± 196%	900 ± 138%	500 ± 196%	900 ± 138%	1,000 ± 196%	1.0 ± 195%	6.0 ± 277%
Ohio	1,100 ± 149%	100 ± 195%	200 ± 111%	100 ± 195%	600 ± 149%	1,600 ± 195%	4.7 ± 186%	1.0 ± 275%
Tennessee	0	1,500 ± 138%	0	100 ± 136%	0	300 ± 139%	0	12.0 ± 193%
Wisconsin	6,200 ± 107%	3,300 ± 88%	1,900 ± 102%	1,000 ± 135%	4,400 ± 132%	3,500 ± 121%	3.3 ± 148%	3.2 ± 161%
Mississippi Flyway Total	115,100 ± 45%	115,300 ± 44%	19,000	14,400	78,800 ± 65%	49,300 ± 46%		

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

[b] 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 18 (continued). Preliminary estimates of coot harvest and hunter activity during the 2006 and 2007 hunting seasons [a].

State and	Coot Harvest		Active Hunters [b]		Coot Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2006	2007	2006	2007	2006	2007	2006	2007
Colorado	500 ± 141%	1,100 ± 146%	200 ± 111%	400 ± 125%	700 ± 128%	1,400 ± 145%	2.7 ± 180%	2.5 ± 192%
Kansas	500 ± 141%	1,400 ± 134%	500 ± 141%	400 ± 192%	800 ± 140%	400 ± 162%	1.0 ± 200%	3.8 ± 234%
Nebraska	0	1,200 ± 115%	100 ± 194%	500 ± 147%	100 ± 194%	800 ± 117%	0	2.5 ± 187%
New Mexico	200 ± 189%	1,800 ± 189%	200 ± 192%	200 ± 180%	200 ± 192%	300 ± 156%	1.0 ± 270%	7.6 ± 261%
North Dakota	1,700 ± 121%	3,700 ± 127%	400 ± 160%	900 ± 123%	1,300 ± 157%	3,200 ± 120%	4.0 ± 200%	4.2 ± 177%
Oklahoma	900 ± 113%	5,500 ± 112%	400 ± 166%	700 ± 89%	1,600 ± 176%	1,900 ± 87%	2.1 ± 200%	7.5 ± 143%
South Dakota	700 ± 98%	600 ± 138%	300 ± 125%	200 ± 167%	500 ± 98%	700 ± 173%	2.1 ± 159%	2.4 ± 217%
Texas	1,400 ± 116%	8,500 ± 130%	100 ± 85%	5,200 ± 135%	300 ± 92%	5,200 ± 133%	11.2 ± 144%	1.6 ± 187%
Wyoming	900 ± 179%	<50 ± 166%	100 ± 125%	<50 ± 166%	500 ± 171%	<50 ± 166%	9.4 ± 219%	1.0 ± 234%
Central Flyway Total	6,900 ± 51%	23,800 ± 60%	2,300	8,600	5,900 ± 66%	13,900 ± 61%		
Arizona	3,300 ± 126%	200 ± 158%	3,100 ± 134%	<50 ± 131%	3,200 ± 129%	<50 ± 138%	1.1 ± 184%	9.0 ± 205%
California	18,000 ± 66%	18,700 ± 53%	2,600 ± 81%	1,800 ± 69%	11,500 ± 86%	5,200 ± 36%	7.0 ± 105%	10.4 ± 87%
Idaho	2,600 ± 85%	2,300 ± 196%	600 ± 124%	1,100 ± 196%	1,400 ± 113%	1,100 ± 196%	4.3 ± 151%	2.0 ± 277%
Montana	1,300 ± 136%	5,500 ± 166%	900 ± 132%	900 ± 101%	2,900 ± 167%	3,600 ± 134%	1.5 ± 190%	6.0 ± 195%
Nevada	100 ± 64%	200 ± 112%	<50 ± 47%	<50 ± 92%	200 ± 138%	100 ± 124%	3.4 ± 79%	16.0 ± 145%
Oregon	1,100 ± 119%	200 ± 195%	900 ± 117%	200 ± 195%	2,000 ± 97%	200 ± 195%	1.3 ± 167%	1.0 ± 276%
Utah	8,300 ± 63%	8,300 ± 97%	1,800 ± 51%	1,500 ± 56%	7,200 ± 72%	8,900 ± 70%	4.6 ± 81%	5.6 ± 112%
Washington	4,600 ± 169%	7,200 ± 138%	400 ± 149%	700 ± 127%	1,100 ± 119%	1,700 ± 147%	10.6 ± 225%	10.5 ± 187%
Pacific Flyway Total	39,300 ± 41%	42,500 ± 45%	10,300	6,200	29,500 ± 45%	20,900 ± 42%		
U.S. Total	199,100 ± 29%	198,300 ± 29%	39,400	33,700	142,600 ± 38%	106,000 ± 27%		

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

[b] 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 20. Preliminary estimates of rail harvest and hunter activity during the 2006 and 2007 hunting seasons [a].

State and	Rail Harvest		Active Hunters [b]		Rail Days Afield		Seasonal Harvest Per Hunter	
Management Unit	2006	2007	2006	2007	2006	2007	2006	2007
Connecticut	300 ± 149%	<50 ± 177%	100 ± 133%	<50 ± 177%	200 ± 135%	<50 ± 177%	3.3 ± 199%	1.0 ± 250%
Delaware	700 ± 158%	<50 ± 170%	100 ± 179%	<50 ± 170%	300 ± 158%	<50 ± 170%	13.9 ± 239%	4.0 ± 240%
Florida	4,800 ± 117%	1,300 ± 150%	200 ± 78%	100 ± 136%	500 ± 88%	100 ± 136%	27.0 ± 140%	18.5 ± 203%
Georgia	0	2,700 ± 196%	0	900 ± 196%	0	4,400 ± 196%	0	3.0 ± 277%
Maine	0	0	0	0	0	0	0	0
Maryland	<50 ± 136%	<50 ± 188%	<50 ± 129%	<50 ± 188%	<50 ± 129%	100 ± 188%	1.5 ± 188%	1.0 ± 266%
Massachusetts	500 ± 155%	100 ± 174%	200 ± 87%	<50 ± 158%	1,100 ± 129%	100 ± 152%	2.8 ± 178%	2.7 ± 235%
New Jersey	600 ± 166%	3,100 ± 64%	<50 ± 108%	200 ± 51%	200 ± 129%	500 ± 92%	10.0 ± 199%	20.5 ± 82%
New York	100 ± 123%	200 ± 159%	<50 ± 63%	200 ± 167%	100 ± 80%	300 ± 121%	3.3 ± 138%	1.1 ± 231%
North Carolina	0	0	900 ± 196%	0	1,800 ± 196%	0	0	0
Pennsylvania	0	1,200 ± 194%	0	100 ± 135%	0	700 ± 164%	0	10.0 ± 237%
Rhode Island	0	<50 ± 180%	0	<50 ± 170%	0	200 ± 148%	0	0.1 ± 247%
South Carolina	3,600 ± 118%	2,400 ± 127%	500 ± 163%	500 ± 180%	500 ± 154%	600 ± 167%	7.1 ± 201%	4.5 ± 220%
Virginia	4,000 ± 47%	4,400 ± 43%	300 ± 109%	300 ± 93%	500 ± 71%	1,700 ± 149%	14.2 ± 118%	12.7 ± 103%
West Virginia	0	200 ± 171%	0	<50 ± 168%	0	300 ± 165%	0	6.9 ± 240%
Atlantic Flyway Total	14,500 ± 51%	15,700 ± 47%	2,400	2,500	5,300 ± 77%	9,100 ± 102%		
Alabama	0	0	0	0	0	0	0	0
Arkansas	0	0	0	0	0	0	0	0
Illinois	900 ± 196%	100 ± 189%	900 ± 136%	<50 ± 189%	2,300 ± 160%	<50 ± 189%	1.0 ± 238%	4.0 ± 267%
Indiana	100 ± 101%	500 ± 130%	200 ± 172%	500 ± 94%	300 ± 167%	800 ± 96%	0.7 ± 199%	0.9 ± 161%
Iowa	100 ± 85%	1,100 ± 107%	<50 ± 68%	800 ± 107%	100 ± 76%	1,300 ± 121%	3.8 ± 109%	1.4 ± 151%
Kentucky	0	300 ± 192%	0	<50 ± 192%	0	<50 ± 192%	0	11.0 ± 271%
Louisiana	7,100 ± 87%	300 ± 89%	400 ± 68%	<50 ± 59%	1,100 ± 90%	100 ± 82%	17.9 ± 110%	9.5 ± 107%
Michigan	1,600 ± 196%	100 ± 195%	800 ± 196%	100 ± 195%	3,100 ± 196%	100 ± 195%	2.0 ± 277%	1.0 ± 276%
Minnesota	700 ± 138%	0	1,100 ± 113%	800 ± 138%	1,100 ± 113%	7,000 ± 139%	0.7 ± 178%	0
Mississippi	0	0	0	0	0	0	0	0
Missouri	100 ± 191%	300 ± 190%	<50 ± 191%	<50 ± 190%	<50 ± 191%	<50 ± 190%	5.0 ± 269%	20.0 ± 268%
Ohio	200 ± 195%	200 ± 195%	200 ± 137%	100 ± 195%	400 ± 140%	100 ± 195%	1.5 ± 238%	3.0 ± 275%
Tennessee	0	0	0	0	0	0	0	0
Wisconsin	<50 ± 189%	700 ± 151%	<50 ± 109%	500 ± 184%	100 ± 125%	700 ± 148%	0.3 ± 218%	1.3 ± 238%
Mississippi Flyway Total	10,800 ± 66%	3,500 ± 55%	3,600	2,900	8,600 ± 86%	10,200 ± 97%		
Colorado	700 ± 194%	1,600 ± 196%	100 ± 137%	200 ± 196%	400 ± 138%	900 ± 196%	6.0 ± 238%	7.0 ± 277%
Kansas	0	0	400 ± 196%	0	400 ± 196%	0	0	0
Nebraska	0	0	100 ± 194%	0	200 ± 194%	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Oklahoma	100 [c]	1,200 ± 177%	0	<50 ± 93%	0	300 ± 96%	30.7 [c]	28.0 ± 200%
Texas	2,200 ± 185%	2,400 ± 190%	2,100 ± 194%	2,400 ± 192%	2,100 ± 194%	2,400 ± 190%	1.0 ± 268%	1.0 ± 270%
Wyoming	0	0	0	0	0	0	0	0
Central Flyway Total	3,000 ± 144%	5,200 ± 113%	2,700	2,600	3,100 ± 136%	3,600 ± 135%		
U.S. Total	28,500 ± 39%	24,500 ± 39%	8,700	8,000	17,000 ± 55%	22,900 ± 63%		

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

[b] 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.

[c] Variance inestimable.

Table 19. Preliminary estimates of gallinule harvest and hunter activity during the 2006 and 2007 hunting seasons[a].

State and Management Unit	Gallinule Harvest		Active Hunters [b]		Gallinule Days Afield		Seasonal Harvest Per Hunter	
	2006	2007	2006	2007	2006	2007	2006	2007
Delaware	0	0	0	0	0	0	0	0
Florida	200 ± 143%	0	100 ± 136%	0	200 ± 143%	0	3.0 ± 198%	0
Georgia	1,500 ± 196%	0	800 ± 196%	0	2,300 ± 196%	0	2.0 ± 277%	0
Maine	0	100 ± 193%	0	<50 ± 193%	0	<50 ± 193%	0	3.0 ± 273%
New Jersey	0	0	<50 ± 191%	<50 ± 191%	100 ± 191%	<50 ± 191%	0	0
New York	100 ± 117%	100 ± 93%	<50 ± 68%	400 ± 127%	100 ± 84%	2,800 ± 165%	4.8 ± 135%	0.1 ± 158%
North Carolina	0	0	900 ± 196%	0	1,800 ± 196%	0	0	0
Pennsylvania	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0	0
Virginia	0	<50 ± 125%	<50 ± 177%	200 ± 183%	<50 ± 177%	1,300 ± 193%	0	0.1 ± 222%
West Virginia	0	0	0	<50 ± 192%	0	300 ± 192%	0	0
Atlantic Flyway Total	1,800 ± 164%	200 ± 122%	1,800	600	4,500 ± 128%	4,400 ± 119%		
Alabama	0	100 ± 186%	0	<50 ± 186%	0	<50 ± 186%	0	6.0 ± 264%
Arkansas	0	0	0	0	0	0	0	0
Indiana	0	0	0	<50 ± 167%	0	<50 ± 167%	0	0
Kentucky	0	0	0	0	0	0	0	0
Louisiana	8,000 ± 65%	300 ± 67%	1,500 ± 87%	<50 ± 53%	6,300 ± 70%	100 ± 78%	5.3 ± 108%	6.4 ± 85%
Michigan	800 ± 196%	0	800 ± 196%	100 ± 195%	3,100 ± 196%	200 ± 195%	1.0 ± 277%	0
Minnesota	700 ± 156%	0	500 ± 152%	0	1,100 ± 129%	0	1.6 ± 217%	0
Mississippi	2,300 ± 194%	0	<50 ± 194%	0	700 ± 194%	0	50.0 ± 274%	0
Ohio	0	0	100 ± 195%	0	100 ± 195%	0	0	0
Tennessee	0	0	0	0	0	0	0	0
Wisconsin	0	0	0	<50 ± 190%	0	100 ± 190%	0	0
Mississippi Flyway Total	11,800 ± 60%	300 ± 65%	2,900	200	11,400 ± 69%	400 ± 104%		
New Mexico	0	0	0	0	0	0	0	0
Oklahoma	0	<50 ± 187%	0	<50 ± 187%	0	100 ± 187%	0	4.0 ± 264%
Texas	0	0	0	0	0	0	0	0
Central Flyway Total	0	<50 ± 187%	0	<50	0	100 ± 187%		
Arizona	0	0	0	0	0	0	0	0
California	0	4,000 ± 116%	500 ± 196%	1,200 ± 96%	2,300 ± 196%	1,600 ± 97%	0	3.4 ± 151%
Idaho	0	0	0	0	0	0	0	0
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
Pacific Flyway Total	0	4,000 ± 116%	500	1,200	2,300 ± 196%	1,600 ± 97%		
U.S. Total	13,700 ± 57%	4,500 ± 103%	5,200	2,000	18,200 ± 59%	6,500 ± 84%		

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

[b] 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 21. Preliminary estimates of rail harvest during the 2006 and 2007 hunting seasons. Species-specific estimates were derived from 5-year runnning averages of species composition estimates from the Migratory Bird Wing Collection Survey.

	Sora		Virginia		Clapper		King	
Flyway	2006	2007	2006	2007	2006	2007	2006	2007
Atlantic	5,800	5,400	300	300	8,600	10,000	<50	<50
Mississippi	10,700	3,500	100	<50	0	<50	0	<50
Central	2,400	4,300	300	400	0	0	300	600
U.S. Total	18,800	13,200	700	700	8,600	10,000	400	600