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Migratory Bird Hunting Activity and Harvest During the 2009 and 2010 Hunting Seasons

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Abstract: National surveys of migratory bird hunters were conducted during the 2009 and 2010 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 1.1 million waterfowl hunters harvested 13,139,800 ($\pm 4\%$) ducks and 3,327,000 ($\pm 5\%$) geese in 2009, and about 1.1 million waterfowl hunters harvested 14,796,700 ($\pm 4\%$) ducks and 3,169,900 ($\pm 5\%$) geese in 2010. Mallard (*Anas platyrhynchos*), green-winged teal (*A. crecca*), gadwall (*A. strepera*), blue-winged/cinnamon teal (*A. discors*), and wood duck (*Aix sponsa*) were the 5 most-harvested duck species in the U.S., and Canada goose (*Branta canadensis*) was the predominant species in the goose harvest. About 974,400 dove hunters harvested 17,354,800 ($\pm 6\%$) mourning doves in 2009 and 959,900 hunters harvested 17,230,400 $\pm 5\%$ in 2010. Woodcock hunters numbered about 109,000 in 2009 and 138,300 in 2010, and harvested 238,400 ($\pm 15\%$) birds in 2009 and 332,900 ($\pm 11\%$) in 2010. About 29,400 people hunted snipe in 2009 and 37,500 in 2010, and they harvested 83,500 ($\pm 45\%$) and 118,200 ($\pm 37\%$) snipe in 2009 and 2010, respectively. Coot hunters (about 31,100 in 2009 and 50,500 in 2010) harvested 219,000 ($\pm 34\%$) coots in 2009 and 302,600 ($\pm 50\%$) in 2010. Gallinule hunters (about 2,300 in 2009 and 15,000 in 2010) harvested 7,400 ($\pm 66\%$) gallinules in 2009 and 13,700 ($\pm 87\%$) in 2010. About 7,800 rail hunters harvested 36,100 ($\pm 62\%$) rails in 2009 and 17,000 rail hunters harvested 27,100 ($\pm 57\%$) rails in 2010.

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 2009-10 and 2010-11 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 1963-2010 were reported in “American woodcock population status, 2011” (Cooper and Parker 2011). 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 to 7, Figures 1 to 3). HIP waterfowl harvest survey sample sizes and response rates were 61,434 hunters and 52% for the 2009-10 survey,

and 67,413 hunters and a 44% for the 2010-11 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 and 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 1999-2010.

Waterfowl Age and Sex Ratios (Tables 8 to 12, Figures 3 to 6). The 2009-10 Waterfowl Parts Survey collected 78,113 duck wings and 18,120 goose tails and primary tips from 5,020 hunters; the 2010-11 sample consisted of 79,333 duck wings and 18,222 goose tails and primary wing tips from 4,535 hunters. State-specific mallard age ratios and flyway-level age ratios for other ducks species are reported in Tables 8 and 9, respectively, followed by state-specific mallard sex ratios (Table 10) and flyway-level sex ratios for other duck species (Table 11). Table 12 gives age ratios for geese. 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) are also presented graphically.

Dove and Band-tailed Pigeon Hunter Activity and Harvest (Tables 13 to 15). The dove and band-tailed pigeon estimates were based on samples of 37,113 hunters in 2009-10 (57% response rate) and 38,369 hunters in 2010-11 (52% 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 2009-10 survey had a sample size of 18,967 hunters and a

60% response rate; the 2010-11 survey sample size and response rate were 15,175 hunters and 57%.

Snipe, Coot, Gallinule, and Rail Hunter Activity and Harvest (Tables 17 to 21). The sample for the 2009-10 snipe, coot, gallinule, and rail harvest survey was 20,410 hunters (57% response rate) and 22,214 hunters (52% response rate) for the 2010-11 survey. Tables 17 to 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 2009-10 estimates are based on the species composition of 2,904 rail wings from 128 hunters collected from 2005-2009, and the 2010-11 estimates are based on 2,918 rail wings from 118 hunters collected from 2006-2010.

Alaska Sandhill Crane Hunter Activity and Harvest Estimates. The estimates presented below were derived from surveys of 651 (2009-10, 69% response rate) and 697 (2010-11, 63% response rate) Alaska migratory bird hunters. For Alaska's 2009 season, we estimated that 800 active sandhill crane hunters spent 3,300 days hunting cranes and harvested 900 birds. In 2010, an estimated 1,200 active hunters spent 4,000 days hunting cranes and harvested 1,400 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 2009 and 2010 seasons were reported in, "Status and harvests of sandhill cranes: Mid-continent, Rocky Mountain, Lower Colorado River Valley and Eastern populations" (Kruse et al. 2011).

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The HIP and Waterfowl Parts surveys could not be conducted without the close cooperation of participating States. We appreciate the efforts of all State personnel who were involved with the HIP at various levels, as well as all who helped with the Waterfowl Parts Surveys at one of the 4 "wingbees". The names of the people who were primarily responsible for coordinating the HIP program in each state are included in Appendix A. The names of wingbee participants are in Appendix B. We also would like to acknowledge Mike Rich, Victor Elam, Lyle Hancock, and the staff at the Flint Hills NWR for providing support for the Central Flyway wingbee and Scott Hamelberg and Debbie Anderson at the Coleman National Fish Hatchery for providing support for the Pacific Flyway wingbee.

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Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Connecticut		Delaware		Florida	
	2009	2010	2009	2010	2009	2010
Mallard	6,310	5,236	17,987	15,084	308	764
Domestic Mallard	0	46	186	0	1,026	127
Black Duck	1,702	1,486	6,058	8,185	205	127
Mallard x Black Duck Hybrid	142	91	746	468	0	0
Mottled Duck	0	0	0	0	14,261	13,882
Gadwall	248	160	1,678	819	1,026	2,038
Wigeon	142	0	1,771	234	4,617	2,292
Green-winged Teal	922	526	5,685	10,290	11,491	20,377
Blue-winged/Cinnamon Teal	0	0	373	117	77,973	86,601
Northern Shoveler	0	0	1,305	351	3,283	9,806
Northern Pintail	35	91	1,771	1,988	205	2,802
Wood Duck	2,092	1,623	2,703	1,637	8,515	16,811
Redhead	35	0	93	0	821	2,674
Canvasback	0	23	186	117	0	255
Greater Scaup	35	206	0	0	410	127
Lesser Scaup	35	114	93	585	7,284	14,518
Ring-necked Duck	71	137	559	935	28,624	38,843
Goldeneyes	142	69	0	0	0	127
Bufflehead	957	252	3,262	3,742	1,744	3,821
Ruddy Duck	0	46	0	468	923	1,528
Long-tailed Duck	1,673	824	145	0	0	0
Eiders	223	906	0	25	0	0
Scoters	1,004	1,154	1,455	661	0	0
Hooded Merganser	284	229	466	702	718	2,038
Other Mergansers	248	389	280	0	410	127
Other Ducks	0	0	0	0	10,054	9,297
Total Duck Harvest	16,300±39%	13,600±19%	46,800±26%	46,400±19%	173,900±27%	229,000±29%
Total Active Duck Hunters ^a	2,100±22%	1,800±17%	3,600±15%	4,300±14%	12,200±21%	13,800±22%
Total Duck Hunter Days Afield ^b	10,900±25%	9,500±19%	25,100±18%	31,200±16%	75,600±24%	84,800±27%
Seasonal Duck Harvest Per Hunter	7.8±45%	7.7±26%	13.0±30%	10.9±23%	14.2±34%	16.6±36%
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Goose Species Composition						
Canada Goose	9,075	8,807	24,873	34,251	2,500	2,063
Snow Goose	0	0	13,883	3,005	0	0
Blue Goose	0	0	0	240	0	0
Ross's Goose	0	0	145	0	0	0
White-fronted Goose	25	0	0	0	0	0
Brant	500	132	900	224	0	0
Other Geese	0	28	0	0	0	0
Total Goose Harvest	9,600±26%	9,000±25%	39,800±26%	37,700±17%	2,500±105%	2,100±136%
Total Active Goose Hunters ^b	1,600±24%	1,600±20%	4,000±14%	4,300±13%	1,100±74%	800±97%
Total Goose Hunter Days Afield ^b	7,700±26%	7,800±22%	27,200±22%	30,000±16%	4,000±85%	7,100±127%
Seasonal Goose Harvest Per Hunter	5.9±36%	5.7±32%	10.0±29%	8.7±21%	2.3±128%	2.8±168%
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Active Waterfowl Hunters	2,700±19%	2,300±15%	5,100±12%	5,400±11%	12,200±21%	13,800±22%
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Sample Sizes						
Duck Wings	404	504	496	418	1,695	1,798
Goose Tails	381	323	282	326	1	0

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Georgia		Maine		Maryland	
	2009	2010	2009	2010	2009	2010
Mallard	19,080	34,323	12,711	8,379	49,563	36,614
Domestic Mallard	931	528	73	0	587	1,204
Black Duck	0	1,056	5,364	3,377	10,851	12,526
Mallard x Black Duck Hybrid	0	0	294	250	440	1,686
Mottled Duck	2,327	0	0	0	0	0
Gadwall	5,119	3,696	0	63	2,493	1,204
Wigeon	1,861	528	367	63	1,760	4,336
Green-winged Teal	10,238	7,393	4,923	3,189	13,051	7,949
Blue-winged/Cinnamon Teal	8,842	4,752	367	813	3,959	1,927
Northern Shoveler	0	3,168	0	0	1,026	1,445
Northern Pintail	2,792	0	147	188	1,026	482
Wood Duck	64,685	135,707	7,641	8,567	11,731	7,467
Redhead	1,861	3,696	73	63	587	2,168
Canvasback	465	1,056	0	0	3,079	13,489
Greater Scaup	465	1,584	73	188	2,346	12,285
Lesser Scaup	465	2,640	220	250	3,813	11,562
Ring-necked Duck	24,664	8,977	1,763	1,688	1,906	1,204
Goldeneyes	0	0	1,469	313	1,026	482
Bufflehead	931	528	2,939	2,376	14,077	14,212
Ruddy Duck	465	5,280	0	125	1,320	2,409
Long-tailed Duck	0	0	656	2,321	4,830	2,597
Eiders	0	0	4,355	4,505	0	0
Scoters	0	528	890	1,092	11,270	6,678
Hooded Merganser	6,980	3,168	2,498	938	2,200	2,891
Other Mergansers	1,396	0	1,176	313	1,760	723
Other Ducks	931	0	0	0	0	0
Total Duck Harvest	154,500±29%	218,600±26%	48,000±92%	39,100±21%	144,700±18%	147,500±16%
Total Active Duck Hunters ^a	24,000±27%	21,900±18%	3,900±30%	5,600±15%	17,300±11%	18,500±11%
Total Duck Hunter Days Afield ^b	122,200±27%	120,400±21%	25,800±52%	26,000±16%	85,900±13%	83,400±14%
Seasonal Duck Harvest Per Hunter	6.4±40%	10.0±32%	12.2±97%	7.0±26%	8.4±21%	8.0±20%
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Goose Species Composition						
Canada Goose	73,315	23,739	4,700	9,194	162,973	200,873
Snow Goose	0	0	0	0	4,330	3,629
Blue Goose	0	0	0	0	0	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	2,485	0	0	0	0	0
Brant	0	0	0	0	2,200	1,589
Other Geese	0	0	0	0	197	0
Total Goose Harvest	75,800±63%	23,700±35%	4,700±59%	9,200±28%	169,700±13%	206,100±13%
Total Active Goose Hunters ^b	11,700±36%	8,800±32%	1,600±49%	3,500±20%	24,200±9%	26,600±8%
Total Goose Hunter Days Afield ^b	72,900±50%	38,900±38%	8,700±56%	13,900±24%	136,800±13%	152,300±11%
Seasonal Goose Harvest Per Hunter	6.5±72%	2.7±47%	3.0±77%	2.7±34%	7.0±16%	7.7±16%
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Active Waterfowl Hunters	26,400±26%	23,100±18%	4,900±27%	6,400±14%	30,300±6%	35,200±6%
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Duck Wings	332	414	699	556	947	624
Goose Tails	61	115	195	134	857	959

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Massachusetts		New Hampshire		New Jersey	
	2009	2010	2009	2010	2009	2010
Mallard	8,458	5,897	11,240	5,913	20,369	18,369
Domestic Mallard	0	31	0	0	163	762
Black Duck	4,520	2,683	3,710	1,806	9,940	11,766
Mallard x Black Duck Hybrid	387	218	327	226	733	423
Mottled Duck	0	0	0	0	0	0
Gadwall	0	0	0	45	1,792	593
Wigeon	65	94	0	0	896	931
Green-winged Teal	1,485	1,466	1,091	1,219	7,822	7,873
Blue-winged/Cinnamon Teal	0	31	109	181	81	0
Northern Shoveler	65	31	0	0	489	339
Northern Pintail	129	0	0	90	407	339
Wood Duck	1,550	1,654	7,203	4,514	10,103	10,243
Redhead	0	0	0	0	0	0
Canvasback	0	0	0	0	163	0
Greater Scaup	65	0	0	0	1,548	423
Lesser Scaup	194	31	0	45	163	423
Ring-necked Duck	129	94	327	90	570	0
Goldeneyes	129	187	0	45	81	254
Bufflehead	2,066	2,714	546	587	4,807	7,957
Ruddy Duck	0	0	0	0	163	423
Long-tailed Duck	0	67	0	0	254	2,067
Eiders	8,408	5,019	233	598	0	413
Scoters	892	2,476	1,167	1,495	3,046	1,447
Hooded Merganser	710	343	437	451	1,955	2,201
Other Mergansers	1,550	1,154	1,310	0	652	1,947
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	30,800±23%	24,200±28%	27,700±20%	17,300±21%	66,200±24%	69,200±21%
Total Active Duck Hunters ^a	3,700±13%	3,000±15%	5,200±17%	2,700±16%	7,400±12%	6,500±11%
Total Duck Hunter Days Afield ^b	19,200±16%	15,400±17%	28,700±18%	17,700±19%	55,200±23%	41,800±16%
Seasonal Duck Harvest Per Hunter	8.4±27%	8.1±32%	5.3±27%	6.5±26%	8.9±27%	10.7±24%
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Goose Species Composition						
Canada Goose	16,500	12,553	11,400	5,829	47,312	52,669
Snow Goose	0	100	0	0	878	4,060
Blue Goose	0	0	0	0	0	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	400	469	0	7	8,300	5,785
Other Geese	0	0	0	0	110	0
Total Goose Harvest	16,900±41%	13,100±36%	11,400±21%	5,800±20%	56,600±34%	62,500±29%
Total Active Goose Hunters ^b	2,700±15%	2,200±17%	4,400±18%	2,100±17%	5,900±15%	5,100±13%
Total Goose Hunter Days Afield ^b	15,500±26%	14,600±21%	23,700±22%	12,700±23%	34,900±28%	29,200±18%
Seasonal Goose Harvest Per Hunter	6.4±44%	5.9±40%	2.6±28%	2.7±26%	9.6±37%	12.3±31%
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Active Waterfowl Hunters	4,500±11%	3,900±12%	6,100±16%	3,100±15%	8,900±10%	7,900±9%
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Sample Sizes						
Duck Wings	406	646	259	351	785	790
Goose Tails	371	293	151	126	493	543

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	New York		North Carolina		Pennsylvania	
	2009	2010	2009	2010	2009	2010
Mallard	91,290	73,353	36,753	32,952	56,316	50,672
Domestic Mallard	194	712	877	785	191	998
Black Duck	17,929	17,250	3,315	5,231	5,059	7,370
Mallard x Black Duck Hybrid	1,841	870	390	392	477	1,075
Mottled Duck	0	0	0	0	0	0
Gadwall	1,938	2,611	6,142	17,130	1,145	1,919
Wigeon	1,938	2,611	12,478	21,184	573	691
Green-winged Teal	11,823	8,783	23,397	47,075	6,491	5,144
Blue-winged/Cinnamon Teal	1,066	950	2,535	4,054	1,623	537
Northern Shoveler	388	554	2,827	8,369	191	77
Northern Pintail	1,647	2,453	3,899	7,846	477	230
Wood Duck	21,805	13,373	56,055	82,511	41,808	31,785
Redhead	3,973	4,352	3,120	7,715	286	384
Canvasback	872	712	390	654	95	77
Greater Scaup	3,489	4,115	682	1,438	286	154
Lesser Scaup	2,326	3,877	12,186	21,837	1,527	1,228
Ring-necked Duck	2,714	2,453	16,183	14,776	477	1,459
Goldeneyes	7,462	9,970	97	262	286	307
Bufflehead	11,629	7,438	14,038	8,500	3,436	3,071
Ruddy Duck	0	237	4,582	4,969	477	1,152
Long-tailed Duck	5,707	7,040	0	0	0	0
Eiders	1,279	512	0	0	0	0
Scoters	5,314	6,400	6,337	5,231	382	307
Hooded Merganser	4,070	3,086	6,824	7,061	955	1,459
Other Mergansers	6,105	6,172	292	392	3,341	4,146
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	206,800±12%	179,900±12%	213,400±19%	300,400±26%	125,900±18%	114,200±18%
Total Active Duck Hunters^a	21,700±6%	16,600±7%	21,500±16%	22,100±17%	25,200±15%	23,200±16%
Total Duck Hunter Days Afield^b	130,500±8%	102,600±11%	126,800±15%	151,800±21%	118,200±15%	104,800±17%
Seasonal Duck Harvest Per Hunter	9.5±13%	10.8±14%	9.9±25%	13.6±31%	5.0±23%	4.9±25%
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Goose Species Composition						
Canada Goose	171,956	127,614	50,006	54,624	161,933	153,257
Snow Goose	3,317	4,354	0	0	6,719	2,045
Blue Goose	0	0	0	0	112	178
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	7,100	5,232	11,400	1,409	336	89
Other Geese	128	0	294	0	0	89
Total Goose Harvest	182,500±14%	137,200±15%	61,700±36%	56,000±52%	169,100±18%	155,700±22%
Total Active Goose Hunters^b	19,000±6%	14,400±8%	11,500±22%	12,300±24%	30,500±12%	28,100±13%
Total Goose Hunter Days Afield^b	113,600±9%	85,000±11%	51,400±36%	52,500±37%	167,500±16%	127,100±16%
Seasonal Goose Harvest Per Hunter	9.6±15%	9.5±17%	5.4±42%	4.6±57%	5.5±22%	5.5±25%
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Active Waterfowl Hunters	26,400±5%	20,800±6%	22,600±16%	23,400±17%	41,400±12%	39,700±13%
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Sample Sizes						
Duck Wings	2,132	2,206	2,189	2,297	1,319	1,488
Goose Tails	1,503	1,292	177	149	1,510	1,751

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Rhode Island		South Carolina		Vermont	
	2009	2010	2009	2010	2009	2010
Mallard	1,518	2,233	34,504	33,590	10,117	6,977
Domestic Mallard	0	31	4,631	3,075	52	0
Black Duck	1,029	1,258	1,389	2,365	1,721	2,031
Mallard x Black Duck Hybrid	147	189	232	710	52	131
Mottled Duck	0	0	2,547	710	0	0
Gadwall	24	346	6,021	12,537	0	197
Wigeon	196	503	5,326	3,312	0	66
Green-winged Teal	73	31	26,167	18,687	3,285	2,588
Blue-winged/Cinnamon Teal	0	126	15,978	16,085	313	262
Northern Shoveler	49	0	8,568	3,548	104	197
Northern Pintail	0	126	463	4,021	469	328
Wood Duck	416	818	99,343	114,016	4,589	5,077
Redhead	0	0	926	1,419	0	0
Canvasback	0	31	463	946	0	0
Greater Scaup	147	220	463	710	52	98
Lesser Scaup	49	31	3,010	5,441	261	557
Ring-necked Duck	49	126	27,325	13,483	1,304	1,474
Goldeneyes	98	157	0	0	1,773	2,031
Bufflehead	563	94	3,474	3,075	417	98
Ruddy Duck	0	31	463	2,839	0	0
Long-tailed Duck	0	34	0	0	52	131
Eiders	1,639	1,071	0	0	0	0
Scoters	61	182	0	1,656	0	33
Hooded Merganser	612	786	7,410	3,785	417	131
Other Mergansers	1,029	1,321	463	237	469	524
Other Ducks	0	0	232	710	52	0
Total Duck Harvest	7,700±29%	9,700±36%	249,400±25%	247,000±21%	25,500±31%	22,900±13%
Total Active Duck Hunters^a	800±20%	1,000±17%	23,500±17%	20,200±17%	2,400±15%	2,700±11%
Total Duck Hunter Days Afield^b	6,000±28%	6,200±20%	156,700±23%	141,000±20%	18,500±22%	17,300±13%
Seasonal Duck Harvest Per Hunter	9.8±35%	9.9±40%	10.6±30%	12.2±27%	10.7±35%	8.5±17%
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Goose Species Composition						
Canada Goose	2,800	4,165	32,700	19,337	11,525	9,644
Snow Goose	0	12	0	0	87	0
Blue Goose	0	0	0	0	0	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	0	0	0	0	0
Brant	600	694	0	0	87	42
Other Geese	0	0	0	0	0	0
Total Goose Harvest	3,400±29%	4,900±33%	32,700±54%	19,300±35%	11,700±30%	9,700±19%
Total Active Goose Hunters^b	600±24%	900±19%	7,700±29%	7,300±28%	2,100±20%	2,000±13%
Total Goose Hunter Days Afield^b	3,900±25%	5,000±25%	47,300±63%	20,600±33%	14,000±31%	9,300±16%
Seasonal Goose Harvest Per Hunter	5.6±38%	5.6±39%	4.2±61%	2.6±45%	5.7±36%	4.9±23%
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Active Waterfowl Hunters	900±17%	1,300±13%	22,900±18%	21,700±17%	3,000±15%	3,300±10%
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Sample Sizes						
Duck Wings	329	382	1,077	1,044	489	700
Goose Tails	370	386	94	59	134	232

Table 1A. Preliminary estimates of waterfowl harvest and hunter activity in the Atlantic Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Virginia		West Virginia		Flyway Total	
	2009	2010	2009	2010	2009	2010
Mallard	39,204	60,045	3,816	4,027	419,543	394,429
Domestic Mallard	264	442	78	43	9,254	8,784
Black Duck	8,105	12,914	392	771	81,287	92,204
Mallard x Black Duck Hybrid	529	883	26	86	6,763	7,699
Mottled Duck	0	0	0	0	19,135	14,591
Gadwall	5,638	9,934	183	129	33,448	53,420
Wigeon	1,498	2,980	26	86	33,514	39,910
Green-winged Teal	7,665	5,850	26	43	135,634	148,482
Blue-winged/Cinnamon Teal	1,233	2,870	26	43	114,479	119,348
Northern Shoveler	881	1,766	26	0	19,202	29,651
Northern Pintail	1,586	2,539	0	0	15,056	23,522
Wood Duck	15,329	16,225	1,934	1,028	357,501	453,057
Redhead	352	1,656	0	0	12,129	24,127
Canvasback	1,674	5,629	0	0	7,389	22,989
Greater Scaup	2,731	1,987	0	0	12,794	23,535
Lesser Scaup	4,229	3,863	52	0	35,908	67,005
Ring-necked Duck	9,779	8,609	0	0	116,445	94,349
Goldeneyes	352	442	0	0	12,918	14,645
Bufflehead	19,646	17,660	0	0	84,532	76,125
Ruddy Duck	881	1,876	0	43	9,275	21,427
Long-tailed Duck	1,943	762	0	0	15,260	15,844
Eiders	0	0	0	0	16,138	13,050
Scoters	4,857	4,382	26	0	36,699	33,723
Hooded Merganser	5,462	6,623	105	257	42,103	36,148
Other Mergansers	1,674	1,656	157	129	22,311	19,229
Other Ducks	88	0	26	0	11,383	10,006
Total Duck Harvest	135,600±19%	171,600±23%	6,900±36%	6,700±37%	1,680,100±7%	1,857,300±8%
Total Active Duck Hunters^a	17,600±13%	18,400±13%	1,200±24%	1,000±26%	193,200^c	183,100^c
Total Duck Hunter Days Afield^d	91,200±16%	113,000±20%	7,700±32%	5,500±32%	1,104,100±6%	1,072,400±6%
Seasonal Duck Harvest Per Hunter	7.7±23%	9.3±27%	5.9±43%	6.4±45%		
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Goose Species Composition						
Canada Goose	63,700	71,131	7,000	6,478	854,268	796,229
Snow Goose	100	671	0	0	29,314	17,875
Blue Goose	0	0	0	0	112	418
Ross's Goose	0	0	0	0	145	0
White-fronted Goose	0	0	0	0	2,510	0
Brant	3,300	2,401	0	0	35,123	18,073
Other Geese	0	134	0	0	728	251
Total Goose Harvest	67,100±22%	74,300±18%	7,000±39%	6,500±61%	922,200±8%	832,800±8%
Total Active Goose Hunters^b	15,600±13%	16,400±14%	1,100±27%	1,000±27%	145,200^c	137,300^c
Total Goose Hunter Days Afield^b	68,600±18%	77,100±22%	6,700±39%	5,800±42%	804,500±8%	688,900±6%
Seasonal Goose Harvest Per Hunter	4.1±26%	4.4±23%	6.6±47%	6.2±67%		
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Active Waterfowl Hunters	22,100±12%	23,700±11%	1,300±23%	1,300±24%	241,700^c	236,300^c
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Sample Sizes						
Duck Wings	1,490	1,535	264	156	15,312	15,909
Goose Tails	683	546	96	88	7,359	7,322

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Alabama		Arkansas		Illinois	
	2009	2010	2009	2010	2009	2010
Mallard	64,833	27,890	605,672	691,693	239,205	183,672
Domestic Mallard	0	0	0	0	475	197
Black Duck	549	1,073	0	1,396	2,851	2,370
Mallard x Black Duck Hybrid	0	0	415	465	0	197
Mottled Duck	0	0	0	0	0	0
Gadwall	30,768	85,012	168,012	231,340	29,455	34,759
Wigeon	3,297	3,486	14,934	27,463	6,414	5,332
Green-winged Teal	9,340	12,068	115,741	171,760	29,455	23,897
Blue-winged/Cinnamon Teal	14,285	3,218	28,624	5,586	25,417	18,565
Northern Shoveler	4,945	17,432	70,109	101,939	13,065	18,367
Northern Pintail	3,297	1,341	18,668	31,652	4,513	9,480
Wood Duck	81,865	45,054	51,441	111,248	31,831	36,734
Redhead	0	1,609	2,489	3,724	2,138	2,567
Canvasback	3,846	2,682	2,489	1,862	2,613	5,925
Greater Scaup	1,648	1,073	830	1,396	1,188	1,580
Lesser Scaup	1,648	2,682	2,904	2,793	9,027	6,912
Ring-necked Duck	6,593	5,900	12,030	12,568	16,153	7,505
Goldeneyes	549	805	0	3,258	2,851	7,307
Bufflehead	8,791	1,609	0	2,327	5,226	3,752
Ruddy Duck	0	0	1,245	0	238	790
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	0	197
Hooded Merganser	4,395	2,950	8,297	7,913	2,613	1,777
Other Mergansers	549	0	0	0	475	395
Other Ducks	0	0	0	465	0	395
Total Duck Harvest	241,200±32%	215,900±29%	1,103,900±18%	1,410,800±18%	425,200±18%	372,700±18%
Total Active Duck Hunters ^a	16,100±20%	12,800±21%	55,000±9%	52,700±9%	35,100±10%	32,700±11%
Total Duck Hunter Days Afield ^d	136,900±31%	90,000±23%	435,600±12%	460,200±15%	317,200±14%	227,600±15%
Seasonal Duck Harvest Per Hunter	15.0±38%	16.9±36%	20.1±20%	26.8±20%	12.1±21%	11.4±21%
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Goose Species Composition						
Canada Goose	22,900	12,866	26,189	54,084	156,863	131,701
Snow Goose	0	477	30,743	27,702	5,147	1,380
Blue Goose	0	0	18,218	21,106	3,251	986
Ross's Goose	0	0	1,139	2,638	271	197
White-fronted Goose	0	0	23,911	36,935	2,167	3,746
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	197
Total Goose Harvest	22,900±41%	13,300±60%	100,200±32%	142,500±31%	167,700±16%	138,200±22%
Total Active Goose Hunters ^b	8,100±32%	4,200±42%	14,900±18%	14,900±18%	29,100±11%	27,900±13%
Total Goose Hunter Days Afield ^d	42,100±45%	18,200±61%	70,000±24%	86,300±26%	223,400±14%	209,000±20%
Seasonal Goose Harvest Per Hunter	2.8±51%	3.1±74%	6.7±37%	9.5±36%	5.8±20%	5.0±26%
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Active Waterfowl Hunters	16,900±20%	12,800±21%	54,900±9%	52,700±9%	43,500±9%	42,100±10%
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Sample Sizes						
Duck Wings	439	805	2,661	3,031	1,790	1,887
Goose Tails	26	28	88	108	619	701

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Indiana		Iowa		Kentucky	
	2009	2010	2009	2010	2009	2010
Mallard	34,993	41,658	45,288	68,332	79,761	33,229
Domestic Mallard	171	0	0	192	0	0
Black Duck	1,707	1,195	523	192	3,552	1,994
Mallard x Black Duck Hybrid	512	0	174	0	969	0
Mottled Duck	0	0	0	0	0	0
Gadwall	6,486	7,000	12,715	17,851	17,761	4,430
Wigeon	1,536	683	3,309	3,647	646	2,104
Green-winged Teal	6,999	4,268	22,470	20,346	6,781	1,329
Blue-winged/Cinnamon Teal	6,657	4,439	35,534	46,834	646	665
Northern Shoveler	1,536	1,537	5,574	10,941	3,229	886
Northern Pintail	853	1,024	2,787	9,213	646	665
Wood Duck	15,363	23,561	45,114	55,472	22,282	4,209
Redhead	0	1,024	697	2,303	0	222
Canvasback	0	171	174	1,919	646	222
Greater Scaup	171	0	0	192	323	665
Lesser Scaup	853	171	174	768	1,615	997
Ring-necked Duck	3,414	3,073	6,271	4,799	2,583	222
Goldeneyes	853	341	174	1,344	0	665
Bufflehead	512	2,902	174	576	969	886
Ruddy Duck	341	0	174	384	0	554
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	0	0
Hooded Merganser	171	1,024	174	192	1,292	554
Other Mergansers	171	0	0	0	0	332
Other Ducks	0	0	0	0	0	0
Total Duck Harvest	83,300±16%	94,100±15%	181,500±16%	245,500±16%	143,700±56%	54,800±48%
Total Active Duck Hunters ^a	12,700±13%	10,900±12%	17,600±9%	22,200±10%	11,000±30%	5,800±46%
Total Duck Hunter Days Afield ^d	85,000±16%	67,600±13%	130,300±13%	149,100±15%	101,100±51%	39,100±68%
Seasonal Duck Harvest Per Hunter	6.5±20%	8.6±19%	10.3±18%	11.1±19%	13.0±63%	9.4±66%
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Goose Species Composition						
Canada Goose	64,600	74,201	62,043	65,777	32,786	31,263
Snow Goose	0	0	0	156	0	0
Blue Goose	0	0	0	0	405	0
Ross's Goose	0	0	0	0	0	0
White-fronted Goose	0	587	257	156	810	2,039
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	64,600±15%	74,800±20%	62,300±23%	66,100±25%	34,000±46%	33,300±91%
Total Active Goose Hunters ^b	13,000±11%	11,800±11%	13,500±11%	15,100±14%	10,600±30%	9,000±37%
Total Goose Hunter Days Afield ^d	83,900±15%	78,800±14%	87,700±16%	94,500±19%	90,500±52%	55,700±54%
Seasonal Goose Harvest Per Hunter	5.0±19%	6.3±23%	4.6±25%	4.4±28%	3.2±55%	3.7±98%
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Active Waterfowl Hunters	14,500±12%	13,500±11%	19,500±8%	25,200±9%	11,700±29%	7,100±42%
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Sample Sizes						
Duck Wings	488	551	1,042	1,279	445	495
Goose Tails	293	255	242	425	84	49

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Louisiana		Michigan		Minnesota	
	2009	2010	2009	2010	2009	2010
Mallard	143,961	229,415	129,651	104,807	101,280	138,167
Domestic Mallard	491	0	206	0	0	0
Black Duck	1,474	4,015	6,997	4,295	0	1,421
Mallard x Black Duck Hybrid	0	1,147	1,029	687	641	284
Mottled Duck	51,590	55,060	0	0	0	0
Gadwall	279,078	485,212	4,733	5,154	23,931	25,871
Wigeon	30,463	47,604	4,322	2,577	10,470	9,382
Green-winged Teal	364,570	621,141	22,432	20,618	49,999	36,674
Blue-winged/Cinnamon Teal	532,606	446,212	1,852	2,062	34,828	36,958
Northern Shoveler	99,249	211,635	1,441	2,062	16,666	19,332
Northern Pintail	43,729	86,031	4,528	5,498	3,632	11,087
Wood Duck	157,227	278,165	38,072	55,324	53,204	77,897
Redhead	10,809	33,265	19,345	18,728	8,974	18,479
Canvasback	8,353	29,824	823	1,546	3,846	13,362
Greater Scaup	2,948	2,294	5,556	3,780	1,496	1,421
Lesser Scaup	52,081	93,487	9,261	8,591	10,043	14,783
Ring-necked Duck	39,307	90,619	11,936	11,512	45,726	88,984
Goldeneyes	1,474	0	5,556	3,952	7,051	4,833
Bufflehead	3,439	2,868	30,046	21,992	12,607	17,058
Ruddy Duck	0	1,147	4,733	2,234	214	1,421
Long-tailed Duck	0	0	823	5,498	0	0
Eiders	0	0	0	0	0	0
Scoters	0	574	2,264	1,203	0	284
Hooded Merganser	5,405	9,750	2,058	4,811	7,478	6,254
Other Mergansers	1,965	574	1,235	1,031	214	0
Other Ducks	18,179	6,309	0	0	0	0
Total Duck Harvest	1,848,400±12%	2,736,300±11%	308,900±13%	288,000±13%	392,300±14%	524,000±13%
Total Active Duck Hunters ^a	80,100±6%	89,300±6%	41,100±10%	37,100±10%	61,100±10%	69,600±9%
Total Duck Hunter Days Afield ^a	691,400±10%	821,700±9%	251,100±12%	203,000±11%	335,800±14%	396,600±14%
Seasonal Duck Harvest Per Hunter	23.1±13%	30.6±12%	7.5±16%	7.8±16%	6.4±17%	7.5±16%
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Goose Species Composition						
Canada Goose	0	4,545	162,300	125,087	147,700	188,450
Snow Goose	25,247	6,818	0	0	0	0
Blue Goose	11,318	7,576	0	0	0	1,967
Ross's Goose	4,353	1,515	0	0	0	0
White-fronted Goose	33,082	44,696	0	0	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	74,000±33%	65,100±39%	162,300±15%	125,100±16%	147,700±19%	190,400±21%
Total Active Goose Hunters ^b	11,700±19%	10,700±21%	35,400±10%	30,700±11%	49,100±11%	51,600±11%
Total Goose Hunter Days Afield ^d	78,700±27%	48,600±25%	214,700±14%	164,300±13%	252,000±16%	298,200±19%
Seasonal Goose Harvest Per Hunter	6.3±38%	6.1±44%	4.6±18%	4.1±20%	3.0±22%	3.7±24%
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Active Waterfowl Hunters	80,600±6%	89,600±6%	47,800±9%	43,200±9%	71,500±10%	81,900±9%
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Sample Sizes						
Duck Wings	3,762	4,771	1,501	1,676	1,836	1,843
Goose Tails	85	86	595	655	520	484

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Mississippi		Missouri		Ohio	
	2009	2010	2009	2010	2009	2010
Mallard	113,291	113,597	221,325	262,778	62,121	50,863
Domestic Mallard	0	0	0	0	479	175
Black Duck	809	247	176	0	4,312	2,797
Mallard x Black Duck Hybrid	0	247	0	372	479	350
Mottled Duck	270	0	0	0	0	0
Gadwall	45,856	57,170	43,949	66,672	1,437	5,069
Wigeon	4,316	5,940	6,680	8,381	479	1,049
Green-winged Teal	39,382	30,194	41,839	54,939	6,388	8,914
Blue-winged/Cinnamon Teal	8,092	8,662	17,228	27,004	4,950	8,914
Northern Shoveler	31,560	39,103	24,435	41,717	160	1,573
Northern Pintail	7,553	8,167	10,548	18,251	479	2,272
Wood Duck	27,244	59,150	8,790	18,437	18,365	24,470
Redhead	2,158	1,732	2,285	3,911	798	1,923
Canvasback	1,079	247	527	1,490	0	175
Greater Scaup	0	990	703	186	319	699
Lesser Scaup	5,934	3,960	2,285	2,980	2,395	3,321
Ring-necked Duck	10,250	1,237	10,899	9,684	319	699
Goldeneyes	0	0	3,867	931	639	175
Bufflehead	0	0	176	186	7,186	3,845
Ruddy Duck	1,618	0	0	0	479	350
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	176	0	319	0
Hooded Merganser	1,888	1,732	2,813	1,676	479	524
Other Mergansers	0	0	0	372	1,916	1,049
Other Ducks	0	0	0	186	0	0
Total Duck Harvest	301,300±20%	332,400±19%	398,700±25%	520,200±19%	114,500±22%	119,200±37%
Total Active Duck Hunters ^a	13,600±15%	15,500±15%	35,200±13%	30,200±11%	17,700±20%	16,400±22%
Total Duck Hunter Days Afield ^d	117,700±16%	108,600±16%	234,600±21%	225,400±18%	133,400±38%	94,100±24%
Seasonal Duck Harvest Per Hunter	22.2±26%	21.4±24%	11.3±28%	17.2±22%	6.5±30%	7.3±43%
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Goose Species Composition						
Canada Goose	10,913	2,380	66,936	47,689	82,600	79,046
Snow Goose	0	4,760	8,637	3,093	0	0
Blue Goose	0	4,760	5,668	1,547	0	0
Ross's Goose	0	0	1,080	258	0	0
White-fronted Goose	8,987	14,280	1,080	1,804	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	19,900±52%	26,200±62%	83,400±56%	54,400±21%	82,600±18%	79,000±37%
Total Active Goose Hunters ^b	4,900±27%	5,000±28%	15,500±18%	12,400±16%	20,900±19%	15,600±21%
Total Goose Hunter Days Afield ^d	16,500±37%	19,900±38%	89,500±24%	74,100±23%	138,900±21%	110,200±31%
Seasonal Goose Harvest Per Hunter	4.0±58%	5.2±68%	5.4±59%	4.4±26%	4.0±26%	5.1±42%
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Active Waterfowl Hunters	13,500±15%	15,500±15%	36,600±12%	32,700±11%	21,000±19%	19,700±21%
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Sample Sizes						
Duck Wings	1,117	1,343	2,268	2,793	717	682
Goose Tails	31	11	309	211	537	555

Table 1B. Preliminary estimates of waterfowl harvest and hunter activity in the Mississippi Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Tennessee		Wisconsin		Flyway Total	
	2009	2010	2009	2010	2009	2010
Mallard	128,946	112,500	105,908	170,271	2,076,235	2,228,872
Domestic Mallard	0	625	168	293	1,990	1,482
Black Duck	5,407	1,250	2,017	4,827	30,373	27,073
Mallard x Black Duck Hybrid	541	625	1,345	146	6,104	4,522
Mottled Duck	0	0	0	0	51,860	55,060
Gadwall	35,143	57,500	13,953	15,652	713,277	1,098,694
Wigeon	5,136	5,000	4,707	7,314	96,709	129,962
Green-winged Teal	12,435	15,625	27,402	31,012	755,233	1,052,784
Blue-winged/Cinnamon Teal	4,055	5,313	17,819	19,017	732,594	633,448
Northern Shoveler	8,380	3,438	2,690	5,120	283,039	475,080
Northern Pintail	2,974	3,750	2,522	7,753	106,727	196,185
Wood Duck	24,329	49,063	72,286	80,455	647,412	919,239
Redhead	2,433	938	7,733	18,578	59,860	109,003
Canvasback	1,081	4,063	2,354	9,216	27,831	72,703
Greater Scaup	811	3,125	8,574	6,290	24,567	23,692
Lesser Scaup	4,055	2,813	9,246	13,019	111,522	157,275
Ring-necked Duck	10,002	9,375	10,759	22,235	186,243	268,411
Goldeneyes	1,622	313	5,379	9,655	30,017	33,578
Bufflehead	5,407	6,875	16,643	14,774	91,175	79,652
Ruddy Duck	1,352	0	1,849	1,317	12,243	8,196
Long-tailed Duck	0	0	4,707	4,242	5,530	9,740
Eiders	0	0	0	0	0	0
Scoters	0	0	841	878	3,599	3,136
Hooded Merganser	1,892	1,563	2,690	5,266	41,645	45,988
Other Mergansers	0	625	1,009	878	7,534	5,256
Other Ducks	0	313	0	293	18,179	7,961
Total Duck Harvest	256,000±27%	284,700±33%	322,600±11%	448,500±14%	6,121,500±6%	7,647,000±6%
Total Active Duck Hunters^a	20,600±21%	15,900±22%	51,500±11%	58,700±11%	468,400^c	469,800^c
Total Duck Hunter Days Afield^d	154,600±28%	137,600±30%	330,800±11%	383,400±14%	3,455,500±5%	3,404,200±5%
Seasonal Duck Harvest Per Hunter	12.4±34%	17.9±40%	6.3±15%	7.6±18%		
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Goose Species Composition						
Canada Goose	42,766	29,167	97,300	92,156	975,895	938,413
Snow Goose	0	503	0	105	69,775	44,993
Blue Goose	578	0	0	0	39,438	37,941
Ross's Goose	0	0	0	0	6,842	4,608
White-fronted Goose	1,156	1,006	0	0	71,451	105,249
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	197
Total Goose Harvest	44,500±74%	30,700±56%	97,300±20%	92,300±22%	1,163,400±8%	1,131,400±8%
Total Active Goose Hunters^b	11,600±25%	8,600±28%	43,400±11%	44,100±11%	281,700^c	261,800^c
Total Goose Hunter Days Afield^d	107,000±39%	52,500±44%	279,200±17%	269,600±17%	1,773,900±6%	1,579,900±7%
Seasonal Goose Harvest Per Hunter	3.8±78%	3.6±62%	2.2±23%	2.1±24%		
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Active Waterfowl Hunters	21,000±21%	15,900±22%	68,800±9%	77,200±9%	521,900^c	529,200^c
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Sample Sizes						
Duck Wings	947	911	1,919	3,066	20,932	25,133
Goose Tails	77	61	452	876	3,958	4,505

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Colorado		Kansas		Nebraska	
	2009	2010	2009	2010	2009	2010
Mallard	72,094	47,129	80,574	76,639	84,027	75,236
Domestic Mallard	0	90	0	129	172	0
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	0	0	0	129	0	0
Mottled Duck	0	0	0	0	0	0
Gadwall	12,132	5,846	27,589	30,940	13,059	9,262
Wigeon	8,088	3,418	11,511	8,415	8,935	11,542
Green-winged Teal	6,972	5,307	25,944	17,088	18,043	16,529
Blue-winged/Cinnamon Teal	3,904	6,116	18,819	20,195	16,496	22,371
Northern Shoveler	2,371	2,069	7,674	9,321	4,124	5,842
Northern Pintail	3,207	630	5,664	5,437	3,093	2,992
Wood Duck	2,789	1,169	3,106	3,366	3,093	6,412
Redhead	1,394	540	2,923	4,013	2,578	2,137
Canvasback	279	180	731	388	0	570
Greater Scaup	139	0	183	0	0	0
Lesser Scaup	279	720	731	1,424	344	142
Ring-necked Duck	2,510	1,259	6,212	4,660	1,031	712
Goldeneyes	2,092	2,249	1,096	3,884	172	0
Bufflehead	1,534	180	548	129	687	0
Ruddy Duck	418	450	0	0	0	0
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	129	172	0
Hooded Merganser	279	90	914	777	1,375	0
Other Mergansers	279	450	183	0	0	0
Other Ducks	139	90	0	0	0	0
Total Duck Harvest	120,900±17%	78,000±21%	194,400±21%	187,100±25%	157,400±17%	153,700±16%
Total Active Duck Hunters ^a	13,300±16%	9,100±16%	14,300±17%	13,100±15%	12,900±15%	13,400±16%
Total Duck Hunter Days Afield ^a	79,400±20%	51,200±16%	92,100±19%	79,100±16%	94,100±13%	98,500±22%
Seasonal Duck Harvest Per Hunter	9.1±24%	8.6±26%	13.6±27%	14.3±29%	12.2±22%	11.5±23%

Goose Species Composition						
Canada Goose	85,123	67,612	92,267	66,494	79,026	107,108
Snow Goose	5,262	1,734	7,467	2,908	1,303	0
Blue Goose	310	347	1,067	388	1,737	0
Ross's Goose	3,405	347	2,133	1,163	0	0
White-fronted Goose	0	173	12,267	4,847	434	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	94,100±23%	70,200±18%	115,200±26%	75,800±22%	82,500±23%	107,100±20%
Total Active Goose Hunters ^b	15,200±15%	10,700±14%	12,200±17%	10,700±16%	11,800±14%	13,800±15%
Total Goose Hunter Days Afield ^d	84,800±21%	60,300±14%	79,000±26%	56,900±18%	95,600±16%	116,800±24%
Seasonal Goose Harvest Per Hunter	6.2±27%	6.6±23%	9.4±31%	7.1±27%	7.0±27%	7.8±25%

Active Waterfowl Hunters	19,700±13%	13,200±14%	17,100±15%	16,100±14%	16,600±13%	18,100±13%

Sample Sizes						
Duck Wings	867	867	1,064	1,445	916	1,079
Goose Tails	304	405	432	391	190	236

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	New Mexico		North Dakota		Oklahoma	
	2009	2010	2009	2010	2009	2010
Mallard	15,200	14,985	169,224	105,146	104,072	90,298
Domestic Mallard	0	71	0	108	108	0
Black Duck	0	0	0	0	0	107
Mallard x Black Duck Hybrid	0	0	0	0	0	107
Mottled Duck	0	0	0	0	0	0
Gadwall	5,263	4,064	93,530	55,061	68,047	56,302
Wigeon	4,437	6,962	21,181	11,575	19,257	14,585
Green-winged Teal	2,785	2,368	20,623	15,036	26,613	29,170
Blue-winged/Cinnamon Teal	897	707	21,404	25,205	8,763	7,614
Northern Shoveler	661	1,237	39,909	21,743	7,573	8,472
Northern Pintail	1,062	2,509	18,840	11,250	6,599	11,153
Wood Duck	378	459	2,341	1,406	4,868	3,539
Redhead	448	601	32,663	25,854	3,029	5,148
Canvasback	71	35	8,361	7,248	1,947	1,716
Greater Scaup	24	0	223	108	0	322
Lesser Scaup	401	35	26,197	18,390	433	858
Ring-necked Duck	590	389	5,685	10,493	8,979	11,046
Goldeneyes	425	71	780	325	1,082	1,180
Bufflehead	189	35	8,138	9,303	216	536
Ruddy Duck	0	0	3,233	3,137	108	0
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	111	0	0	0
Hooded Merganser	71	177	557	865	1,406	1,930
Other Mergansers	330	0	0	0	0	107
Other Ducks	566	389	0	108	0	0
Total Duck Harvest	33,800±45%	35,100±35%	473,000±19%	322,400±11%	263,100±23%	244,200±28%
Total Active Duck Hunters ^a	1,800±25%	2,600±22%	30,600±7%	24,800±8%	11,700±13%	13,600±14%
Total Duck Hunter Days Afield ^d	17,000±42%	15,900±25%	165,900±15%	115,500±9%	87,400±17%	89,900±22%
Seasonal Duck Harvest Per Hunter	18.9±52%	13.4±41%	15.5±21%	13.0±14%	22.5±27%	18.0±31%
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Goose Species Composition						
Canada Goose	4,853	5,074	101,599	88,966	28,084	21,831
Snow Goose	677	276	15,296	17,277	1,590	4,962
Blue Goose	0	0	15,779	17,277	177	2,580
Ross's Goose	113	221	2,093	1,547	530	794
White-fronted Goose	56	0	1,932	5,157	2,120	1,588
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	5,700±56%	5,600±32%	136,700±37%	130,200±15%	32,500±22%	31,800±42%
Total Active Goose Hunters ^b	1,000±35%	1,700±32%	20,700±8%	21,600±8%	7,600±16%	6,500±22%
Total Goose Hunter Days Afield ^d	4,700±47%	5,600±29%	98,200±15%	90,400±10%	33,200±19%	29,100±36%
Seasonal Goose Harvest Per Hunter	6.0±66%	3.2±45%	6.6±38%	6.0±17%	4.3±27%	4.9±47%
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Active Waterfowl Hunters	2,300±24%	3,200±21%	33,400±7%	28,100±7%	12,100±13%	14,300±14%
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Sample Sizes						
Duck Wings	1,432	993	4,243	2,980	2,432	2,277
Goose Tails	101	101	849	505	184	160

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	South Dakota		Texas		Wyoming	
	2009	2010	2009	2010	2009	2010
Mallard	108,581	83,910	74,524	89,514	25,784	22,075
Domestic Mallard	0	0	0	930	0	0
Black Duck	0	0	220	233	0	0
Mallard x Black Duck Hybrid	0	0	0	233	0	0
Mottled Duck	0	0	10,992	10,463	0	0
Gadwall	31,363	21,671	207,963	182,980	2,738	2,985
Wigeon	10,530	5,551	98,046	68,123	4,679	2,707
Green-winged Teal	12,568	12,277	145,310	161,822	3,584	3,124
Blue-winged/Cinnamon Teal	17,323	14,839	208,842	161,590	747	1,805
Northern Shoveler	11,888	11,957	62,213	78,354	299	625
Northern Pintail	8,492	12,917	42,868	68,821	896	417
Wood Duck	2,831	2,776	27,919	36,735	299	347
Redhead	7,020	5,872	29,018	44,176	299	208
Canvasback	679	2,242	4,617	11,858	348	0
Greater Scaup	0	214	1,099	930	0	0
Lesser Scaup	4,189	4,270	11,212	13,718	299	0
Ring-necked Duck	3,397	6,085	41,329	33,015	548	208
Goldeneyes	226	320	0	2,325	3,634	625
Bufflehead	5,321	1,495	3,737	4,418	249	694
Ruddy Duck	453	961	2,638	3,488	0	69
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	113	0	220	0	0	0
Hooded Merganser	226	107	2,198	3,488	0	0
Other Mergansers	0	0	879	0	100	139
Other Ducks	0	0	3,957	8,835	0	0
Total Duck Harvest	225,200±16%	187,500±18%	979,800±20%	986,000±20%	44,500±39%	36,000±32%
Total Active Duck Hunters ^a	16,600±12%	16,500±13%	67,400±20%	67,000±20%	4,100±20%	3,300±18%
Total Duck Hunter Days Afield ^a	84,700±14%	71,500±17%	410,200±28%	355,100±16%	22,300±26%	18,700±26%
Seasonal Duck Harvest Per Hunter	13.5±20%	11.3±22%	14.5±28%	14.7±28%	10.7±44%	10.8±37%
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Goose Species Composition						
Canada Goose	98,716	77,830	54,583	70,113	21,134	24,378
Snow Goose	9,892	12,151	67,839	75,121	66	0
Blue Goose	7,831	5,384	12,476	13,355	0	0
Ross's Goose	824	1,077	9,357	18,363	0	90
White-fronted Goose	1,237	615	52,244	75,121	0	0
Brant	0	0	0	0	0	0
Other Geese	0	0	0	0	0	0
Total Goose Harvest	118,500±27%	97,100±17%	196,500±35%	252,100±32%	21,200±46%	24,500±24%
Total Active Goose Hunters ^b	14,600±12%	14,200±13%	36,700±23%	46,000±20%	3,600±19%	3,800±15%
Total Goose Hunter Days Afield ^d	82,800±16%	69,200±15%	108,900±26%	152,400±30%	17,000±23%	20,000±22%
Seasonal Goose Harvest Per Hunter	8.1±30%	6.8±21%	5.4±42%	5.5±38%	5.8±50%	6.4±28%
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Active Waterfowl Hunters	22,400±10%	21,300±11%	86,900±19%	75,800±19%	5,800±15%	5,700±12%
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Sample Sizes						
Duck Wings	1,989	1,756	4,457	4,241	894	519
Goose Tails	575	631	252	302	322	273

Table 1C. Preliminary estimates of waterfowl harvest and hunter activity in the Central Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Flyway Total	
	2009	2010
Mallard	734,079	604,931
Domestic Mallard	280	1,328
Black Duck	220	340
Mallard x Black Duck Hybrid	0	469
Mottled Duck	10,992	10,463
Gadwall	461,684	369,112
Wigeon	186,663	132,878
Green-winged Teal	262,443	262,721
Blue-winged/Cinnamon Teal	297,195	260,442
Northern Shoveler	136,711	139,619
Northern Pintail	90,721	116,127
Wood Duck	47,623	56,210
Redhead	79,372	88,548
Canvasback	17,033	24,237
Greater Scaup	1,668	1,573
Lesser Scaup	44,084	39,557
Ring-necked Duck	70,281	67,869
Goldeneyes	9,507	10,977
Bufflehead	20,620	16,790
Ruddy Duck	6,850	8,105
Long-tailed Duck	0	0
Eiders	0	0
Scoters	616	129
Hooded Merganser	7,026	7,433
Other Mergansers	1,771	696
Other Ducks	4,663	9,422
Total Duck Harvest	2,492,100±9%	2,230,000±10%
Total Active Duck Hunters^a	172,700^c	163,300^c
Total Duck Hunter Days Afield^d	1,053,000±12%	895,300±8%
Seasonal Duck Harvest Per Hunter		

Goose Species Composition		
Canada Goose	565,387	529,406
Snow Goose	109,392	114,429
Blue Goose	39,376	39,330
Ross's Goose	18,456	23,601
White-fronted Goose	70,290	87,502
Brant	0	0
Other Geese	0	0
Total Goose Harvest	802,900±13%	794,300±12%
Total Active Goose Hunters^b	123,400^c	129,000^c
Total Goose Hunter Days Afield^b	604,200±8%	600,800±10%
Seasonal Goose Harvest Per Hunter		

Active Waterfowl Hunters	216,300^c	195,700^c

Sample Sizes		
Duck Wings	18,294	16,157
Goose Tails	3,209	3,004

Table 1D. Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Arizona		California		Idaho	
	2009	2010	2009	2010	2009	2010
Mallard	9,288	12,152	262,442	331,987	146,716	104,223
Domestic Mallard	0	0	525	2,105	265	0
Black Duck	0	0	0	0	0	0
Mallard x Black Duck Hybrid	0	0	0	0	0	0
Mottled Duck	0	0	0	0	0	0
Gadwall	2,781	5,258	117,846	124,376	14,592	6,248
Wigeon	3,253	2,688	195,302	226,172	21,357	13,821
Green-winged Teal	5,300	5,726	387,457	394,940	13,266	10,791
Blue-winged/Cinnamon Teal	1,364	292	35,319	48,219	1,725	757
Northern Shoveler	2,624	3,564	157,710	220,814	1,990	947
Northern Pintail	577	1,986	177,118	242,628	5,174	4,828
Wood Duck	157	526	27,101	34,060	4,112	1,515
Redhead	525	1,110	6,644	7,654	929	1,799
Canvasback	315	175	9,791	17,604	0	95
Greater Scaup	157	0	4,196	4,592	1,061	663
Lesser Scaup	1,732	234	13,113	9,376	265	757
Ring-necked Duck	2,676	2,103	17,659	36,930	1,725	1,420
Goldeneyes	1,942	58	9,092	4,401	10,480	4,070
Bufflehead	2,519	526	12,589	9,185	2,653	4,165
Ruddy Duck	1,050	993	4,196	12,438	133	0
Long-tailed Duck	0	58	100	0	133	0
Eiders	0	0	0	0	0	0
Scoters	0	0	900	5,092	0	0
Hooded Merganser	157	0	874	765	1,194	189
Other Mergansers	210	409	874	191	531	284
Other Ducks	472	643	350	574	0	0
Total Duck Harvest	37,100±19%	38,500±20%	1,441,200±20%	1,734,100±22%	228,300±22%	156,600±36%
Total Active Duck Hunters ^a	3,300±13%	3,400±16%	51,300±11%	55,500±10%	15,400±14%	16,900±17%
Total Duck Hunter Days Afield ^d	18,800±14%	18,200±17%	511,300±16%	596,800±18%	113,800±27%	84,300±26%
Seasonal Duck Harvest Per Hunter	11.2±23%	11.5±26%	28.1±23%	31.3±24%	14.8±26%	9.3±40%
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Goose Species Composition						
Canada Goose	4,485	668	53,865	68,666	57,053	30,031
Snow Goose	408	859	30,490	53,906	1,247	1,221
Blue Goose	0	0	203	642	0	0
Ross's Goose	408	286	8,740	14,974	0	122
White-fronted Goose	0	0	56,101	67,810	0	0
Brant	0	0	900	541	0	0
Other Geese	0	0	0	214	0	0
Total Goose Harvest	5,300±46%	1,800±13%	150,300±18%	206,800±20%	58,300±25%	31,400±32%
Total Active Goose Hunters ^d	1,100±23%	1,100±31%	33,400±12%	38,600±11%	11,100±15%	11,100±20%
Total Goose Hunter Days Afield ^p	7,100±32%	5,700±43%	251,100±15%	279,100±17%	77,400±31%	56,400±28%
Seasonal Goose Harvest Per Hunter	4.8±52%	1.7±64%	4.5±22%	5.4±23%	5.3±29%	2.8±38%
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Active Waterfowl Hunters	3,400±12%	3,400±16%	53,300±11%	57,100±10%	18,300±13%	18,100±16%
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Sample Sizes						
Duck Wings	707	659	8,247	9,037	1,721	1,654
Goose Tails	26	19	858	1,023	374	257

Table 1D. Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Montana		Nevada		Oregon	
	2009	2010	2009	2010	2009	2010
Mallard	67,811	79,844	14,914	10,088	147,480	161,862
Domestic Mallard	0	0	0	0	70	94
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	6,283	4,022	4,636	6,834	13,844	13,746
Wigeon	8,233	4,414	4,133	3,384	59,618	61,622
Green-winged Teal	8,124	5,983	7,988	6,248	49,322	56,572
Blue-winged/Cinnamon Teal	867	1,079	447	1,172	139	1,029
Northern Shoveler	2,167	1,471	3,296	10,219	12,104	18,515
Northern Pintail	2,708	2,256	2,123	3,515	39,653	59,658
Wood Duck	1,842	1,079	168	456	7,444	9,725
Redhead	1,517	1,766	559	2,473	209	281
Canvasback	217	687	279	1,497	835	748
Greater Scaup	0	98	0	0	5,009	6,452
Lesser Scaup	758	490	168	260	5,078	5,236
Ring-necked Duck	975	490	503	716	4,522	10,847
Goldeneyes	2,275	2,452	391	130	3,478	1,590
Bufflehead	650	687	670	781	8,904	4,582
Ruddy Duck	325	392	56	325	139	187
Long-tailed Duck	0	0	0	0	0	0
Eiders	0	0	0	0	0	0
Scoters	0	0	0	0	300	312
Hooded Merganser	325	196	168	0	1,739	4,208
Other Mergansers	325	196	503	130	1,113	1,777
Other Ducks	0	98	0	0	0	94
Total Duck Harvest	105,400±21%	107,700±23%	41,000±20%	48,200±18%	361,000±21%	419,100±18%
Total Active Duck Hunters ^a	11,500±16%	10,200±17%	3,500±19%	3,600±19%	18,700±9%	19,500±9%
Total Duck Hunter Days Afield ^d	50,500±17%	49,700±19%	22,200±18%	23,900±19%	147,600±13%	161,600±14%
Seasonal Duck Harvest Per Hunter	9.1±27%	10.6±29%	11.7±27%	13.3±26%	19.3±22%	21.5±21%
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Goose Species Composition						
Canada Goose	43,948	39,088	5,831	5,859	54,537	39,057
Snow Goose	1,481	1,382	1,693	1,652	4,218	2,220
Blue Goose	0	0	0	0	0	0
Ross's Goose	123	395	376	451	222	0
White-fronted Goose	247	99	0	0	1,924	3,885
Brant	0	0	0	0	100	212
Other Geese	0	0	0	0	0	0
Total Goose Harvest	45,800±18%	41,000±18%	7,900±37%	8,000±29%	61,000±16%	45,400±19%
Total Active Goose Hunters ^b	12,100±17%	10,700±18%	2,400±22%	2,500±20%	10,100±11%	10,000±12%
Total Goose Hunter Days Afield ^d	48,400±22%	42,200±22%	12,500±29%	12,800±22%	66,700±17%	51,600±14%
Seasonal Goose Harvest Per Hunter	3.8±25%	3.8±25%	3.4±43%	3.1±35%	6.0±20%	4.5±22%
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Active Waterfowl Hunters	15,900±15%	16,300±14%	4,000±18%	4,000±18%	20,500±9%	21,400±9%
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Sample Sizes						
Duck Wings	973	1,098	734	741	5,189	4,488
Goose Tails	371	415	42	53	826	657

Table 1D. Preliminary estimates of waterfowl harvest and hunter activity in the Pacific Flyway during the 2009 and 2010 hunting seasons.

Duck Species Composition	Utah		Washington		Flyway Total	
	2009	2010	2009	2010	2009	2010
Mallard	69,379	76,285	166,231	128,805	884,262	905,246
Domestic Mallard	106	202	0	0	966	2,401
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	21,887	43,100	10,779	8,205	192,648	211,788
Wigeon	15,618	22,258	77,385	61,109	384,900	395,468
Green-winged Teal	29,430	28,531	32,111	30,339	532,998	539,131
Blue-winged/Cinnamon Teal	6,056	6,880	454	0	46,370	59,428
Northern Shoveler	11,050	24,889	9,758	6,694	200,698	287,112
Northern Pintail	16,893	21,044	34,835	22,781	279,080	358,696
Wood Duck	106	0	4,879	3,023	45,809	50,383
Redhead	4,781	5,261	3,291	2,051	18,453	22,394
Canvasback	1,806	3,440	4,766	1,512	18,009	25,757
Greater Scaup	106	202	4,993	6,586	15,523	18,593
Lesser Scaup	2,125	3,440	6,922	3,671	30,161	23,465
Ring-necked Duck	2,019	3,845	5,560	3,347	35,638	59,698
Goldeneyes	2,125	3,642	3,744	2,591	33,527	18,935
Bufflehead	1,487	1,012	4,993	4,319	34,465	25,256
Ruddy Duck	637	3,035	0	0	6,536	17,371
Long-tailed Duck	0	0	567	0	800	58
Eiders	0	0	0	0	0	0
Scoters	106	0	8,283	1,404	9,589	6,807
Hooded Merganser	319	202	794	756	5,570	6,317
Other Mergansers	1,062	1,619	340	324	4,958	4,930
Other Ducks	0	202	113	108	935	1,719
Total Duck Harvest	187,100±25%	249,100±44%	380,800±25%	287,600±16%	2,781,900±12%	3,041,000±13%
Total Active Duck Hunters^a	14,000±18%	15,900±16%	19,200±16%	21,000±13%	136,900^c	146,000^c
Total Duck Hunter Days Afield^d	115,300±37%	116,600±41%	154,700±19%	131,400±15%	1,134,100±9%	1,182,600±11%
Seasonal Duck Harvest Per Hunter	13.4±30%	15.6±47%	19.8±29%	13.6±21%		
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Goose Species Composition						
Canada Goose	20,008	36,218	65,506	41,446	305,233	261,033
Snow Goose	292	866	14,102	2,285	53,931	64,392
Blue Goose	0	0	0	0	203	642
Ross's Goose	0	520	182	127	10,052	16,875
White-fronted Goose	0	0	910	2,031	59,182	73,825
Brant	0	0	1,100	0	2,100	753
Other Geese	0	0	0	0	0	214
Total Goose Harvest	20,300±46%	37,600±24%	81,800±28%	45,900±17%	430,700±10%	417,700±11%
Total Active Goose Hunters^b	8,500±22%	11,700±18%	12,900±14%	12,000±12%	91,600^c	97,800^c
Total Goose Hunter Days Afield^d	53,700±34%	69,500±29%	81,300±24%	52,900±17%	598,300±9%	570,300±10%
Seasonal Goose Harvest Per Hunter	2.4±51%	3.2±29%	6.3±31%	3.8±21%		
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Active Waterfowl Hunters	15,000±17%	18,000±15%	21,100±15%	23,900±12%	151,600^c	162,200^c
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Sample Sizes						
Duck Wings	1,761	1,231	3,356	2,664	22,688	21,572
Goose Tails	139	217	895	726	3,531	3,367

Table 1E. Preliminary estimates of waterfowl harvest and hunter activity in Alaska and the United States during the 2009 and 2010 hunting seasons.

Duck Species Composition	Alaska		United States Total	
	2009	2010	2009	2010
Mallard	21,078	32,534	4,135,196	4,166,013
Domestic Mallard	0	0	12,490	13,995
Black Duck	0	0	111,880	119,616
Mallard x Black Duck Hybrid	0	0	12,868	12,690
Mottled Duck	0	0	81,986	80,113
Gadwall	718	2,270	1,401,774	1,735,283
Wigeon	10,572	17,553	712,358	715,771
Green-winged Teal	7,766	8,928	1,694,073	2,012,046
Blue-winged/Cinnamon Teal	0	0	1,190,638	1,072,665
Northern Shoveler	3,850	3,178	643,500	934,639
Northern Pintail	7,178	10,139	498,762	704,668
Wood Duck	0	0	1,098,345	1,478,889
Redhead	0	0	169,814	244,072
Canvasback	131	0	70,392	145,686
Greater Scaup	587	2,421	55,139	69,814
Lesser Scaup	392	605	222,066	287,907
Ring-necked Duck	1,044	757	409,651	491,083
Goldeneyes	2,676	2,724	88,644	80,859
Bufflehead	1,109	1,665	231,902	199,487
Ruddy Duck	0	0	34,904	55,098
Long-tailed Duck	592	598	22,182	26,241
Eiders	0	598	16,138	13,648
Scoters	1,775	2,392	52,279	46,187
Hooded Merganser	0	0	96,345	95,886
Other Mergansers	4,142	598	40,716	30,708
Other Ducks	592	4,784	35,752	33,891
Total Duck Harvest	64,200±12%	91,700±16%	13,139,800±4%	14,867,000±4%
Total Active Duck Hunters^a	4,900±7%	7,900±5%	976,100^c	970,200^c
Total Duck Hunter Days Afield^d	25,200±10%	36,400±11%	6,771,900±4%	6,590,800±3%
Seasonal Duck Harvest Per Hunter	13.2±14%	11.5±17%		
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Goose Species Composition				
Canada Goose	4,889	10,189	2,705,672	2,535,269
Snow Goose	0	0	262,411	241,689
Blue Goose	0	0	79,129	78,331
Ross's Goose	0	0	35,494	45,084
White-fronted Goose	1,811	2,183	205,243	268,759
Brant	1,100	2,118	38,323	20,943
Other Geese	0	0	728	662
Total Goose Harvest	7,800±25%	14,500±35%	3,327,000±5%	3,190,700±5%
Total Active Goose Hunters^b	2,000±12%	3,100±13%	643,900^c	629,000^c
Total Goose Hunter Days Afield^b	8,900±16%	13,500±21%	3,789,800±4%	3,453,400±4%
Seasonal Goose Harvest Per Hunter	3.8±28%	4.6±37%		
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Active Waterfowl Hunters	5,400±6%	8,800±3%	1,137,000^c	1,132,200^c
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Sample Sizes				
Duck Wings	887	562	78,113	79,333
Goose Tails	62	23	18,119	18,221

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

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

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

Table 2. Flyway-specific point estimates of duck and goose harvest in Colorado, Montana, New Mexico, and Wyoming during the 2009 and 2010 hunting seasons.

	2009		2010	
	Central Flyway	Pacific Flyway	Central Flyway	Pacific Flyway
Duck Harvest				
Colorado	79,200	41,700	52,300	25,700
Montana	43,000	62,400	37,000	70,700
New Mexico	28,300	5,500	32,800	2,300
Wyoming	32,700	11,800	25,200	10,800
Goose Harvest				
Colorado	77,100	17,000	51,700	18,500
Montana	26,800	19,000	18,300	22,700
New Mexico	2,900	2,800	2,000	3,600
Wyoming	17,100	4,100	20,500	3,900

Table 3. Preliminary estimates of sea duck harvest and hunter activity for states with special sea duck seasons or sea duck permits during the 2009 and 2010 hunting seasons. ¹

State / Flyway	Sea Duck Harvest ²		Active Sea Duck Hunters ³		Sea Duck Hunter Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Connecticut	2,900 ± 67%	2,900 ± 81%	500 ± 46%	400 ± 41%	1,500 ± 52%	1,500 ± 67%	6.0 ± 81%	6.7 ± 90%
Delaware	1,600 ± 62%	700 ± 82%	200 ± 59%	100 ± 90%	400 ± 51%	300 ± 105%	7.1 ± 85%	6.9 ± 122%
Maine	5,900 ± 68%	7,900 ± 87%	1,000 ± 61%	1,200 ± 52%	3,700 ± 87%	3,000 ± 58%	6.0 ± 92%	6.5 ± 102%
Maryland	16,100 ± 44%	9,300 ± 34%	2,600 ± 28%	2,600 ± 29%	8,000 ± 40%	5,600 ± 35%	6.2 ± 52%	3.6 ± 45%
Massachusetts	9,300 ± 50%	7,600 ± 41%	1,200 ± 24%	1,000 ± 29%	4,100 ± 28%	3,500 ± 39%	7.4 ± 56%	7.6 ± 51%
New Hampshire	1,400 ± 68%	2,100 ± 106%	500 ± 59%	200 ± 56%	1,400 ± 71%	900 ± 86%	3.0 ± 90%	11.3 ± 120%
New Jersey	3,300 ± 98%	3,900 ± 47%	600 ± 57%	900 ± 35%	2,600 ± 102%	2,300 ± 40%	5.2 ± 114%	4.3 ± 59%
New York	12,300 ± 35%	14,000 ± 74%	1,700 ± 25%	1,500 ± 34%	9,600 ± 40%	8,000 ± 57%	7.3 ± 44%	9.6 ± 82%
Rhode Island	1,700 ± 67%	1,300 ± 47%	200 ± 39%	200 ± 33%	700 ± 50%	1,000 ± 43%	8.9 ± 78%	5.3 ± 58%
Virginia	6,800 ± 51%	5,100 ± 81%	1,900 ± 36%	1,700 ± 43%	4,900 ± 42%	6,000 ± 65%	3.5 ± 62%	3.1 ± 91%
Atlantic Flyway Total	61,300 ± 19%	54,700 ± 26%	10,500	9,800	36,700 ± 19%	32,000 ± 21%		
California	1,000 ± 105%	5,100 ± 109%	400 ± 76%	1,500 ± 64%	3,400 ± 138%	6,300 ± 113%	2.8 ± 129%	3.4 ± 127%
Oregon	300 ± 50%	300 ± 49%	200 ± 73%	200 ± 67%	500 ± 64%	300 ± 67%	1.9 ± 89%	2.0 ± 83%
Pacific Flyway	1,300 ± 81%	5,400 ± 103%	500	1,700	3,900 ± 122%	6,600 ± 107%		
Alaska ⁴	7,100 ± 32%	9,000 ± 32%	1,100 ± 20%	1,300 ± 25%	4,400 ± 25%	5,000 ± 35%	6.7 ± 38%	6.8 ± 41%
U.S. Total	69,800 ± 17%	69,100 ± 23%	12,100	12,800	45,000 ± 19%	43,600 ± 23%		

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

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

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

⁴ In addition to the aforementioned, sea ducks also include Harlequin Ducks, Common Mergansers, and Red-breasted Mergansers in Alaska.

Table 4. Preliminary estimates of Brant harvest and hunter activity along the Atlantic and Pacific coasts during the 2009 and 2010 hunting seasons. ¹

State / Flyway	Brant Harvest		Active Brant Hunters ²		Brant Hunter Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Connecticut	500 ± 120%	100 ± 195%	200 ± 111%	100 ± 195%	1,400 ± 129%	100 ± 195%	2.0 ± 163%	2.0 ± 275%
Delaware	900 ± 51%	200 ± 85%	300 ± 47%	200 ± 63%	800 ± 52%	400 ± 65%	2.7 ± 69%	0.9 ± 106%
Maryland	2,200 ± 89%	1,600 ± 123%	500 ± 63%	300 ± 76%	2,700 ± 89%	1,200 ± 115%	4.3 ± 109%	4.6 ± 144%
Massachusetts	400 ± 42%	500 ± 58%	200 ± 51%	200 ± 62%	1,200 ± 55%	700 ± 42%	2.0 ± 66%	2.0 ± 85%
New Hampshire	0	<50 ± 165%	100 ± 137%	<50 ± 165%	600 ± 138%	<50 ± 165%	0	2.0 ± 233%
New Jersey	8,300 ± 46%	5,800 ± 39%	2,200 ± 32%	1,900 ± 24%	10,600 ± 45%	5,400 ± 33%	3.8 ± 56%	3.1 ± 46%
New York	7,100 ± 34%	5,200 ± 66%	1,500 ± 25%	1,100 ± 41%	9,500 ± 31%	7,300 ± 58%	4.8 ± 42%	4.7 ± 77%
North Carolina	11,400 ± 77%	1,400 ± 99%	2,400 ± 44%	1,800 ± 57%	10,600 ± 72%	7,100 ± 107%	4.7 ± 89%	0.8 ± 114%
Rhode Island	600 ± 48%	700 ± 60%	200 ± 30%	200 ± 62%	900 ± 43%	900 ± 45%	3.5 ± 57%	2.9 ± 86%
Virginia	3,300 ± 42%	2,400 ± 53%	1,200 ± 39%	1,200 ± 42%	2,700 ± 34%	3,400 ± 63%	2.8 ± 57%	1.9 ± 67%
Atlantic Flyway Total	34,800 ± 29%	17,900 ± 28%	8,800	7,200	41,000 ± 25%	26,400 ± 35%		
California	900 ± 37%	500 ± 37%	300 ± 100%	200 ± 26%	3,400 ± 151%	600 ± 37%	3.2 ± 106%	3.0 ± 45%
Oregon	100 ± 76%	200 ± 145%	<50 ± 58%	100 ± 111%	100 ± 66%	300 ± 95%	2.4 ± 95%	1.8 ± 182%
Washington	1,100 ± 195%	0	400 ± 138%	200 ± 138%	900 ± 161%	400 ± 145%	3.0 ± 239%	0
Pacific Flyway Total	2,100 ± 104%	800 ± 49%	700	500	4,400 ± 122%	1,200 ± 52%		
Alaska	1,100 ± 36%	2,100 ± 41%	400 ± 30%	600 ± 30%	2,000 ± 57%	2,700 ± 43%	2.6 ± 47%	3.3 ± 51%
U.S. Total	38,000 ± 27%	20,800 ± 24%	10,000	8,400	47,400 ± 24%	30,300 ± 31%		

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

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

Table 5. Preliminary harvest estimates for special September teal/duck seasons during the 2009 and 2010 hunting seasons.

State	Harvest										Number of	
	Green-winged Teal		Blue-winged/Cinnamon Teal		Wood Duck		Other Ducks		Total Duck Harvest		Wings Received	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
September Teal Season												
Delaware	1,212	1,403	186	117	0	0	0	0	1,398	1,520	15	13
Georgia	0	0	465	0	0	0	0	0	465	0	1	0
Maryland	1,173	482	2,200	723	0	0	0	0	3,373	1,204	23	5
North Carolina	0	262	0	0	0	0	0	0	0	262	0	2
South Carolina	232	0	6,716	9,225	0	237	0	0	6,947	9,462	30	40
Virginia	352	110	352	1,656	0	0	264	0	969	1,766	11	16
Subtotal	2,969	2,257	9,919	11,721	0	237	264	0	13,152	14,214	80	76
Alabama	0	268	9,890	2,682	0	0	0	0	9,890	2,950	18	11
Arkansas	0	465	9,956	3,724	0	0	0	0	9,956	4,189	24	9
Illinois	1,425	1,185	17,816	16,985	238	0	0	0	19,478	18,170	82	92
Indiana	853	171	4,097	3,585	1,024	0	0	0	5,974	3,756	35	22
Louisiana	1,965	574	179,337	217,371	0	0	0	0	181,302	217,944	369	380
Mississippi	0	0	539	8,167	0	0	0	0	539	8,167	2	33
Missouri	1,758	1,862	15,294	25,328	0	0	0	0	17,052	27,190	97	146
Ohio	639	2,447	3,673	7,691	0	0	319	0	4,631	10,138	29	58
Subtotal	6,641	6,972	240,602	285,532	1,262	0	319	0	248,824	292,504	656	751
Colorado	418	90	2,092	2,518	0	0	139	0	2,649	2,608	19	29
Kansas	2,375	1,812	15,165	16,829	0	0	0	0	17,540	18,642	96	144
Nebraska	1,890	2,565	11,513	12,112	0	0	0	0	13,403	14,677	78	103
New Mexico	283	212	755	565	0	0	0	0	1,039	778	44	22
Oklahoma	2,055	965	8,006	7,507	0	0	0	0	10,061	8,472	93	79
Texas	13,190	3,255	130,142	113,926	0	233	0	0	143,332	117,414	652	505
Subtotal	20,212	8,899	167,672	153,459	0	233	139	0	188,024	162,591	982	882
Total	29,822	18,129	418,193	450,711	1,262	469	723	0	449,999	469,309	1,718	1,709
September Duck Season												
Florida	205	0	7,490	15,282	1,231	4,457	103	0	9,028	19,740	88	155
Kentucky	323	0	0	665	11,948	1,994	0	0	12,271	2,658	38	24
Tennessee	811	313	4,055	5,313	11,624	16,250	0	0	16,490	21,875	61	70
Total	1,339	313	11,544	21,260	24,803	22,701	103	0	37,789	44,273	187	249
U.S. Total	31,161	18,441	429,737	471,971	26,065	23,170	826	0	487,789	513,582	1,905	1,958

Table 6. Preliminary estimates of the number of Canada geese harvested during the special September, regular, and special late seasons during the 2009 and 2010 hunting seasons.

State / Flyway	September		Regular		Late		Total	
	2009	2010	2009	2010	2009	2010	2009	2010
Connecticut	2,700	2,300	6,300	6,500	0	0	9,100	8,800
Delaware	1,400	1,100	23,400	33,200	---	---	24,900	34,300
Florida	0	0	2,500	2,100	---	---	2,500	2,100
Georgia	21,100	5,400	52,200	18,400	---	---	73,300	23,700
Maine	1,600	4,700	3,100	4,500	---	---	4,700	9,200
Maryland	6,500	3,600	156,500	197,200	---	---	163,000	200,900
Massachusetts	4,200	2,200	9,400	7,500	2,900	2,800	16,500	12,600
New Hampshire	4,500	500	6,900	5,400	---	---	11,400	5,800
New Jersey	12,700	15,300	32,500	28,900	2,100	8,500	47,300	52,700
New York	63,000	45,300	108,900	82,300	---	0	172,000	127,600
North Carolina	16,500	29,700	33,500	24,900	---	---	50,000	54,600
Pennsylvania	54,600	42,100	107,300	111,100	---	---	161,900	153,300
Rhode Island	900	1,000	1,800	2,700	200	500	2,800	4,200
South Carolina	23,000	11,100	9,700	8,200	---	---	32,700	19,300
Vermont	6,400	3,300	5,200	6,300	---	---	11,500	9,600
Virginia	16,800	15,600	46,900	55,600	---	0	63,700	71,100
West Virginia	900	3,200	6,100	3,200	---	---	7,000	6,500
Atlantic Flyway Total	236,900	186,500	612,300	598,000	5,200	11,800	854,300	796,200
Alabama	0	1,400	22,900	11,400	---	---	22,900	12,900
Arkansas	2,300	26,400	23,900	27,700	---	---	26,200	54,100
Illinois	13,500	14,800	143,300	116,900	0	---	156,900	131,700
Indiana	19,800	19,900	39,000	47,800	5,700	6,500	64,600	74,200
Iowa	0	300	62,000	65,500	---	---	62,000	65,800
Kentucky	6,100	8,200	26,700	23,100	---	---	32,800	31,300
Louisiana	0	0	0	4,500	---	---	0	4,500
Michigan	74,500	43,000	87,800	82,100	---	0	162,300	125,100
Minnesota	68,500	76,700	79,200	111,700	---	---	147,700	188,500
Mississippi	0	0	10,900	2,400	---	---	10,900	2,400
Missouri	0	0	66,900	47,700	---	---	66,900	47,700
Ohio	17,700	25,600	64,900	53,400	---	---	82,600	79,000
Tennessee	14,400	6,000	28,300	23,100	---	---	42,800	29,200
Wisconsin	22,200	32,400	75,100	59,700	---	---	97,300	92,200
Mississippi Flyway Total	239,000	254,800	731,200	677,200	5,700	6,500	975,900	938,400
Kansas	0	0	92,300	66,500	---	---	92,300	66,500
Nebraska	2,600	3,600	76,400	103,500	---	---	79,000	107,100
North Dakota ^a	18,700	0	67,600	87,400	---	---	101,600	89,000
Oklahoma	1,200	1,400	26,800	20,400	---	---	28,100	21,800
South Dakota ^b	36,300	17,700	62,400	53,500	---	---	98,700	77,800
Colorado	0	0	17,000	18,500	---	---	17,000	18,500
Oregon	5,300	2,600	49,200	36,400	---	---	54,500	39,100
Washington	2,600	600	60,600	39,500	2,300	1,300	65,500	41,400
Wyoming	0	0	4,100	3,900	---	---	4,100	3,900

^a The total harvest for North Dakota includes geese taken during the August conservation order: 15,300 in 2009 and 1,500 in 2010.

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

Table 7. Waterfowl harvest estimates in Canada during the 2009 and 2010 hunting seasons (estimates courtesy of the Canadian Wildlife Service).

Duck Species Composition	Newfoundland		Prince Edward Isl.		Nova Scotia		New Brunswick		Quebec		Ontario		Manitoba	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
Mallard	80	1,122	651	2,213	4,079	4,129	3,377	4,665	65,216	56,523	106,537	105,400	61,460	48,539
Black Duck	13,583	6,430	5,049	7,734	18,788	13,105	9,719	12,075	29,150	31,126	14,173	14,058	155	91
Gadwall	0	0	106	407	315	172	112	0	1,495	1,250	2,921	4,342	2,649	3,901
Wigeon	0	350	212	285	167	670	924	926	861	1,728	5,503	6,566	2,311	3,438
Green-winged Teal	2,734	3,334	1,412	1,802	3,789	6,913	2,111	5,388	28,018	23,110	18,258	18,001	3,573	3,881
Blue-winged/Cinnamon Teal	0	0	531	1,391	207	533	1,172	3,868	2,849	3,490	5,552	5,176	5,965	5,910
Northern Shoveler	0	0	0	0	136	138	150	65	589	1,330	817	1,283	4,180	2,465
Northern Pintail	0	296	190	955	104	832	504	609	4,039	6,209	4,684	6,410	4,582	4,894
Wood Duck	0	86	0	0	1,386	1,131	4,258	3,705	18,327	12,402	36,881	42,952	269	521
Redhead	0	0	0	0	0	0	0	0	295	208	3,459	9,309	12,547	15,710
Canvasback	0	0	0	0	0	0	0	0	0	119	958	1,973	7,897	2,117
Greater Scaup	0	240	0	0	223	0	155	2,596	912	926	3,244	2,803	540	46
Lesser Scaup	0	606	48	0	247	372	343	740	2,710	2,783	7,063	11,317	8,238	10,232
Ring-necked Duck	7,194	3,412	1,040	0	832	689	1,782	1,749	3,725	4,597	14,942	13,020	3,772	8,920
Goldeneyes	1,417	612	179	0	1,301	467	3,030	910	3,352	2,217	9,499	8,869	1,839	1,711
Bufflehead	0	0	0	0	0	296	40	161	746	2,042	8,057	6,898	3,391	2,686
Ruddy Duck	0	0	0	0	0	0	0	0	0	0	149	958	0	0
Long-tailed Duck	0	899	0	0	889	1,049	0	89	305	619	513	0	0	0
Eiders	10,495	4,524	0	0	4,808	2,983	687	1,158	1,856	667	0	0	0	0
Scoters	0	2,378	0	0	1,509	5,117	81	884	1,285	3,642	522	310	0	0
Hooded Merganser	0	426	327	0	338	853	37	161	2,335	4,855	5,573	2,445	1,003	188
Other Mergansers	12,156	7,879	370	0	1,353	2,430	0	509	1,671	2,333	3,643	990	0	0
Other Ducks	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Duck Harvest	47,659	32,594	10,115	14,787	40,471	41,879	28,482	40,258	169,736	162,176	252,948	263,080	124,371	115,250
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Goose Species Composition														
Canada Goose	4,025	4,245	11,926	15,768	9,056	12,765	9,638	10,609	126,678	121,553	190,433	169,495	99,955	90,062
Snow Goose	0	0	0	0	257	0	0	0	50,625	52,881	868	635	3,236	2,673
Blue Goose	0	0	0	0	0	0	0	0	640	658	104	92	5,887	9,344
Ross's Goose	0	0	0	0	0	0	0	0	0	0	0	0	2,399	2,106
White-fronted Goose	0	0	0	0	0	0	0	0	0	120	0	0	0	0
Brant	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Goose Harvest	4,025	4,245	11,926	15,768	9,313	12,765	9,638	10,609	177,943	175,212	191,405	170,222	111,477	104,185
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Migratory Bird Permits Sold	15,683	15,737	1,685	1,754	5,552	5,696	5,560	5,536	28,509	29,290	55,587	54,857	12,644	12,635

Table 7 (continued). Waterfowl harvest estimates in Canada during the 2009 and 2010 hunting seasons (estimates courtesy of the Canadian Wildlife Service).

Duck Species Composition	Saskatchewan		Alberta		British Columbia		Nunavut		Northwest Terr.		Yukon Territory		Canada Total	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
Mallard	135,546	125,686	62,778	68,014	32,736	28,301	0	0	0	0	67	0	472,527	444,592
Black Duck	0		0		0	52	0	0	0	0	0	0	90,617	84,671
Gadwall	17,720	15,653	9,539	12,418	1,082	568	0	0	0	0	0	0	35,939	38,711
Wigeon	3,873	5,251	7,686	3,855	6,153	8,561	0	0	0	0	22	0	27,712	31,630
Green-winged Teal	1,147	6,093	4,162	4,449	2,158	2,482	0	0	0	0	0	0	67,362	75,453
Blue-winged/Cinnamon Teal	2,624	12,272	2,931	5,936	104	0	0	0	0	0	0	0	21,935	38,576
Northern Shoveler	6,045	14,176	3,128	7,195	444	660	0	0	0	0	0	0	15,489	27,312
Northern Pintail	17,226	13,625	6,138	6,708	2,837	2,062	0	0	0	0	22	0	40,326	42,600
Wood Duck	333	0	0	0	0	0	0	0	0	0	0	0	61,454	60,797
Redhead	760	4,353	905	715	0	0	0	0	0	0	0	0	17,966	30,295
Canvasback	456	491	797	1,103	0	58	0	0	0	0	0	0	10,108	5,861
Greater Scaup	0	0	0	0	0	0	0	0	0	0	22	0	5,096	6,611
Lesser Scaup	826	4,059	7,700	4,035	202	528	0	0	0	0	22	0	27,399	34,672
Ring-necked Duck	0	1,865	2,177	414	198	786	0	0	0	0	0	0	35,662	35,452
Goldeneyes	0	0	368	538	593	175	0	0	0	0	0	0	21,578	15,499
Bufflehead	413	582	2,138	5,960	30	859	0	0	0	0	0	0	14,815	19,484
Ruddy Duck	0	0	0	183	0	0	0	0	0	0	0	0	149	1,141
Long-tailed Duck	0	0	0	0	0	0	0	0	0	0	0	0	1,707	2,656
Eiders	0	0	0	0	0	0	0	0	0	0	0	0	17,846	9,332
Scoters	0	0	226	0	19	0	0	0	0	0	0	0	3,642	12,331
Hooded Merganser	270	0	187	47	0	76	0	0	0	0	0	0	10,070	9,051
Other Mergansers	0	0	0	0	0	0	0	0	0	0	0	0	19,193	14,141
Other Ducks	0	0	0	0	0	0	0	0	0	0	0	0		
Total Duck Harvest	187,239	204,106	110,860	121,570	46,556	45,168	0	0	0	0	155	0	1,018,592	1,040,868
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Goose Species Composition														
Canada Goose	140,922	149,533	102,591	104,955	15,873	10,756	0	0	0	0	116	0	711,213	689,741
Snow Goose	46,561	60,798	10,762	14,768	1,316	852	0	0	0	0	0	0	113,625	132,607
Blue Goose	34,192	18,200	851	581	0	0	0	0	0	0	0	0	41,674	28,875
Ross's Goose	20,655	26,280	982	6,303	0	0	0	0	0	0	0	0	24,036	34,689
White-fronted Goose	30,882	33,558	23,173	22,113	158	191	0	0	0	0	0	0	54,213	55,982
Brant	0		0		0		0	0	0	0	0	0	0	0
Total Goose Harvest	273,212	288,369	138,359	148,720	17,347	11,799	0	0	0	0	116	0	944,761	941,894
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Migratory Bird Permits Sold	17,790	17,830	19,240	19,775	6,632	6,387	33	47	217	245	189	195	169,539	169,984

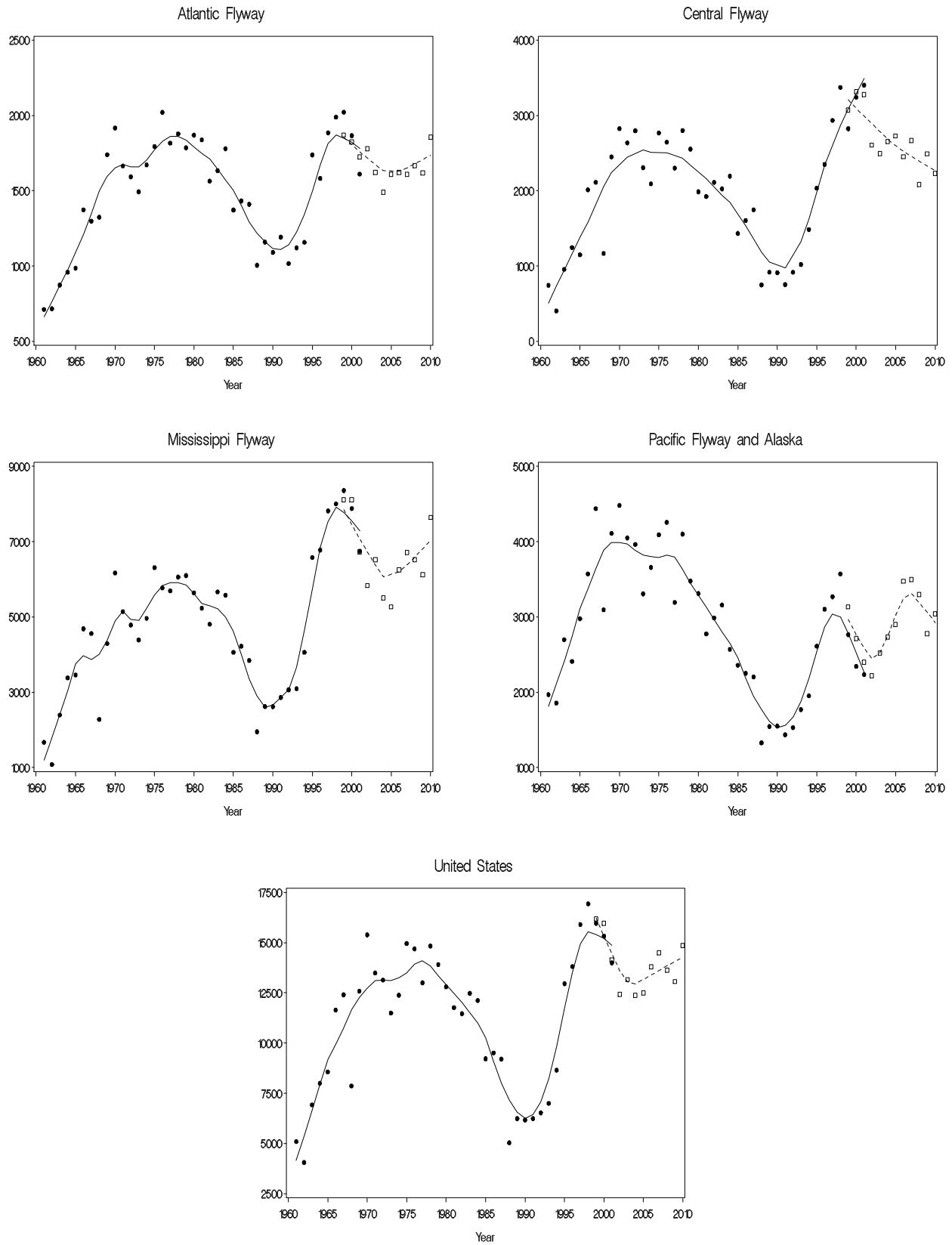


Figure 1. Number of ducks harvested (in thousands) by hunters in the the United States, 1961-2010. (Federal Duck Stamp Survey - circles and solid line; HIP survey squares and dashed line).

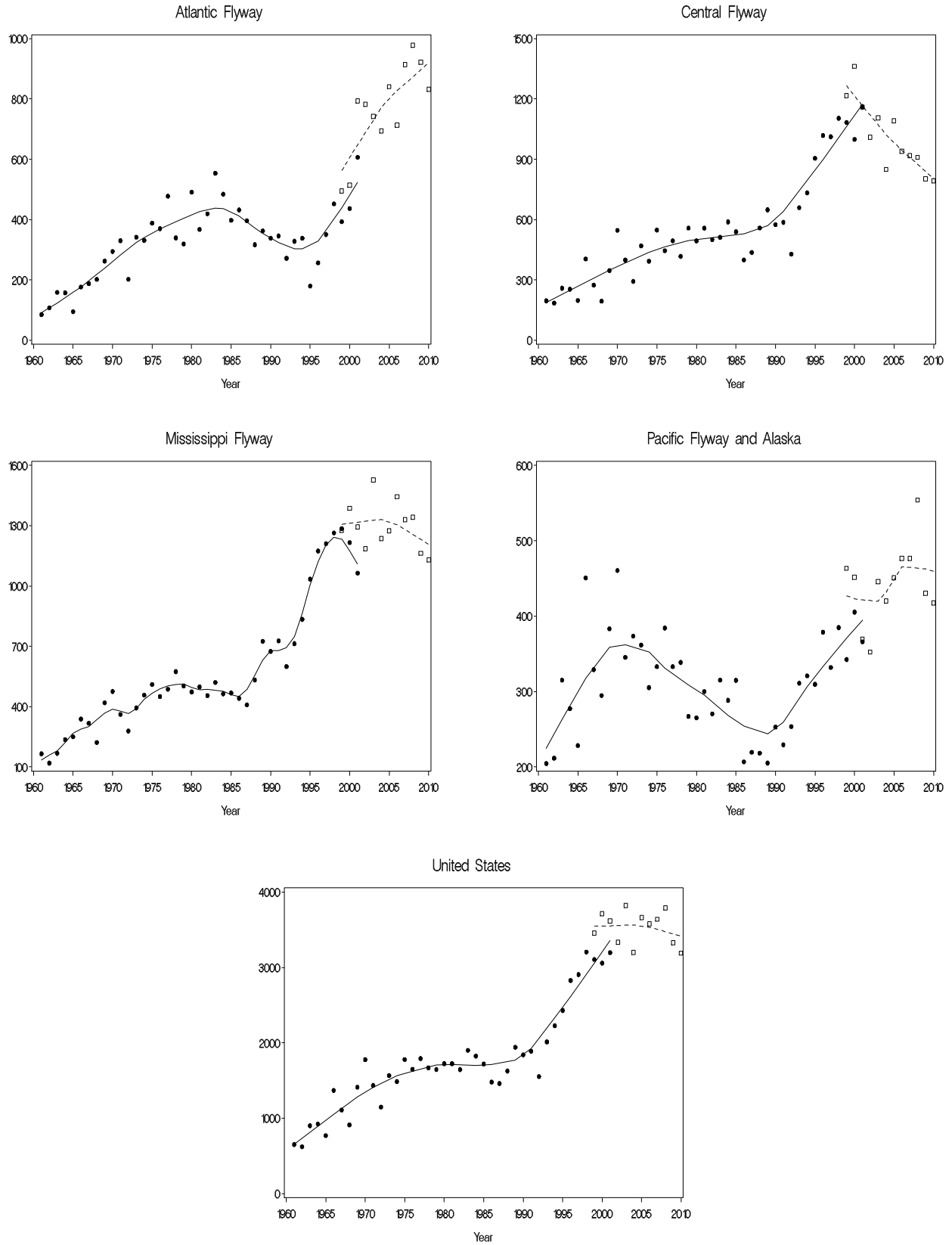


Figure 2. Number of geese harvested (in thousands) by hunters in the the United States, 1961-2010. (Federal Duck Stamp Survey - circles and solid line; HIP survey squares and dashed line).

Table 8. Preliminary weighted age ratios of mallards in state harvests during the 2006-2010 hunting seasons as determined from Waterfowl Parts Collection Survey.

State and Flyway	Immatures per adult ^a				
	2006	2007	2008	2009	2010
Connecticut	1.2	1.8	1.0	1.4	1.5
Delaware	1.4	1.9	1.5	1.6	0.9
Florida	4.0	3.0	---	---	---
Georgia	1.8	---	1.0	1.2	1.2
Maine	1.7	1.9	2.0	2.8	2.7
Maryland	1.3	1.7	1.3	1.4	1.1
Massachusetts	1.4	1.2	1.6	1.1	1.1
New Hampshire	1.5	1.9	1.0	3.1	1.1
New Jersey	1.0	1.2	0.9	0.8	1.0
New York	1.8	1.3	1.4	1.6	1.7
North Carolina	1.7	1.2	1.4	1.4	1.4
Pennsylvania	1.0	1.2	0.9	1.0	1.1
Rhode Island	0.7	0.4	0.8	0.8	0.7
South Carolina	2.3	1.9	1.5	1.7	2.0
Vermont	1.8	2.6	3.9	2.2	1.9
Virginia	0.7	0.9	0.9	1.2	1.0
West Virginia	0.6	0.7	0.6	0.7	1.2
Atlantic Flyway Total ^b	1.35	1.31	1.22	1.37	1.30
Alabama	1.1	1.1	1.3	0.4	1.2
Arkansas	0.8	0.7	0.7	0.9	1.1
Illinois	2.0	1.4	1.2	1.7	1.9
Indiana	1.5	1.2	1.4	1.5	1.1
Iowa	1.8	1.9	1.8	2.3	3.4
Kentucky	1.2	1.1	0.6	1.5	1.2
Louisiana	1.2	1.3	0.8	1.1	1.4
Michigan	2.2	1.7	1.9	2.0	1.8
Minnesota	3.0	2.1	2.8	3.0	2.9
Mississippi	0.9	1.1	0.7	0.7	1.3
Missouri	1.4	1.6	0.9	1.3	2.3
Ohio	1.8	1.4	1.1	1.4	1.7
Tennessee	1.5	1.0	0.9	1.0	1.6
Wisconsin	2.8	1.7	2.3	2.6	2.9
Mississippi Flyway Total ^b	1.44	1.20	1.06	1.24	1.59

Table 8 (continued). Preliminary weighted age ratios of mallards in state harvests during the 2006-2010 hunting seasons as determined from Waterfowl Parts Collection Survey.

State and Flyway	Immatures per adult ^a				
	2006	2007	2008	2009	2010
Colorado	0.7	1.1	0.5	0.7	0.9
Kansas	0.8	1.0	0.6	0.6	1.3
Montana	1.0	1.2	0.8	0.8	1.0
Nebraska	1.0	1.0	0.7	0.8	1.3
New Mexico	0.8	1.7	1.2	1.3	1.5
North Dakota	2.4	2.1	1.3	2.3	2.4
Oklahoma	0.6	0.6	0.3	0.4	0.6
South Dakota	1.6	1.8	1.2	1.7	2.5
Texas	0.7	0.7	0.4	0.7	0.9
Wyoming	0.9	0.8	0.5	0.9	1.3
Central Flyway Total ^b	1.05	1.07	0.70	1.01	1.29
Arizona	1.6	1.4	1.1	1.1	1.4
California	2.5	1.3	1.5	1.9	2.2
Colorado	1.8	1.3	0.7	1.5	1.1
Idaho	1.5	1.2	1.1	1.0	1.3
Montana	1.0	0.9	0.9	1.0	1.2
Nevada	2.1	0.8	1.7	1.4	3.2
New Mexico	0.1	0.9	0.8	0.9	0.7
Oregon	2.1	1.5	1.4	1.6	1.5
Utah	1.5	1.1	1.1	1.7	1.3
Washington	1.5	1.1	0.9	1.1	1.4
Wyoming	2.4	3.3	2.5	2.5	1.6
Pacific Flyway Total ^b	1.82	1.23	1.19	1.42	1.63
Alaska	2.2	2.7	2.5	3.4	3.2
U.S. Total ^b	1.45	1.20	1.04	1.25	1.53

^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 2006-2010 hunting seasons, by species and flyway.

Species and Flyway	Immatures per adult ^{a, b}				
	2006	2007	2008	2009	2010
Mallard					
Atlantic	1.35	1.31	1.22	1.37	1.30
Mississippi	1.44	1.20	1.06	1.24	1.59
Central	1.05	1.07	0.70	1.01	1.29
Pacific	1.82	1.23	1.19	1.42	1.63
U.S. Total	1.45	1.20	1.04	1.25	1.53
Black duck					
Atlantic	1.39	1.31	0.96	1.15	1.43
Mississippi	1.69	1.02	1.03	1.65	2.24
U.S. Total	1.47	1.22	0.98	1.27	1.58
Mottled duck					
Atlantic	1.67	1.17	0.81	1.07	0.69
Mississippi	1.82	1.44	0.76	1.19	1.40
Central	1.91	1.12	0.49	0.85	1.93
U.S. Total	1.80	1.34	0.73	1.11	1.29
Gadwall					
Atlantic	1.35	1.35	0.79	1.00	1.82
Mississippi	1.39	1.37	0.74	1.32	1.72
Central	0.94	1.29	0.70	1.16	1.68
Pacific	1.13	0.79	0.79	1.03	1.34
U.S. Total	1.19	1.25	0.74	1.22	1.66
American wigeon					
Atlantic	1.95	1.22	0.67	0.66	1.79
Mississippi	2.62	1.65	0.91	1.37	1.69
Central	0.83	0.82	0.94	0.71	1.11
Pacific	1.38	1.31	1.09	1.29	1.34
U.S. Total	1.40	1.26	1.02	1.10	1.41
Green-winged teal					
Atlantic	2.00	1.90	1.61	1.62	1.95
Mississippi	2.30	1.98	1.38	1.23	1.61
Central	1.97	1.83	1.68	1.59	1.68
Pacific	1.45	1.22	0.92	1.05	0.87
U.S. Total	1.89	1.66	1.26	1.25	1.39
Blue-winged/Cinnamon teal					
Atlantic	1.39	1.24	0.86	0.96	0.97
Mississippi	1.75	1.87	0.92	1.24	1.71
Central	2.10	2.85	1.59	1.42	1.57
Pacific	1.07	1.73	0.83	0.63	0.94
U.S. Total	1.74	2.03	1.03	1.22	1.52

Table 9 (continued). Preliminary weighted age ratios of ducks harvested during the 2006-2010 hunting seasons, by species and flyway.

Species and Flyway	Immatures per adult ^{a, b}				
	2006	2007	2008	2009	2010
Northern shoveler					
Atlantic	1.55	1.38	0.73	0.98	1.98
Mississippi	1.80	1.66	0.80	1.30	1.57
Central	2.02	2.04	1.35	2.12	2.28
Pacific	1.40	1.50	0.70	0.90	1.51
U.S. Total	1.62	1.64	0.80	1.27	1.66
Northern pintail					
Atlantic	1.66	1.70	0.95	0.66	1.77
Mississippi	1.28	1.43	0.96	1.30	2.03
Central	0.94	0.82	1.06	1.09	1.31
Pacific	0.98	1.03	0.54	0.98	1.24
U.S. Total	1.09	1.13	0.75	1.07	1.46
Wood duck					
Atlantic	0.99	0.97	1.21	1.31	1.20
Mississippi	1.61	1.28	1.77	2.05	1.78
Central	1.08	1.64	1.63	1.01	1.42
Pacific	2.06	1.12	1.23	2.08	1.43
U.S. Total	1.37	1.18	1.53	1.71	1.54
Redhead					
Atlantic	1.47	1.47	0.13	0.38	1.93
Mississippi	2.32	2.45	0.68	1.62	6.54
Central	2.13	2.21	0.56	1.56	3.47
Pacific	1.50	1.18	0.52	0.70	1.27
U.S. Total	2.07	2.09	0.56	1.32	3.69
Canvasback					
Atlantic	---	1.42	---	0.52	0.58
Mississippi	2.57	1.15	---	0.74	1.83
Central	1.71	1.50	0.75	1.34	2.48
Pacific	1.30	0.99	---	1.00	1.37
U.S. Total	1.91	1.14	0.84	0.90	1.51
Greater scaup					
Atlantic	1.81	0.78	0.37	0.63	0.57
Mississippi	1.80	1.26	0.79	1.24	1.15
Central	---	---	---	---	---
Pacific	0.56	1.23	1.22	1.19	0.64
U.S. Total	1.33	1.19	0.80	1.06	0.80

Table 9 (continued). Preliminary weighted age ratios of ducks harvested during the 2006-2010 hunting seasons, by species and flyway.

Species and Flyway	Immatures per adult ^{a, b}				
	2006	2007	2008	2009	2010
Lesser scaup					
Atlantic	0.85	0.77	0.46	0.52	0.80
Mississippi	1.79	1.05	0.63	0.53	1.54
Central	1.13	1.08	0.67	0.82	1.23
Pacific	1.77	1.36	2.57	1.37	1.07
U.S. Total	1.39	1.05	0.75	0.66	1.24
Ring-necked duck					
Atlantic	1.93	1.01	0.92	0.93	1.45
Mississippi	2.30	1.81	1.28	1.96	2.37
Central	0.95	0.96	0.86	1.00	1.09
Pacific	1.59	1.49	1.21	1.47	1.75
U.S. Total	1.86	1.38	1.10	1.37	1.85
Common goldeneye					
Atlantic	0.79	0.55	0.49	0.62	0.80
Mississippi	1.16	1.11	0.75	0.96	0.94
Central	1.15	0.51	0.56	0.47	0.84
Pacific	0.98	0.78	1.19	0.88	0.83
U.S. Total	1.02	0.81	0.81	0.84	0.88
Bufflehead					
Atlantic	0.97	0.81	0.67	0.47	0.62
Mississippi	1.07	1.26	0.85	1.17	0.94
Central	0.70	0.84	0.54	0.83	0.45
Pacific	0.78	1.06	0.71	0.87	1.02
U.S. Total	0.95	1.00	0.73	0.79	0.77
Ruddy duck					
Atlantic	3.62	2.15	0.81	1.90	0.63
Mississippi	4.40	3.61	0.89	1.22	0.89
Central	4.31	2.94	0.77	1.81	2.85
Pacific	1.26	1.49	0.42	1.21	1.92
U.S. Total	3.18	2.44	0.76	1.47	1.16
Hooded merganser					
Atlantic	0.78	0.88	0.61	0.99	0.77
Mississippi	0.93	0.87	1.34	1.18	1.09
Central	1.42	1.40	0.85	0.74	0.75
Pacific	1.00	0.87	2.22	1.09	3.83
U.S. Total	0.88	0.91	0.94	1.05	1.00

Table 9 (continued). Preliminary weighted age ratios of ducks harvested during the 2006-2010 hunting seasons, by species and flyway.

Species and Flyway	Immatures per adult ^{a, b}				
	2006	2007	2008	2009	2010
Common merganser					
Atlantic	1.04	0.74	0.52	1.04	1.51
Mississippi	---	---	0.85	---	---
Central	---	---	---	---	---
Pacific	0.93	1.04	0.68	0.56	1.03
U.S. Total	1.38	0.78	0.71	0.74	1.25
Red-breasted merganser					
Atlantic	0.96	1.11	1.30	0.74	1.27
Mississippi	---	---	---	0.73	---
U.S. Total	1.11	1.21	1.22	0.76	1.33
Long-tailed duck					
Atlantic	0.76	0.86	0.35	0.37	0.77
Mississippi	1.18	---	0.27	0.57	1.98
U.S. Total	0.87	0.79	0.35	0.43	1.04
Common eider					
Atlantic	0.06	0.19	0.27	0.23	0.30
U.S. Total	0.06	0.19	0.27	0.23	0.30
Black scoter					
Atlantic	1.37	0.44	0.26	0.41	0.66
U.S. Total	1.54	0.75	0.45	0.41	0.68
White-winged scoter					
Atlantic	2.21	0.82	0.74	0.15	0.76
Pacific	---	---	---	0.29	---
U.S. Total	2.95	1.56	0.64	0.43	1.18
Surf scoter					
Atlantic	0.36	0.43	0.31	0.21	0.60
Pacific	0.41	1.63	0.27	0.37	---
U.S. Total	0.38	0.58	0.36	0.29	1.08

^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 2006-2010 hunting seasons as determined from Waterfowl Parts Collection Survey.

State and Flyway	Males per female ^a				
	2006	2007	2008	2009	2010
Connecticut	2.2	2.0	2.4	2.0	2.2
Delaware	1.6	1.5	1.6	1.5	2.0
Florida	3.0	---	---	---	---
Georgia	2.2	---	2.6	2.4	1.3
Maine	1.7	1.7	1.8	1.4	1.2
Maryland	1.9	1.7	1.9	1.9	2.4
Massachusetts	1.7	1.9	1.9	1.5	1.6
New Hampshire	1.3	1.4	1.1	2.0	1.6
New Jersey	1.7	1.7	1.6	2.2	1.7
New York	1.9	1.7	1.9	1.7	1.8
North Carolina	2.2	2.5	2.1	2.0	1.6
Pennsylvania	2.1	2.0	2.1	2.1	2.2
Rhode Island	2.7	2.1	2.8	1.6	2.3
South Carolina	2.0	1.9	2.8	1.7	2.0
Vermont	1.7	1.8	1.8	1.0	1.4
Virginia	2.2	1.9	2.2	2.1	2.1
West Virginia	2.0	2.5	1.9	2.2	1.8
Atlantic Flyway Total ^b	1.96	1.87	2.00	1.86	1.84
Alabama	2.0	1.6	1.6	2.5	1.7
Arkansas	3.2	3.9	3.3	3.0	2.3
Illinois	2.1	2.3	2.1	2.2	2.1
Indiana	2.6	2.5	2.7	3.1	2.3
Iowa	2.3	2.4	1.9	1.7	2.5
Kentucky	2.8	3.0	2.2	2.6	2.5
Louisiana	1.6	2.4	2.2	2.8	1.9
Michigan	2.1	2.3	2.1	1.7	2.0
Minnesota	2.2	2.2	1.8	2.0	1.9
Mississippi	4.2	2.8	2.9	3.2	2.1
Missouri	2.8	2.7	3.4	3.3	3.1
Ohio	2.6	2.6	3.0	2.6	3.0
Tennessee	2.2	2.3	3.0	2.4	1.6
Wisconsin	2.0	2.1	2.2	2.0	2.2
Mississippi Flyway Total ^b	2.51	2.65	2.58	2.58	2.20

Table 10 (continued). Preliminary weighted sex ratios of mallards in state harvests during the 2006-2010 hunting seasons as determined from Waterfowl Parts Collection Survey.

State and Flyway	Males per female ^a				
	2006	2007	2008	2009	2010
Colorado	3.4	3.1	3.4	4.2	2.6
Kansas	3.8	4.8	7.1	5.8	4.0
Montana	4.7	2.9	3.8	4.1	3.7
Nebraska	4.0	4.1	3.8	4.9	3.4
New Mexico	3.5	2.2	2.9	3.3	4.3
North Dakota	3.2	3.4	3.8	2.5	2.2
Oklahoma	3.6	3.6	4.1	3.6	3.8
South Dakota	4.1	3.5	5.1	4.7	3.4
Texas	2.8	3.3	2.7	3.0	2.3
Wyoming	7.1	6.6	6.6	5.2	4.0
Central Flyway Total ^b	3.52	3.62	4.13	3.67	3.04
Arizona	1.9	1.9	1.7	1.4	1.6
California	2.1	2.3	2.3	2.3	2.2
Colorado	3.6	2.3	2.4	2.2	2.9
Idaho	2.7	3.3	3.2	2.5	3.1
Montana	3.5	3.5	3.1	2.4	3.4
Nevada	2.8	1.8	1.7	1.3	2.0
New Mexico	2.3	4.1	4.1	2.2	3.1
Oregon	1.9	1.7	2.1	1.9	1.8
Utah	2.2	2.4	1.9	2.6	2.9
Washington	2.1	2.6	2.8	2.3	2.2
Wyoming	2.9	1.4	1.7	1.7	2.4
Pacific Flyway Total ^b	2.19	2.33	2.44	2.23	2.30
Alaska	1.5	1.5	1.6	1.3	1.4
U.S. Total ^b	2.47	2.60	2.63	2.54	2.27

^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 2006-2010 hunting seasons, by species and flyway.

Species and Flyway	Males per female ^a				
	2006	2007	2008	2009	2010
Mallard					
Atlantic	1.96	1.87	2.00	1.86	1.84
Mississippi	2.51	2.65	2.58	2.58	2.20
Central	3.52	3.62	4.13	3.67	3.04
Pacific	2.19	2.33	2.44	2.23	2.30
U.S. Total	2.47	2.60	2.63	2.54	2.27
Black duck					
Atlantic	1.17	1.08	1.08	1.00	1.04
Mississippi	0.69	0.80	1.21	0.87	0.67
U.S. Total	1.01	0.99	1.11	0.96	0.94
Mottled duck					
Atlantic	0.92	0.99	1.13	0.98	0.82
Mississippi	0.94	0.62	0.77	1.05	1.18
Central	1.13	0.94	1.50	1.27	0.96
U.S. Total	0.96	0.71	0.89	1.06	1.07
Gadwall					
Atlantic	1.52	1.81	1.96	1.83	1.77
Mississippi	1.79	1.93	1.84	1.79	1.73
Central	1.78	1.76	1.83	1.66	1.69
Pacific	1.54	1.64	1.91	1.76	1.69
U.S. Total	1.74	1.84	1.85	1.75	1.72
American wigeon					
Atlantic	1.56	2.12	1.95	2.15	1.39
Mississippi	1.45	1.36	1.32	1.40	1.85
Central	1.92	1.80	1.69	2.02	1.85
Pacific	1.48	1.48	1.74	1.64	1.62
U.S. Total	1.57	1.52	1.64	1.70	1.66
Green-winged teal					
Atlantic	1.26	1.12	1.45	1.31	1.14
Mississippi	1.88	1.95	1.92	1.71	2.01
Central	1.82	2.07	1.65	1.73	1.82
Pacific	1.59	1.53	1.74	1.81	1.83
U.S. Total	1.69	1.73	1.76	1.70	1.84
Blue-winged/Cinnamon teal					
Atlantic	1.31	1.28	1.51	1.48	1.55
Mississippi	1.33	1.39	1.43	1.79	1.51
Central	1.29	1.12	1.19	1.46	1.58
Pacific	1.27	1.29	1.71	1.19	1.72
U.S. Total	1.31	1.29	1.39	1.64	1.54

Table 11 (continued). Preliminary weighted sex ratios of ducks harvested during the 2006-2010 hunting seasons, by species and flyway.

Species and Flyway	Males per female ^a				
	2006	2007	2008	2009	2010
Northern shoveler					
Atlantic	1.13	1.47	1.27	1.26	1.32
Mississippi	1.78	1.82	1.88	1.83	1.71
Central	1.39	1.71	1.54	1.42	1.35
Pacific	1.50	1.44	1.45	1.89	1.70
U.S. Total	1.56	1.61	1.63	1.72	1.63
Northern pintail					
Atlantic	1.29	2.10	2.07	1.25	2.43
Mississippi	2.52	1.98	2.32	3.04	2.11
Central	2.34	2.41	2.49	2.34	2.35
Pacific	2.79	2.36	2.76	2.72	2.69
U.S. Total	2.48	2.20	2.51	2.59	2.40
Wood duck					
Atlantic	2.05	1.97	2.06	2.15	2.17
Mississippi	1.76	1.77	1.68	1.83	1.86
Central	1.50	2.11	1.90	3.15	2.05
Pacific	1.51	1.72	1.86	1.61	1.77
U.S. Total	1.81	1.85	1.82	1.96	1.95
Redhead					
Atlantic	1.23	1.96	2.22	1.60	1.09
Mississippi	1.50	1.08	1.10	1.24	1.14
Central	1.26	1.55	1.85	1.11	1.38
Pacific	1.77	1.81	1.45	1.26	1.16
U.S. Total	1.42	1.39	1.49	1.20	1.22
Canvasback					
Atlantic	---	0.74	---	1.59	1.97
Mississippi	1.89	2.05	---	1.09	1.72
Central	1.63	1.80	2.60	1.10	1.16
Pacific	1.02	1.17	---	1.50	1.03
U.S. Total	1.52	1.54	2.28	1.24	1.49
Greater scaup					
Atlantic	1.13	1.79	1.95	1.38	1.38
Mississippi	1.06	0.96	1.23	1.02	0.73
Central	---	---	---	---	---
Pacific	1.22	1.90	2.26	2.06	1.61
U.S. Total	1.10	1.51	1.58	1.38	1.16

Table 11 (continued). Preliminary weighted sex ratios of ducks harvested during the 2006-2010 hunting seasons, by species and flyway.

Species and Flyway	Males per female ^a				
	2006	2007	2008	2009	2010
Lesser scaup					
Atlantic	2.14	2.53	1.81	2.57	2.32
Mississippi	1.53	1.93	2.18	2.08	1.37
Central	1.45	1.53	1.82	1.93	1.47
Pacific	1.83	1.55	1.53	1.80	1.06
U.S. Total	1.65	1.85	1.95	2.08	1.52
Ring-necked duck					
Atlantic	1.62	1.89	1.54	1.65	1.18
Mississippi	1.71	1.94	2.18	1.84	2.21
Central	2.27	2.79	2.47	2.36	1.94
Pacific	1.61	1.83	1.53	1.48	1.46
U.S. Total	1.74	2.02	1.94	1.82	1.82
Common goldeneye					
Atlantic	1.69	1.38	1.28	1.96	1.35
Mississippi	1.61	1.32	1.64	2.01	1.75
Central	2.31	1.73	1.36	2.67	1.09
Pacific	1.37	1.29	1.42	1.77	1.33
U.S. Total	1.53	1.36	1.46	1.91	1.44
Bufflehead					
Atlantic	1.66	1.65	1.96	2.38	1.74
Mississippi	2.17	1.79	1.39	1.45	1.55
Central	1.88	1.42	1.95	1.91	1.47
Pacific	1.84	1.63	1.10	1.81	1.04
U.S. Total	1.90	1.66	1.53	1.82	1.52
Hooded merganser					
Atlantic	1.59	2.97	2.07	2.30	3.04
Mississippi	3.04	2.86	1.83	4.77	2.82
Central	---	---	4.04	2.14	5.40
Pacific	---	0.87	---	1.37	---
U.S. Total	2.07	2.55	2.12	2.88	3.00
Common merganser					
Atlantic	0.63	1.13	1.05	0.87	0.73
Mississippi	---	---	0.26	---	---
Central	---	---	---	---	---
Pacific	1.06	0.92	0.82	1.19	0.88
U.S. Total	0.83	1.06	0.75	0.88	0.70

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

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

Table 12. Preliminary weighted age ratios of geese harvested during the 2006-2010 hunting seasons, by species and flyway.

Species and Flyway	Immatures per adult ^{a, b}				
	2006	2007	2008	2009	2010
Canada goose					
Atlantic	0.53	0.40	0.59	0.37	0.63
Mississippi	0.54	0.50	0.51	0.47	0.55
Central	0.47	0.40	0.51	0.57	0.60
Pacific	0.45	0.44	0.38	0.50	0.45
U.S. Total	0.51	0.44	0.52	0.46	0.57
Snow goose					
Atlantic	0.53	0.56	1.46	0.26	0.44
Mississippi	0.75	0.34	0.29	0.20	0.30
Central	0.49	0.20	0.54	0.14	0.42
Pacific	0.70	0.64	0.17	0.67	0.59
U.S. Total	0.60	0.33	0.46	0.25	0.44
Blue goose					
Mississippi	0.62	0.35	0.23	0.50	0.54
Central	0.53	0.43	0.64	0.22	0.59
U.S. Total	0.58	0.39	0.41	0.35	0.57
Ross' goose					
Mississippi	---	---	2.07	---	---
Central	1.37	0.91	1.57	0.70	0.93
Pacific	0.90	0.22	0.39	0.10	0.19
U.S. Total	1.79	0.64	1.26	0.54	0.60
Greater white-fronted goose					
Mississippi	0.91	0.31	0.35	0.49	0.46
Central	1.16	0.70	0.50	0.61	0.70
Pacific	0.86	0.68	0.72	1.42	0.94
U.S. Total	0.97	0.48	0.50	0.72	0.66
Brant					
Atlantic	0.27	0.67	0.68	0.22	0.52
Pacific	0.39	1.01	0.50	1.35	0.51
U.S. Total	0.27	0.68	0.70	0.26	0.44

^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.

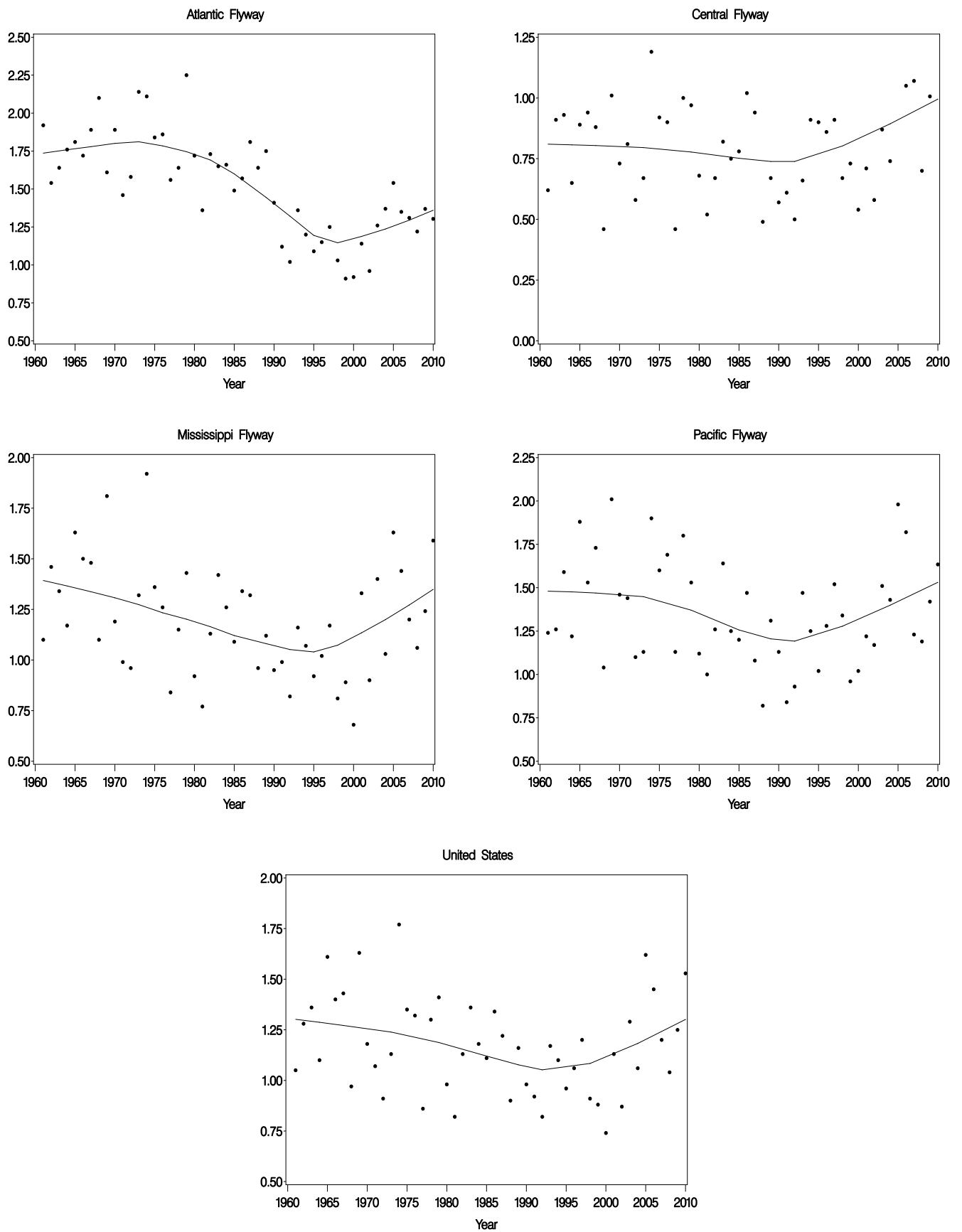


Figure 3. Age ratios of mallards harvested in the United States, 1961-2010.

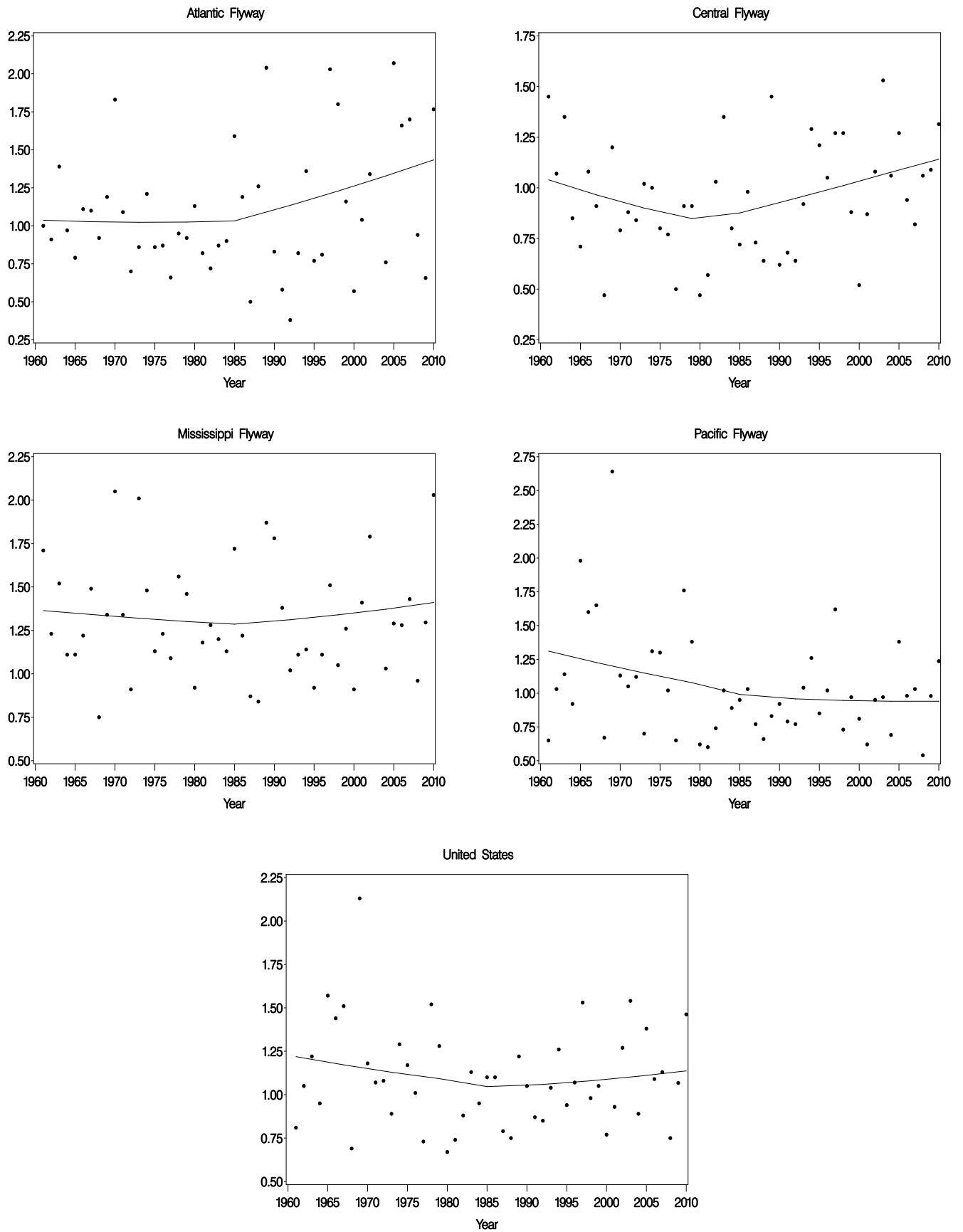


Figure 4. Age ratios of northern pintails harvested in the United States, 1961-2010.

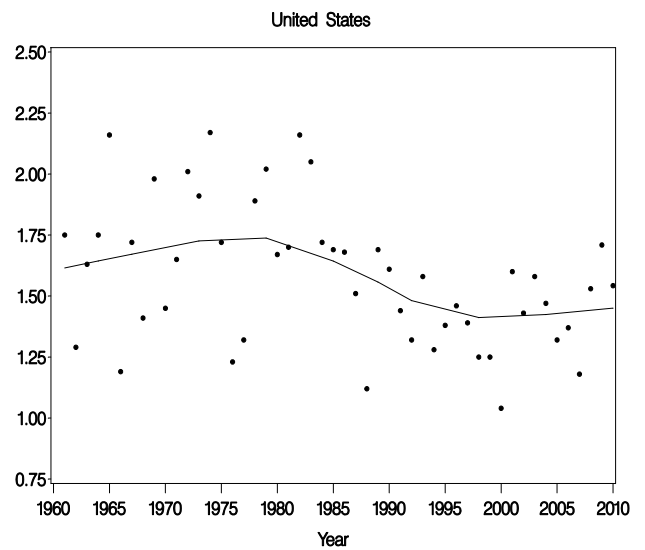
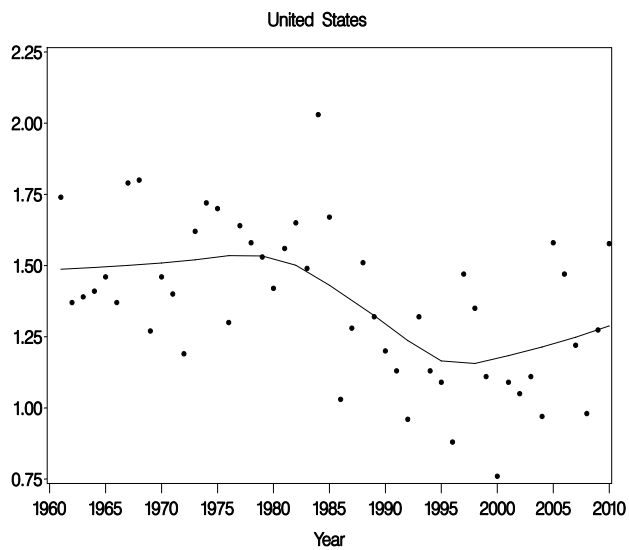
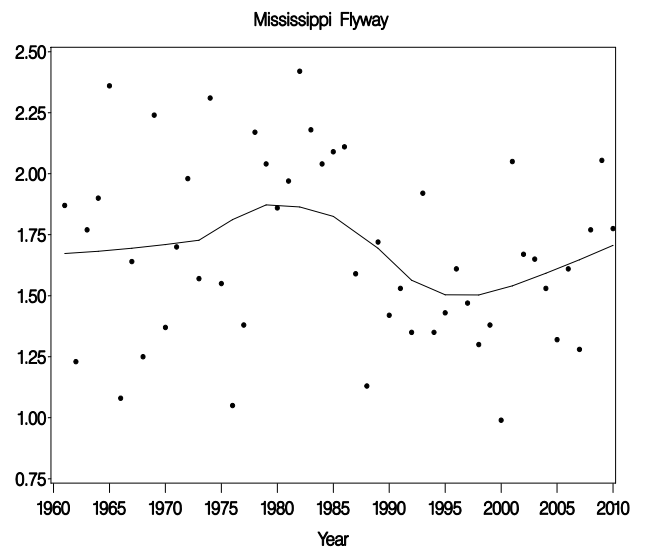
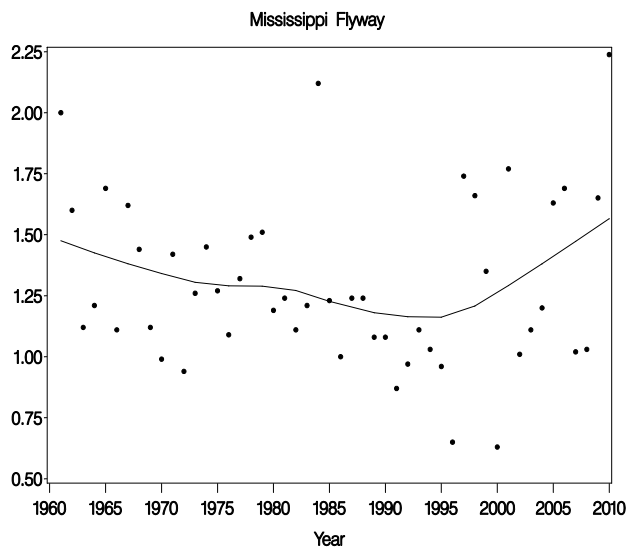
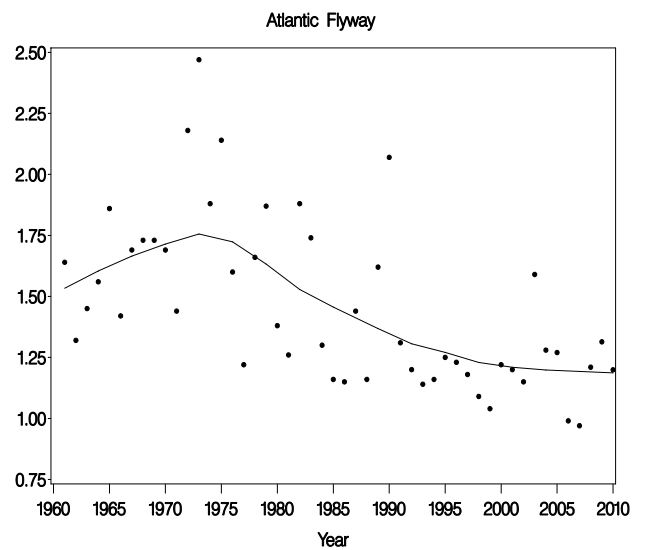
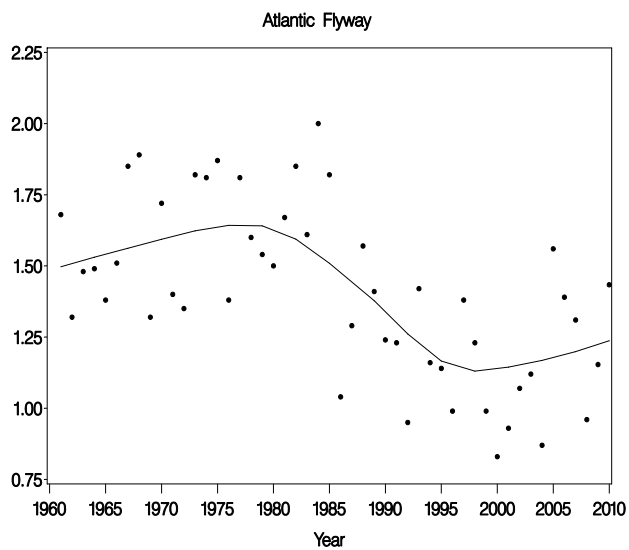


Figure 5. Age ratios of American black ducks (left column) and wood ducks (right column) harvested in the United States, 1961-2010.

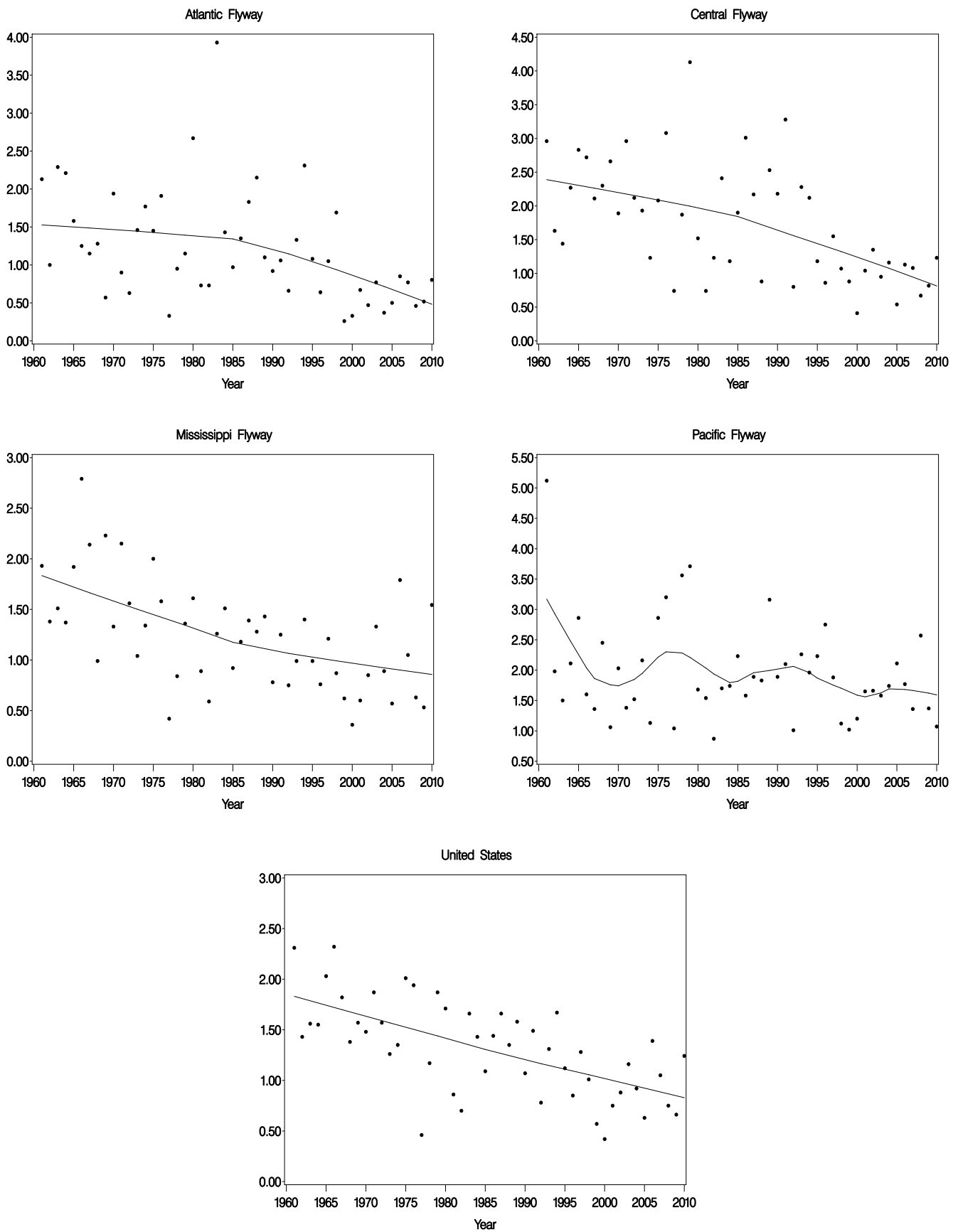


Figure 6. Age ratios of lesser scaup harvested in the United States, 1961-2010.

Table 13. Preliminary estimates of mourning dove harvest and hunter activity during the 2009 and 2010 hunting seasons¹.

State and Management Unit	Mourning Dove Harvest		Active Hunters ²		Mourning Dove Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Alabama	1,113,500 ± 13%	1,022,900 ± 17%	61,800 ± 9%	48,600 ± 9%	152,200 ± 12%	127,100 ± 14%	18.0 ± 16%	21.0 ± 19%
Delaware	36,300 ± 36%	42,300 ± 34%	1,800 ± 20%	2,200 ± 21%	5,700 ± 28%	6,400 ± 28%	19.7 ± 42%	18.9 ± 40%
Florida	292,500 ± 21%	321,200 ± 38%	18,100 ± 19%	12,800 ± 29%	53,900 ± 19%	48,200 ± 38%	16.1 ± 28%	25.2 ± 47%
Georgia	857,200 ± 22%	1,053,900 ± 19%	48,500 ± 18%	47,100 ± 13%	119,000 ± 19%	148,600 ± 19%	17.7 ± 28%	22.4 ± 23%
Illinois	659,600 ± 27%	464,400 ± 22%	28,400 ± 13%	28,900 ± 14%	102,900 ± 23%	89,300 ± 21%	23.2 ± 30%	16.1 ± 26%
Indiana	243,200 ± 17%	185,700 ± 25%	13,200 ± 16%	10,000 ± 21%	40,300 ± 15%	29,600 ± 19%	18.4 ± 23%	18.5 ± 33%
Kentucky	451,300 ± 34%	357,100 ± 26%	21,400 ± 33%	20,100 ± 35%	62,800 ± 34%	43,400 ± 25%	21.1 ± 48%	17.7 ± 44%
Louisiana	482,700 ± 51%	303,000 ± 54%	25,000 ± 24%	18,000 ± 28%	77,700 ± 32%	46,300 ± 39%	19.3 ± 56%	16.8 ± 61%
Maryland	174,900 ± 38%	113,900 ± 35%	9,100 ± 21%	7,600 ± 22%	26,900 ± 27%	20,800 ± 28%	19.2 ± 43%	15.1 ± 41%
Mississippi	361,500 ± 19%	514,300 ± 22%	19,800 ± 13%	22,400 ± 12%	47,400 ± 18%	57,400 ± 17%	18.3 ± 23%	23.0 ± 25%
North Carolina	581,100 ± 21%	686,900 ± 24%	40,300 ± 18%	44,300 ± 18%	99,800 ± 25%	111,700 ± 31%	14.4 ± 28%	15.5 ± 30%
Ohio	295,800 ± 27%	221,500 ± 37%	16,700 ± 19%	12,700 ± 20%	75,500 ± 27%	45,900 ± 28%	17.7 ± 33%	17.5 ± 42%
Pennsylvania	188,000 ± 30%	226,500 ± 31%	18,100 ± 23%	19,900 ± 22%	71,000 ± 38%	69,600 ± 25%	10.4 ± 37%	11.4 ± 38%
Rhode Island	<50 ± 191%	7,800 ± 118%	100 ± 96%	400 ± 99%	100 ± 104%	1,400 ± 98%	0.3 ± 214%	20.9 ± 154%
South Carolina	885,700 ± 21%	998,700 ± 21%	42,600 ± 13%	43,100 ± 15%	125,900 ± 19%	138,300 ± 22%	20.8 ± 25%	23.2 ± 25%
Tennessee	619,800 ± 22%	530,600 ± 23%	41,100 ± 16%	31,500 ± 18%	90,800 ± 19%	83,400 ± 27%	15.1 ± 27%	16.8 ± 29%
Virginia	305,500 ± 12%	299,000 ± 14%	20,900 ± 13%	23,200 ± 12%	57,500 ± 24%	55,300 ± 15%	14.6 ± 17%	12.9 ± 19%
West Virginia	15,600 ± 27%	24,500 ± 30%	1,300 ± 24%	1,400 ± 23%	2,700 ± 29%	4,600 ± 48%	11.9 ± 36%	17.6 ± 38%
Wisconsin	74,900 ± 36%	99,400 ± 76%	9,500 ± 28%	9,100 ± 29%	33,700 ± 32%	39,800 ± 43%	7.9 ± 46%	10.9 ± 81%
Eastern Unit Total	7,639,200 ± 7%	7,473,500 ± 7%	437,600	403,200	1,245,700 ± 6%	1,167,100 ± 7%		
Arkansas	353,500 ± 21%	446,400 ± 28%	22,400 ± 19%	23,900 ± 20%	53,800 ± 26%	63,300 ± 28%	15.8 ± 28%	18.7 ± 34%
Colorado	242,400 ± 17%	172,000 ± 18%	20,300 ± 13%	15,900 ± 14%	45,400 ± 18%	38,400 ± 19%	11.9 ± 22%	10.8 ± 22%
Kansas	572,600 ± 16%	511,200 ± 15%	29,400 ± 10%	28,200 ± 10%	97,000 ± 14%	93,900 ± 13%	19.5 ± 19%	18.1 ± 18%
Minnesota	61,500 ± 67%	98,900 ± 58%	6,800 ± 36%	10,000 ± 42%	24,100 ± 64%	55,300 ± 115%	9.1 ± 77%	9.9 ± 72%
Missouri	294,700 ± 26%	426,000 ± 20%	21,500 ± 16%	29,300 ± 10%	58,700 ± 21%	75,200 ± 14%	13.7 ± 30%	14.5 ± 23%
Montana	12,700 ± 32%	17,400 ± 36%	2,500 ± 32%	1,600 ± 35%	6,400 ± 46%	4,700 ± 44%	5.1 ± 45%	10.7 ± 50%
Nebraska	277,600 ± 17%	276,400 ± 19%	16,000 ± 12%	15,800 ± 14%	51,800 ± 15%	49,700 ± 21%	17.4 ± 21%	17.5 ± 24%
New Mexico	170,200 ± 26%	128,000 ± 29%	7,800 ± 16%	5,900 ± 20%	35,700 ± 26%	21,000 ± 20%	21.9 ± 30%	21.9 ± 35%
North Dakota	40,000 ± 31%	54,200 ± 38%	2,800 ± 28%	3,800 ± 28%	10,800 ± 50%	11,800 ± 37%	14.3 ± 42%	14.1 ± 48%
Oklahoma	378,400 ± 17%	268,700 ± 28%	18,600 ± 12%	19,500 ± 14%	55,500 ± 15%	51,300 ± 22%	20.4 ± 21%	13.8 ± 31%
South Dakota	105,400 ± 24%	64,300 ± 23%	6,500 ± 19%	5,000 ± 21%	21,700 ± 23%	14,200 ± 26%	16.2 ± 31%	12.9 ± 31%
Texas	4,945,100 ± 18%	4,699,300 ± 14%	236,600 ± 10%	244,600 ± 10%	846,200 ± 12%	876,500 ± 10%	20.9 ± 21%	19.2 ± 17%
Wyoming	20,600 ± 31%	32,100 ± 36%	2,300 ± 27%	2,700 ± 26%	5,800 ± 31%	7,100 ± 32%	8.8 ± 41%	12.0 ± 45%
Central Unit Total	7,474,600 ± 12%	7,194,900 ± 10%	393,400	406,100	1,312,700 ± 8%	1,362,300 ± 8%		
Arizona	784,400 ± 12%	941,800 ± 15%	37,200 ± 8%	40,500 ± 6%	130,600 ± 11%	145,300 ± 13%	21.1 ± 14%	23.3 ± 16%
California	1,069,700 ± 13%	1,244,900 ± 14%	67,200 ± 8%	70,400 ± 8%	197,400 ± 12%	249,200 ± 14%	15.9 ± 15%	17.7 ± 16%
Idaho	143,300 ± 38%	90,600 ± 39%	10,600 ± 28%	10,100 ± 28%	27,200 ± 30%	25,500 ± 33%	13.5 ± 48%	9.0 ± 48%
Nevada	41,500 ± 31%	60,300 ± 27%	4,600 ± 18%	4,500 ± 19%	11,600 ± 31%	12,700 ± 26%	9.0 ± 36%	13.3 ± 33%
Oregon	38,600 ± 25%	43,700 ± 97%	4,300 ± 25%	3,600 ± 35%	16,400 ± 32%	11,600 ± 46%	9.0 ± 35%	12.0 ± 103%
Utah	122,800 ± 26%	102,800 ± 25%	15,200 ± 17%	14,300 ± 23%	34,600 ± 19%	31,500 ± 28%	8.1 ± 31%	7.2 ± 34%
Washington	40,700 ± 50%	77,900 ± 31%	4,200 ± 36%	7,200 ± 25%	11,100 ± 40%	18,900 ± 42%	9.7 ± 61%	10.8 ± 40%
Western Unit Total	2,241,000 ± 8%	2,562,000 ± 9%	143,400	150,600	428,900 ± 7%	494,700 ± 9%		
U.S. Total	17,354,800 ± 6%	17,230,400 ± 5%	974,400	959,900	2,987,300 ± 4%	3,024,100 ± 5%		

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

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

Table 14. Preliminary estimates of white-winged dove harvest and hunter activity during the 2009 and 2010 hunting seasons¹.

State and Management Unit	White-winged Dove Harvest		Active Hunters ²		White-winged Dove Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Alabama	9,300 ± 65%	4,400 ± 82%	2,200 ± 57%	1,600 ± 57%	4,000 ± 57%	5,400 ± 70%	4.2 ± 87%	2.7 ± 99%
Florida	24,300 ± 47%	6,200 ± 109%	2,800 ± 46%	3,300 ± 66%	7,700 ± 42%	2,300 ± 63%	8.5 ± 66%	1.9 ± 128%
Georgia	15,000 ± 106%	4,200 ± 108%	1,500 ± 97%	1,800 ± 62%	1,900 ± 103%	1,600 ± 90%	10.0 ± 144%	2.2 ± 124%
Illinois	0	7,200 ± 141%	500 ± 129%	1,400 ± 91%	700 ± 121%	12,500 ± 103%	0	5.3 ± 168%
Indiana	<50 ± 191%	<50 ± 191%	<50 ± 191%	100 ± 124%	<50 ± 191%	300 ± 124%	1.0 ± 270%	0.2 ± 227%
Kentucky	1,100 ± 150%	0	200 ± 111%	0	300 ± 118%	0	5.3 ± 187%	0
Louisiana	33,000 ± 76%	4,600 ± 159%	5,400 ± 56%	2,500 ± 77%	23,300 ± 78%	6,600 ± 109%	6.2 ± 94%	1.8 ± 177%
Maryland	2,500 ± 186%	0	200 ± 166%	200 ± 195%	300 ± 142%	600 ± 195%	10.5 ± 250%	0
Mississippi	1,300 ± 105%	2,800 ± 74%	1,000 ± 70%	1,200 ± 70%	1,600 ± 77%	3,600 ± 81%	1.3 ± 126%	2.4 ± 102%
Ohio	1,400 ± 195%	0	100 ± 195%	100 ± 195%	500 ± 195%	300 ± 195%	12.0 ± 276%	0
Pennsylvania	200 ± 194%	0	100 ± 194%	600 ± 177%	100 ± 194%	600 ± 177%	4.0 ± 275%	0
Eastern Unit Total	88,200 ± 37%	29,200 ± 53%	14,100	12,700	40,400 ± 46%	33,800 ± 47%		
Arkansas	15,900 ± 88%	2,700 ± 113%	2,100 ± 84%	600 ± 62%	10,800 ± 104%	2,900 ± 93%	7.7 ± 122%	4.3 ± 128%
Colorado	4,800 ± 65%	4,900 ± 99%	2,500 ± 44%	2,000 ± 42%	6,600 ± 69%	4,300 ± 54%	1.9 ± 78%	2.4 ± 107%
Kansas	4,100 ± 103%	2,200 ± 90%	1,800 ± 57%	1,100 ± 62%	3,900 ± 67%	4,500 ± 68%	2.3 ± 118%	2.0 ± 109%
Missouri	3,300 ± 93%	4,400 ± 74%	1,900 ± 67%	2,300 ± 47%	3,000 ± 70%	4,300 ± 46%	1.7 ± 115%	1.9 ± 88%
Nebraska	3,800 ± 90%	400 ± 108%	800 ± 71%	600 ± 107%	3,300 ± 68%	2,500 ± 139%	4.8 ± 115%	0.7 ± 152%
New Mexico	64,500 ± 52%	29,500 ± 31%	3,700 ± 26%	3,000 ± 29%	20,400 ± 37%	10,400 ± 23%	17.6 ± 58%	9.8 ± 43%
Oklahoma	5,500 ± 54%	4,600 ± 111%	1,800 ± 47%	2,500 ± 53%	4,800 ± 38%	8,400 ± 69%	3.1 ± 72%	1.8 ± 123%
Texas	1,259,300 ± 19%	1,436,800 ± 16%	109,700 ± 16%	129,200 ± 15%	439,000 ± 20%	470,400 ± 15%	11.5 ± 24%	11.1 ± 22%
Central Unit Total	1,361,300 ± 17%	1,485,500 ± 16%	124,200	141,400	491,700 ± 19%	507,700 ± 14%		
Arizona	124,500 ± 19%	84,900 ± 24%	20,400 ± 15%	17,400 ± 16%	68,200 ± 19%	52,400 ± 17%	6.1 ± 24%	4.9 ± 29%
California	66,100 ± 32%	78,200 ± 41%	13,900 ± 22%	15,500 ± 21%	35,300 ± 24%	63,300 ± 41%	4.8 ± 39%	5.0 ± 46%
Nevada	600 ± 111%	400 ± 95%	500 ± 79%	300 ± 90%	1,000 ± 68%	500 ± 68%	1.3 ± 136%	1.4 ± 131%
Utah	1,500 ± 76%	1,800 ± 74%	700 ± 82%	400 ± 52%	1,300 ± 60%	800 ± 56%	2.1 ± 111%	4.7 ± 90%
Western Unit Total	192,700 ± 16%	165,200 ± 23%	35,400	33,600	105,800 ± 15%	117,100 ± 23%		
U.S. Total	1,642,200 ± 15%	1,679,900 ± 14%	173,700	187,600	637,900 ± 15%	658,600 ± 12%		

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

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

Table 15. Preliminary estimates of band-tailed pigeon harvest and hunter activity during the 2009 and 2010 hunting seasons¹.

State and Management Unit	Band-tailed Pigeon Harvest		Active Hunters ²		Band-tailed Pigeon Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Arizona	2,300 ± 76%	700 ± 110%	1,300 ± 52%	1,800 ± 47%	4,100 ± 68%	5,800 ± 57%	1.8 ± 92%	0.4 ± 120%
Colorado	1,400 ± 100%	1,500 ± 90%	2,400 ± 51%	1,100 ± 61%	6,100 ± 70%	3,900 ± 77%	0.6 ± 112%	1.4 ± 109%
New Mexico	1,300 ± 79%	2,700 ± 100%	500 ± 54%	900 ± 46%	2,300 ± 72%	3,200 ± 55%	2.5 ± 96%	2.9 ± 110%
Utah	0	200 ± 195%	200 ± 138%	300 ± 112%	600 ± 166%	700 ± 121%	0	0.7 ± 225%
Four Corners Total	5,000 ± 49%	5,000 ± 62%	4,400	4,100	13,200 ± 42%	13,600 ± 36%		
California	19,300 ± 29%	16,500 ± 50%	8,200 ± 25%	5,500 ± 36%	20,100 ± 29%	11,100 ± 39%	2.3 ± 39%	3.0 ± 62%
Oregon	1,900 ± 25%	1,100 ± 41%	600 ± 12%	500 ± 17%	1,800 ± 19%	1,100 ± 26%	3.5 ± 28%	2.4 ± 44%
Washington	1,400 ± 132%	700 ± 138%	1,000 ± 68%	500 ± 79%	2,500 ± 85%	1,500 ± 96%	1.5 ± 149%	1.5 ± 159%
Pacific Coast Total	22,600 ± 27%	18,400 ± 45%	9,700	6,400	24,400 ± 25%	13,700 ± 33%		
U.S. Total	27,600 ± 23%	23,400 ± 38%	14,100	10,500	37,600 ± 22%	27,300 ± 25%		

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

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

Table 16. Preliminary estimates of woodcock harvest and hunter activity during the 2009 and 2010 hunting seasons¹.

State and Management Unit	Woodcock Harvest		Active Hunters ²		Woodcock Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Connecticut	1,000 ± 37%	700 ± 54%	900 ± 26%	700 ± 31%	5,100 ± 31%	3,200 ± 39%	1.0 ± 45%	0.9 ± 62%
Delaware ³	200 ± 138%	900 ± 363%	300 ± 84%	300 ± 82%	700 ± 92%	1,600 ± 197%	0.7 ± 161%	2.4 ± 305%
Florida	8,700 ± 105%	200 ± 195%	3,000 ± 62%	200 ± 110%	14,800 ± 75%	400 ± 119%	2.9 ± 122%	1.0 ± 223%
Georgia	0	10,300 ± 196%	3,600 ± 196%	3,400 ± 196%	10,800 ± 196%	3,400 ± 196%	0	3.0 ± 277%
Maine	8,300 ± 61%	31,700 ± 55%	3,100 ± 52%	7,100 ± 33%	22,100 ± 76%	40,800 ± 52%	2.7 ± 80%	4.5 ± 64%
Maryland	600 ± 47%	2,000 ± 160%	800 ± 117%	1,100 ± 99%	1,900 ± 108%	2,100 ± 92%	0.8 ± 126%	1.8 ± 188%
Massachusetts	2,400 ± 34%	2,600 ± 27%	1,100 ± 29%	900 ± 27%	6,500 ± 40%	5,300 ± 32%	2.3 ± 45%	2.8 ± 38%
New Hampshire	8,400 ± 32%	9,500 ± 35%	3,200 ± 42%	2,300 ± 30%	17,000 ± 33%	14,200 ± 35%	2.7 ± 53%	4.1 ± 46%
New Jersey	3,400 ± 67%	3,800 ± 45%	900 ± 87%	1,300 ± 49%	3,900 ± 63%	3,700 ± 36%	3.7 ± 109%	2.9 ± 66%
New York	7,700 ± 28%	12,000 ± 40%	4,500 ± 24%	4,000 ± 42%	17,700 ± 26%	13,300 ± 41%	1.7 ± 37%	3.0 ± 58%
North Carolina	9,300 ± 129%	3,400 ± 196%	4,700 ± 83%	3,400 ± 196%	27,000 ± 113%	3,400 ± 196%	2.0 ± 154%	1.0 ± 277%
Pennsylvania	7,400 ± 71%	12,800 ± 45%	7,000 ± 33%	9,100 ± 32%	32,500 ± 41%	35,600 ± 40%	1.1 ± 78%	1.4 ± 56%
Rhode Island	600 ± 76%	400 ± 84%	300 ± 80%	200 ± 100%	1,000 ± 91%	800 ± 94%	1.9 ± 111%	2.1 ± 131%
South Carolina	1,400 ± 85%	1,700 ± 139%	1,200 ± 121%	5,300 ± 185%	3,900 ± 136%	11,100 ± 176%	1.1 ± 148%	0.3 ± 232%
Vermont	1,500 ± 91%	6,200 ± 45%	1,200 ± 38%	1,300 ± 25%	7,500 ± 49%	5,400 ± 27%	1.2 ± 99%	4.8 ± 51%
Virginia	1,600 ± 36%	1,100 ± 44%	600 ± 101%	300 ± 23%	3,300 ± 114%	1,200 ± 29%	2.5 ± 108%	3.7 ± 50%
West Virginia	600 ± 70%	500 ± 32%	400 ± 57%	300 ± 65%	2,200 ± 77%	1,100 ± 64%	1.5 ± 90%	1.6 ± 73%
Eastern Unit Total	63,300 ± 28%	99,800 ± 16%	36,800	41,200	178,000 ± 26%	146,700 ± 16%		
Alabama	5,900 ± 117%	600 ± 124%	2,100 ± 163%	1,200 ± 180%	6,500 ± 108%	1,500 ± 142%	2.9 ± 201%	0.5 ± 218%
Arkansas	6,600 ± 112%	200 ± 164%	3,000 ± 94%	100 ± 111%	8,100 ± 128%	200 ± 128%	2.2 ± 146%	2.0 ± 198%
Illinois	5,300 ± 142%	900 ± 106%	1,800 ± 98%	800 ± 171%	6,200 ± 91%	1,200 ± 123%	2.9 ± 173%	1.0 ± 201%
Indiana	1,700 ± 79%	3,000 ± 134%	1,100 ± 63%	1,000 ± 66%	4,000 ± 80%	3,900 ± 89%	1.5 ± 101%	2.9 ± 149%
Iowa	700 ± 155%	1,700 ± 134%	900 ± 102%	3,200 ± 74%	1,800 ± 121%	7,400 ± 71%	0.8 ± 186%	0.5 ± 153%
Kansas	<50 ± 121%	0	<50 ± 121%	300 ± 193%	<50 ± 122%	700 ± 182%	3.0 ± 171%	0
Kentucky	0	6,800 ± 166%	<50 ± 182%	2,900 ± 111%	<50 ± 182%	6,700 ± 113%	0	2.4 ± 199%
Louisiana	24,700 ± 70%	33,000 ± 112%	4,300 ± 44%	9,100 ± 70%	20,800 ± 59%	28,200 ± 74%	5.7 ± 83%	3.6 ± 132%
Michigan	80,900 ± 22%	93,200 ± 21%	26,400 ± 15%	31,100 ± 14%	146,200 ± 21%	159,200 ± 19%	3.1 ± 27%	3.0 ± 26%
Minnesota	16,000 ± 48%	34,800 ± 39%	9,700 ± 37%	13,900 ± 32%	38,300 ± 44%	55,400 ± 33%	1.6 ± 60%	2.5 ± 50%
Mississippi ³	1,300 ± 153%	1,400 ± 355%	1,000 ± 74%	1,000 ± 170%	3,700 ± 89%	3,000 ± 153%	1.2 ± 170%	2.6 ± 235%
Missouri	900 ± 86%	3,000 ± 159%	200 ± 42%	2,600 ± 91%	1,200 ± 49%	6,000 ± 94%	4.9 ± 96%	1.2 ± 183%
Nebraska	100 ± 190%	100 ± 193%	<50 ± 134%	600 ± 178%	100 ± 134%	800 ± 154%	2.5 ± 233%	0.1 ± 262%
Ohio	1,200 ± 63%	1,700 ± 93%	1,600 ± 82%	1,800 ± 98%	7,200 ± 94%	4,300 ± 70%	0.7 ± 103%	0.9 ± 135%
Oklahoma	200 ± 149%	3,100 ± 166%	<50 ± 98%	1,000 ± 138%	100 ± 130%	17,600 ± 174%	9.3 ± 178%	3.0 ± 216%
Tennessee ³	400 ± 102%	5,100 ± 445%	200 ± 69%	1,600 ± 227%	1,000 ± 78%	4,900 ± 215%	1.7 ± 124%	4.3 ± 190%
Texas ³	0	2,200 ± 280%	0	10,100 ± 199%	0	25,500 ± 320%	0	0.5 ± 298%
Wisconsin	29,200 ± 24%	42,300 ± 22%	19,400 ± 22%	14,600 ± 25%	77,100 ± 24%	65,700 ± 40%	1.5 ± 32%	2.9 ± 33%
Central Unit Total	175,100 ± 17%	233,100 ± 20%	72,000	97,100	322,300 ± 14%	392,400 ± 20%		
U.S. Total	238,400 ± 15%	332,900 ± 11%	108,800	138,300	500,300 ± 13%	539,100 ± 11%		

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

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

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

Table 17. Preliminary estimates of snipe harvest and hunter activity during the 2009 and 2010 hunting seasons¹.

State and Management Unit	Snipe Harvest		Active Hunters ²		Snipe Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Connecticut	<50 ± 135%	0	100 ± 164%	0	100 ± 145%	0	0.2 ± 213%	0.0
Delaware	0	200 ± 194%	0	100 ± 194%	0	100 ± 194%	0	3.0 ± 275%
Florida	37,000 ± 92%	32,100 ± 55%	3,000 ± 76%	3,700 ± 67%	32,100 ± 115%	9,200 ± 51%	12.5 ± 119%	8.8 ± 87%
Georgia	1,300 ± 155%	3,900 ± 107%	100 ± 137%	300 ± 73%	500 ± 153%	700 ± 88%	10.5 ± 207%	13.3 ± 130%
Maine	0	100 ± 144%	900 ± 196%	200 ± 78%	2,700 ± 196%	300 ± 98%	0	0.5 ± 164%
Maryland	0	100 ± 149%	0	<50 ± 133%	0	200 ± 172%	0	4.0 ± 199%
Massachusetts	0	<50 ± 176%	100 ± 112%	200 ± 101%	400 ± 82%	300 ± 120%	0	<0.1 ± 203%
New Hampshire	1,900 ± 193%	400 ± 180%	1,000 ± 93%	300 ± 104%	3,600 ± 117%	2,000 ± 128%	2.0 ± 214%	1.3 ± 208%
New Jersey	0	700 ± 144%	0	300 ± 112%	0	400 ± 119%	0	2.3 ± 182%
New York	600 ± 185%	600 ± 150%	100 ± 71%	500 ± 127%	400 ± 87%	2,900 ± 142%	4.4 ± 198%	1.4 ± 196%
North Carolina	300 ± 196%	7,200 ± 142%	300 ± 196%	1,400 ± 159%	300 ± 196%	3,400 ± 144%	1.0 ± 277%	5.1 ± 213%
Pennsylvania	400 ± 154%	100 ± 192%	300 ± 107%	<50 ± 192%	1,500 ± 135%	100 ± 192%	1.3 ± 187%	2.0 ± 272%
Rhode Island	0	0	0	0	0	0	0	0
South Carolina	1,900 ± 124%	7,400 ± 140%	1,200 ± 126%	1,400 ± 107%	1,200 ± 126%	3,800 ± 121%	1.6 ± 177%	5.2 ± 177%
Vermont ³	<50 ± 123%	200 ± 169%	<50 ± 86%	100 ± 151%	100 ± 115%	300 ± 158%	0.5 ± 150%	4.1 ± 229%
Virginia	100 ± 129%	1,000 ± 117%	200 ± 171%	200 ± 83%	300 ± 134%	300 ± 88%	0.3 ± 215%	5.6 ± 144%
West Virginia	100 ± 136%	100 ± 193%	100 ± 136%	100 ± 136%	400 ± 164%	100 ± 144%	2.0 ± 193%	1.0 ± 236%
Atlantic Flyway Total	43,600 ± 79%	54,000 ± 58%	7,300	8,600	43,400 ± 86%	24,100 ± 52%		
Alabama ³	1,400 ± 109%	3,700 ± 117%	200 ± 77%	600 ± 90%	500 ± 92%	2,900 ± 102%	6.8 ± 133%	9.5 ± 149%
Arkansas ³	0	2,200 ± 151%	0	600 ± 124%	0	1,700 ± 143%	0	9.9 ± 195%
Illinois	0	300 ± 194%	900 ± 196%	100 ± 136%	900 ± 196%	300 ± 164%	0	3.0 ± 237%
Indiana	<50 ± 96%	400 ± 74%	400 ± 173%	100 ± 34%	500 ± 138%	300 ± 46%	0.1 ± 198%	5.0 ± 81%
Iowa	400 ± 169%	800 ± 144%	400 ± 175%	700 ± 159%	800 ± 173%	2,800 ± 163%	1.0 ± 243%	1.1 ± 214%
Kentucky	4,000 ± 141%	0	700 ± 135%	0	2,500 ± 148%	0	5.5 ± 195%	0
Louisiana ³	2,200 ± 153%	24,100 ± 108%	200 ± 111%	2,500 ± 99%	700 ± 113%	9,000 ± 97%	12.7 ± 189%	8.7 ± 148%
Michigan	4,700 ± 131%	5,200 ± 166%	4,200 ± 90%	2,100 ± 117%	12,500 ± 112%	15,200 ± 134%	1.1 ± 159%	2.5 ± 203%
Minnesota	7,800 ± 130%	1,200 ± 120%	2,700 ± 74%	3,300 ± 73%	12,800 ± 96%	11,200 ± 87%	2.9 ± 149%	0.4 ± 140%
Mississippi	0	600 ± 196%	0	2,600 ± 103%	0	3,000 ± 97%	0	0.2 ± 221%
Missouri	100 ± 195%	1,600 ± 134%	1,200 ± 138%	1,100 ± 123%	2,100 ± 111%	1,100 ± 123%	0.1 ± 239%	1.4 ± 182%
Ohio	100 ± 195%	0	100 ± 137%	100 ± 194%	100 ± 137%	200 ± 194%	0.5 ± 238%	0
Tennessee	0	0	0	0	0	0	0	0
Wisconsin	200 ± 97%	<50 ± 192%	100 ± 63%	4,300 ± 94%	600 ± 72%	7,800 ± 101%	1.6 ± 116%	<0.1 ± 214%
Mississippi Flyway Total	20,900 ± 65%	40,200 ± 60%	11,100	18,100	34,100 ± 57%	55,600 ± 56%		

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

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

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

Table 17 (continued). Preliminary estimates of snipe harvest and hunter activity during the 2009 and 2010 hunting seasons¹.

State and Management Unit	Snipe Harvest		Active Hunters ²		Snipe Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Colorado	900 ± 196%	0	400 ± 196%	200 ± 111%	400 ± 196%	500 ± 113%	2.0 ± 277%	0
Kansas	400 ± 179%	2,200 ± 193%	800 ± 136%	700 ± 137%	4,200 ± 178%	1,100 ± 144%	0.5 ± 225%	3.0 ± 237%
Nebraska	1,200 ± 138%	1,300 ± 150%	900 ± 118%	1,000 ± 119%	1,200 ± 106%	1,300 ± 107%	1.3 ± 181%	1.2 ± 191%
New Mexico	400 ± 196%	0	200 ± 196%	<50 ± 182%	200 ± 196%	<50 ± 182%	2.0 ± 277%	0
North Dakota ³	100 ± 65%	1,200 ± 105%	100 ± 46%	400 ± 115%	200 ± 70%	1,000 ± 116%	2.4 ± 80%	3.0 ± 161%
Oklahoma	400 ± 130%	0	100 ± 87%	0	200 ± 114%	0	7.8 ± 156%	0
South Dakota	<50 ± 178%	400 ± 119%	<50 ± 87%	700 ± 106%	200 ± 145%	4,300 ± 112%	1.3 ± 198%	0.5 ± 160%
Texas	1,800 ± 158%	6,500 ± 153%	2,700 ± 181%	200 ± 78%	13,100 ± 185%	1,500 ± 109%	0.7 ± 240%	30.6 ± 172%
Wyoming	100 ± 94%	1,200 ± 129%	<50 ± 71%	400 ± 89%	<50 ± 92%	600 ± 92%	6.8 ± 118%	3.2 ± 157%
Central Flyway Total	5,300 ± 73%	12,700 ± 79%	5,100	3,700	19,700 ± 129%	10,400 ± 72%		
Arizona	200 ± 133%	0	<50 ± 108%	100 ± 110%	200 ± 122%	100 ± 118%	5.3 ± 171%	0
California	7,400 ± 91%	4,800 ± 74%	1,100 ± 100%	2,300 ± 80%	3,400 ± 78%	5,400 ± 83%	6.6 ± 135%	2.1 ± 109%
Idaho	100 ± 194%	600 ± 196%	1,000 ± 185%	1,300 ± 137%	1,000 ± 185%	1,300 ± 137%	0.1 ± 269%	0.5 ± 239%
Montana	100 ± 186%	3,400 ± 147%	400 ± 187%	1,300 ± 108%	500 ± 162%	2,100 ± 125%	0.2 ± 263%	2.7 ± 183%
Nevada	1,000 ± 156%	100 ± 83%	300 ± 98%	200 ± 105%	600 ± 93%	500 ± 107%	3.7 ± 184%	0.6 ± 134%
Oregon	1,800 ± 108%	300 ± 119%	500 ± 134%	600 ± 134%	900 ± 97%	3,100 ± 135%	3.5 ± 172%	0.5 ± 179%
Utah	800 ± 196%	1,300 ± 102%	500 ± 112%	1,100 ± 79%	1,200 ± 109%	2,500 ± 86%	1.5 ± 225%	1.2 ± 129%
Washington	1,400 ± 100%	400 ± 74%	1,300 ± 126%	100 ± 50%	3,300 ± 141%	400 ± 70%	1.1 ± 161%	5.3 ± 90%
Pacific Flyway Total	12,700 ± 59%	10,900 ± 75%	5,200	6,900	11,100 ± 54%	15,400 ± 66%		
Alaska	900 ± 104%	400 ± 78%	700 ± 132%	200 ± 45%	2,000 ± 135%	500 ± 63%	1.3 ± 168%	2.2 ± 90%
U.S. Total	83,500 ± 45%	118,200 ± 37%	29,400	37,500	110,300 ± 45%	106,000 ± 36%		

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

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

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

Table 18. Preliminary estimates of coot harvest and hunter activity during the 2009 and 2010 hunting seasons¹.

State and Management Unit	Coot Harvest		Active Hunters ²		Coot Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Connecticut	<50 ± 135%	200 ± 107%	100 ± 181%	200 ± 93%	200 ± 181%	300 ± 99%	0.4 ± 226%	0.8 ± 142%
Delaware	<50 ± 188%	0	<50 ± 188%	0	<50 ± 188%	0	2.0 ± 266%	0
Florida	12,400 ± 154%	13,900 ± 106%	800 ± 134%	2,400 ± 90%	2,000 ± 119%	4,900 ± 69%	14.7 ± 205%	5.9 ± 138%
Georgia	800 ± 194%	800 ± 150%	100 ± 194%	100 ± 112%	700 ± 194%	200 ± 118%	13.0 ± 275%	6.7 ± 187%
Maine	0	100 ± 193%	0	100 ± 136%	0	200 ± 159%	0	1.0 ± 237%
Maryland ³	0	800 ± 177%	0	500 ± 169%	0	700 ± 169%	0	2.3 ± 245%
Massachusetts	0	<50 ± 129%	<50 ± 124%	100 ± 160%	<50 ± 124%	100 ± 119%	0	0.5 ± 206%
New Hampshire	1,600 ± 196%	0	200 ± 196%	0	2,100 ± 196%	0	7.0 ± 277%	0
New Jersey	0	300 ± 145%	0	300 ± 112%	0	300 ± 112%	0	1.0 ± 183%
New York	500 ± 134%	400 ± 134%	100 ± 95%	400 ± 149%	400 ± 98%	2,300 ± 172%	6.5 ± 164%	1.0 ± 201%
North Carolina	6,900 ± 196%	5,500 ± 161%	1,100 ± 196%	2,200 ± 138%	4,600 ± 196%	3,300 ± 146%	6.0 ± 277%	2.5 ± 212%
Pennsylvania	1,900 ± 89%	0	500 ± 75%	0	2,800 ± 85%	0	3.5 ± 116%	0
Rhode Island	0	0	0	0	0	0	0	0
South Carolina ³	200 ± 171%	5,900 ± 155%	100 ± 133%	700 ± 130%	200 ± 162%	2,200 ± 146%	4.5 ± 217%	7.3 ± 204%
Vermont	<50 ± 174%	0	<50 ± 174%	0	<50 ± 174%	0	4.0 ± 246%	0.0
Virginia ³	300 ± 107%	1,500 ± 137%	200 ± 159%	400 ± 114%	2,000 ± 178%	1,700 ± 122%	1.3 ± 191%	4.5 ± 181%
West Virginia	0	200 ± 180%	0	<50 ± 180%	0	100 ± 180%	0	35.0 ± 255%
Atlantic Flyway Total	24,800 ± 96%	29,600 ± 78%	3,300	7,200	14,900 ± 74%	16,400 ± 60%		
Alabama	20,500 ± 153%	7,300 ± 131%	2,000 ± 176%	3,000 ± 107%	6,900 ± 151%	14,800 ± 128%	10.5 ± 233%	2.5 ± 170%
Arkansas	0	600 ± 195%	0	1,600 ± 126%	0	2,400 ± 136%	0	0.4 ± 232%
Illinois	0	800 ± 149%	0	100 ± 111%	0	500 ± 125%	0	6.0 ± 186%
Indiana	1,300 ± 82%	700 ± 67%	800 ± 121%	100 ± 31%	1,100 ± 93%	400 ± 44%	1.6 ± 146%	7.5 ± 74%
Iowa	2,400 ± 151%	9,200 ± 114%	400 ± 160%	1,900 ± 101%	2,800 ± 151%	24,600 ± 124%	5.3 ± 220%	4.8 ± 152%
Kentucky	5,400 ± 138%	8,500 ± 196%	700 ± 135%	400 ± 196%	4,400 ± 137%	4,400 ± 196%	7.5 ± 193%	23.0 ± 277%
Louisiana ³	80,600 ± 63%	123,200 ± 84%	4,600 ± 63%	5,900 ± 68%	15,100 ± 70%	29,400 ± 79%	17.4 ± 89%	19.8 ± 109%
Michigan	9,500 ± 147%	6,500 ± 130%	2,200 ± 126%	2,800 ± 104%	2,600 ± 109%	9,300 ± 108%	4.4 ± 194%	2.3 ± 167%
Minnesota	18,800 ± 103%	41,500 ± 160%	1,700 ± 68%	4,400 ± 63%	7,400 ± 98%	13,800 ± 86%	11.1 ± 123%	9.3 ± 172%
Mississippi	0	0	0	2,400 ± 111%	0	2,400 ± 111%	0	0
Missouri ³	100 ± 195%	1,800 ± 152%	900 ± 171%	800 ± 139%	900 ± 171%	2,600 ± 153%	0.1 ± 260%	2.9 ± 207%
Ohio	500 ± 195%	0	100 ± 137%	0	400 ± 165%	0	4.0 ± 238%	0
Tennessee ³	0	800 ± 138%	0	100 ± 127%	0	1,800 ± 145%	0	13.7 ± 187%
Wisconsin	3,700 ± 85%	4,600 ± 141%	2,000 ± 127%	4,400 ± 93%	6,300 ± 144%	10,400 ± 86%	1.9 ± 153%	1.0 ± 169%
Mississippi Flyway Total	142,800 ± 45%	205,600 ± 65%	15,500	27,900	48,000 ± 43%	116,900 ± 53%		

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

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

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

Table 18 (continued). Preliminary estimates of coot harvest and hunter activity during the 2009 and 2010 hunting seasons¹.

State and Management Unit	Coot Harvest		Active Hunters ²		Coot Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Colorado	0	200 ± 195%	0	400 ± 134%	0	700 ± 124%	0	0.4 ± 236%
Kansas	400 ± 196%	100 ± 112%	800 ± 138%	<50 ± 101%	4,100 ± 179%	100 ± 103%	0.5 ± 239%	3.0 ± 151%
Nebraska	0	900 ± 196%	0	500 ± 170%	0	1,300 ± 150%	0	1.7 ± 259%
New Mexico	100 ± 178%	100 ± 120%	<50 ± 178%	<50 ± 83%	<50 ± 178%	<50 ± 103%	10.0 ± 252%	4.0 ± 146%
North Dakota	2,200 ± 120%	2,300 ± 108%	600 ± 155%	1,400 ± 101%	800 ± 104%	3,400 ± 123%	3.9 ± 196%	1.7 ± 148%
Oklahoma	100 ± 130%	100 ± 139%	<50 ± 130%	<50 ± 124%	200 ± 176%	100 ± 129%	2.0 ± 184%	5.5 ± 186%
South Dakota	1,000 ± 124%	2,800 ± 108%	600 ± 127%	900 ± 91%	2,400 ± 143%	3,500 ± 113%	1.5 ± 178%	3.1 ± 141%
Texas	12,200 ± 160%	15,200 ± 131%	2,600 ± 185%	4,800 ± 137%	5,700 ± 169%	7,600 ± 138%	4.7 ± 245%	3.1 ± 190%
Wyoming	<50 ± 112%	600 ± 115%	<50 ± 106%	200 ± 127%	<50 ± 112%	200 ± 108%	4.5 ± 154%	3.3 ± 171%
Central Flyway Total	15,800 ± 125%	22,400 ± 88%	4,600	8,300	13,400 ± 95%	16,800 ± 86%		
Arizona	400 ± 154%	0	100 ± 92%	<50 ± 134%	100 ± 124%	100 ± 150%	6.3 ± 180%	0
California	24,600 ± 69%	28,000 ± 92%	3,800 ± 58%	3,700 ± 62%	10,200 ± 56%	8,200 ± 47%	6.5 ± 90%	7.6 ± 111%
Idaho	1,000 ± 185%	1,300 ± 196%	1,000 ± 185%	600 ± 196%	1,000 ± 185%	600 ± 196%	1.0 ± 262%	2.0 ± 277%
Montana	100 ± 169%	<50 ± 184%	<50 ± 129%	400 ± 192%	100 ± 169%	400 ± 192%	5.5 ± 213%	<0.1 ± 266%
Nevada	700 ± 133%	900 ± 100%	200 ± 118%	300 ± 90%	500 ± 147%	600 ± 89%	4.0 ± 178%	3.4 ± 134%
Oregon	2,100 ± 175%	700 ± 109%	200 ± 77%	600 ± 134%	400 ± 100%	7,400 ± 166%	10.5 ± 191%	1.2 ± 173%
Utah	3,000 ± 98%	13,600 ± 121%	1,300 ± 73%	1,300 ± 74%	5,600 ± 133%	3,000 ± 75%	2.3 ± 122%	10.4 ± 142%
Washington	3,600 ± 161%	500 ± 95%	1,200 ± 132%	<50 ± 62%	3,000 ± 157%	300 ± 94%	3.0 ± 209%	10.5 ± 113%
Pacific Flyway Total	35,600 ± 52%	45,100 ± 63%	7,700	7,000	21,000 ± 51%	20,600 ± 54%		
U.S. Total	219,000 ± 34%	302,600 ± 50%	31,100	50,500	97,300 ± 29%	170,700 ± 36%		

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

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

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

Table 19. Preliminary estimates of gallinule harvest and hunter activity during the 2009 and 2010 hunting seasons¹.

State and Management Unit	Gallinule Harvest		Active Hunters ²		Gallinule Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Delaware	0	0	0	0	0	0	0	0
Florida	900 ± 193%	600 ± 180%	500 ± 183%	1,100 ± 132%	1,500 ± 187%	1,200 ± 127%	1.9 ± 266%	0.5 ± 223%
Georgia	0	0	0	0	0	0	0	0
New Jersey	0	0	0	0	0	0	0	0
New York	<50 ± 191%	<50 ± 192%	<50 ± 191%	100 ± 110%	100 ± 191%	400 ± 121%	2.0 ± 270%	0.7 ± 221%
North Carolina	0	0	0	0	0	0	0	0
Pennsylvania	0	0	0	0	0	0	0	0
South Carolina	0	500 ± 196%	0	500 ± 196%	0	500 ± 196%	0	0
Virginia	<50 ± 182%	<50 ± 192%	<50 ± 182%	200 ± 178%	<50 ± 182%	200 ± 178%	1.0 ± 257%	0.2 ± 262%
West Virginia	0	0	0	0	0	0	0	0
Atlantic Flyway Total	1,000 ± 184%	1,100 ± 127%	500	1,900	1,600 ± 175%	2,200 ± 117%		
Alabama ³	0	300 ± 148%	0	200 ± 138%	0	1,000 ± 141%	0	3.4 ± 199%
Arkansas	0	0	0	200 ± 195%	0	300 ± 195%	0	0
Kentucky ³	0	400 ± 98%	0	500 ± 131%	0	300 ± 131%	0	1.3 ± 139%
Louisiana	3,000 ± 80%	2,000 ± 69%	100 ± 49%	100 ± 49%	700 ± 76%	500 ± 58%	21.0 ± 94%	15.5 ± 84%
Michigan	0	0	0	1,100 ± 159%	0	3,200 ± 126%	0	0
Minnesota ³	0	600 ± 179%	0	500 ± 149%	0	800 ± 157%	0	3.4 ± 234%
Mississippi	0	0	0	2,300 ± 111%	0	2,300 ± 111%	0	0
Ohio	0	0	100 ± 194%	0	100 ± 194%	0	0	0
Tennessee	0	0	0	0	0	0	0	0
Wisconsin	700 ± 196%	0	700 ± 196%	4,300 ± 86%	4,800 ± 196%	8,900 ± 93%	1.0 ± 277%	0
Mississippi Flyway Total	3,700 ± 75%	3,200 ± 88%	900	9,300	5,600 ± 168%	17,200 ± 91%		
New Mexico	0	0	0	200 ± 196%	0	200 ± 196%	0	0
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	2,300 ± 196%	0	2,300 ± 196%	0	4,600 ± 196%	0	1.0 ± 277%
Central Flyway Total	0	2,300 ± 196%	0	2,500	0	4,800 ± 164%		
Arizona ³	<50 ± 190%	0	<50 ± 190%	<50 ± 134%	<50 ± 190%	100 ± 150%	2.0 ± 269%	0
California	2,700 ± 132%	6,000 ± 162%	900 ± 108%	800 ± 131%	2,100 ± 110%	2,500 ± 145%	3.0 ± 171%	5.7 ± 206%
Idaho	0	0	0	0	0	0	0	0
Montana	0	1,000 ± 196%	0	300 ± 196%	0	300 ± 196%	0	3.0 ± 277%
Nevada	0	<50 ± 107%	0	100 ± 132%	0	200 ± 119%	0	0.2 ± 170%
Pacific Flyway Total	2,700 ± 131%	7,000 ± 154%	900	1,200	2,100 ± 109%	3,100 ± 130%		
U.S. Total	7,400 ± 66%	13,700 ± 87%	2,300	15,000	9,300 ± 109%	27,500 ± 73%		

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

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

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

Table 20. Preliminary estimates of rail harvest and hunter activity during the 2009 and 2010 hunting seasons¹.

State and Management Unit	Rail Harvest		Active Hunters ²		Rail Days Afield		Seasonal Harvest Per Hunter	
	2009	2010	2009	2010	2009	2010	2009	2010
Connecticut	<50 ± 0%	<50 ± 70%	<50 ± 0%	<50 ± 70%	<50 ± 0%	<50 ± 70%	5.0 ± 0%	25.0 ± 99%
Delaware	0	0	0	0	0	0	0	0
Florida	6,500 ± 150%	2,300 ± 190%	900 ± 138%	600 ± 166%	2,800 ± 166%	800 ± 141%	7.0 ± 204%	3.6 ± 252%
Georgia	1,800 ± 188%	1,600 ± 104%	100 ± 137%	200 ± 96%	300 ± 153%	200 ± 96%	14.5 ± 233%	10.3 ± 142%
Maine	0	0	0	100 ± 136%	0	100 ± 136%	0	0
Maryland	100 ± 186%	1,000 ± 192%	<50 ± 186%	500 ± 192%	<50 ± 186%	2,600 ± 195%	15.0 ± 263%	2.0 ± 271%
Massachusetts	<50 ± 179%	<50 ± 138%	<50 ± 91%	100 ± 129%	<50 ± 99%	200 ± 97%	1.7 ± 201%	0.5 ± 188%
New Jersey	800 ± 134%	2,300 ± 80%	100 ± 108%	100 ± 50%	300 ± 120%	300 ± 57%	10.3 ± 172%	16.0 ± 94%
New York	4,100 ± 195%	<50 ± 192%	200 ± 178%	100 ± 95%	1,300 ± 183%	400 ± 109%	19.1 ± 264%	0.3 ± 214%
North Carolina ³	300 ± 196%	900 ± 161%	300 ± 196%	500 ± 166%	500 ± 196%	900 ± 167%	1.0 ± 277%	3.1 ± 226%
Pennsylvania	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
South Carolina	10,200 ± 156%	1,500 ± 104%	700 ± 158%	100 ± 92%	700 ± 145%	100 ± 103%	15.3 ± 222%	26.0 ± 138%
Virginia ³	5,900 ± 55%	5,800 ± 76%	400 ± 102%	400 ± 91%	800 ± 60%	900 ± 87%	15.5 ± 115%	16.1 ± 123%
West Virginia	0	0	0	0	0	0	0	0
Atlantic Flyway Total	29,800 ± 70%	15,500 ± 62%	2,700	2,700	6,700 ± 81%	6,400 ± 82%		
Alabama	0	800 ± 196%	0	1,700 ± 138%	0	11,700 ± 144%	0	0.5 ± 240%
Arkansas	0	0	0	200 ± 195%	0	300 ± 195%	0	0.0
Illinois	0	1,000 ± 182%	0	1,000 ± 182%	0	2,900 ± 182%	0	1.0 ± 257%
Indiana	<50 ± 165%	3,400 ± 189%	<50 ± 115%	800 ± 84%	<50 ± 115%	6,200 ± 100%	0.5 ± 201%	4.0 ± 207%
Iowa	<50 ± 129%	0	500 ± 134%	0	600 ± 124%	0	0.1 ± 186%	0
Kentucky	0	0	0	0	0	0	0	0
Louisiana	200 ± 137%	900 ± 126%	<50 ± 131%	100 ± 58%	<50 ± 131%	400 ± 70%	11.5 ± 190%	10.1 ± 138%
Michigan	300 ± 195%	0	100 ± 195%	200 ± 137%	500 ± 195%	1,400 ± 147%	3.0 ± 276%	0
Minnesota	900 ± 196%	2,500 ± 161%	900 ± 138%	1,100 ± 131%	9,700 ± 179%	3,700 ± 143%	1.0 ± 240%	2.4 ± 208%
Mississippi	0	0	0	2,300 ± 111%	0	2,300 ± 111%	0	0
Missouri	0	500 ± 195%	100 ± 195%	100 ± 195%	400 ± 195%	100 ± 195%	0	5.0 ± 276%
Ohio	100 ± 194%	0	100 ± 194%	0	100 ± 194%	0	1.0 ± 275%	0
Tennessee	0	0	0	0	0	0	0	0
Wisconsin	0	0	700 ± 196%	4,300 ± 86%	6,200 ± 196%	8,900 ± 93%	0	0
Mississippi Flyway Total	1,500 ± 123%	9,100 ± 88%	2,400	11,800	17,400 ± 122%	38,000 ± 81%		
Colorado	400 ± 196%	0	400 ± 196%	100 ± 195%	400 ± 196%	100 ± 195%	1.0 ± 277%	0
Kansas	4,300 ± 175%	0	1,400 ± 112%	0	7,200 ± 141%	0	3.0 ± 208%	0
Nebraska	0	0	0	100 ± 194%	0	300 ± 194%	0	0
New Mexico	0	<50 ± 182%	0	300 ± 190%	0	200 ± 196%	0	<0.1 ± 263%
Oklahoma ³	<50 ± 176%	300 ± 158%	900 ± 137%	200 ± 130%	1,300 ± 142%	500 ± 135%	0.1 ± 223%	8.4 ± 200%
Texas ³	0	2,100 ± 159%	0	1,900 ± 165%	0	2,100 ± 161%	0	1.8 ± 229%
Wyoming	0	0	0	<50 ± 155%	0	<50 ± 155%	0	0
Central Flyway Total	4,800 ± 159%	2,400 ± 115%	2,700	2,600	8,900 ± 115%	3,300 ± 120%		
U.S. Total	36,100 ± 62%	27,100 ± 57%	7,800	17,000	33,100 ± 73%	47,700 ± 56%		

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

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

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

Table 21. Preliminary estimates of rail harvest during the 2009 and 2010 hunting seasons. Species-specific estimates were derived from 5-year running averages of species composition estimates from the Migratory Bird Wing Collection Survey.

Flyway	Sora		Virginia		Clapper		King	
	2009	2010	2009	2010	2009	2010	2009	2010
Atlantic	6,400	2,900	300	200	23,100	12,500	<50	<50
Mississippi	1,500	8,900	<50	100	<50	200	<50	<50
Central	4,600	2,300	200	100	0	0	0	0
U.S. Total	12,500	14,100	500	300	23,100	12,700	<50	<50

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

Jim Robertson, Alabama Department of Conservation and Natural Resources
Kristin Wright, Alaska Department of Fish and Game
Amber Munig, Arizona Game and Fish Department
Susan Porter, Arkansas Game and Fish Commission
Kim Shepherd, California Department of Fish and Game
Ed Gorman, Colorado Division of Wildlife
Min Huang, Connecticut Department of Environmental Protection
Matthew DiBona, Delaware Department of Natural Resources and Environmental Control
Cindy Whittington, Florida Fish and Wildlife Conservation Commission
Mike England and David Neyhart, Georgia Department of Natural Resources
Craig Weidmeier, Idaho Department of Fish and Game
Craig Hill, Illinois Department of Natural Resources
Adam Phelps, Indiana Department of Natural Resources
Matthew VanGundy, Iowa Department of Natural Resources
Mary Becker, Kansas Department of Wildlife and Parks
Denise Boebinger, 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 and H Heussman, Massachusetts Division of Fisheries and Wildlife
Kristen Shuler, Michigan Department of Natural Resources
Margaret Dexter, Minnesota Department of Natural Resources
Curtis Thornhill, Mississippi Department of Wildlife, Fisheries and Parks
Julie Fleming, Missouri Department of Conservation
Hank Worsch, Montana Department of Fish, Wildlife and Parks
Mark Vrtiska, Nebraska Game and Parks Commission
Paula Lannen, Nevada Department of Wildlife
Susan Perry, New Hampshire Fish and Game Department
Barbara Stoff, New Jersey Division of Fish and Wildlife
Tim Mitchusson, New Mexico Department of Game and Fish
Mary Bailey and Bryan Swift, New York Department of Environmental Conservation
Harvey White and Bobby Dunn, North Carolina Wildlife Resources Commission
Jerel Gulke, North Dakota Game and Fish Department
Korey Brown, Ohio Department of Natural Resources
Rodney Derrick, Oklahoma Department of Wildlife Conservation
Bill Herber and Brandon Reishus, Oregon Department of Fish and Wildlife
Terry Heckrote, Pennsylvania Game Commission
Ed Ferris, Rhode Island Division of Fish and Wildlife Resources
Bruce Robb, South Carolina Department of Natural Resources
Corey Huxoll, South Dakota Game, Fish and Parks Department
Gary Clouse, Tennessee Wildlife Resources Agency
Kevin Kraai, Texas Parks and Wildlife Department
Tom Aldrich, Utah Division of Wildlife Resources

Tom Merrifield, Vermont Fish and Wildlife Department
Bob Ellis and Gary Costanzo, Virginia Department of Game and Inland Fisheries
Rajbir Deol, Washington Department of Fish and Wildlife
Larry Rucker, West Virginia Department of Natural Resources
Brian Dhuey, Wisconsin Department of Natural Resources
Jerome Espinoza, Wyoming Game and Fish Department

Appendix B. Names of waterfowl wingbee participants.

Atlantic Flyway wingbee, Laurel, MD; January 24-28, 2011

J. Bennett, MD DNR; N. Carle, USFWS; L. Coldiron, USFWS; Z. Cravens, USFWS; M. DiBona, DE DFW; C. Ferguson, USFWS (retired); C. Ferguson, Carroll County Outdoor School (volunteer); T. Fries, OSU; P. Garrettson, USFWS; C. Haskin, USFWS; R. Hossler, DE DFW; M. Hoy, Carroll County Outdoor School (volunteer); K. Jacobs, PA GC; S. Janson, USFWS; J. Joachimowski, DE DFW; J. Klimstra, USFWS; M. Livingston, USFWS (volunteer); W. Martin, USFWS (retired); M. McBride, USFWS; K. McCabe, USFWS; K. McCargo, NC WRC; P. Padding, USFWS; J. Panaccione, USFWS; J. Pape, USFWS (volunteer); M. Peters, WV DNR; B. Raftovich, USFWS; K. Richkus, USFWS; B. Rosamund, USFWS; N. Sagwitz, MD DNR; M. Simmons, USFWS; R. Slemmons, OSU; A. Snyder, USFWS; J. Stempler, PA GC; B. West, USFWS; K. Wilkins, USFWS

Mississippi Flyway wingbee, Carbondale, IL; January 31 - February 4, 2011

J. Berry, LA DWF; J. Carbaugh, AR GFC; R. Colvis, KY DFW; A. Fosado, IA DNR; T. Fries, OSU; D. Fuqua, TN WRA; B. Gray, KY DFW; J. Hanks, LA DWF; J. Hartleb, USFWS; R. Hirschboeck, USFWS; S. Jacoby, IL DNR; M. Kapsch, USFWS; J. Kleitch, MI DNR; G. Knutsen, USFWS; J. Larson, USFWS; P. Mathias, USFWS; B. Mohr, IA DNR; A. Novarra, USFWS (retired); D. Prosser, USFWS; B. Raftovich, USFWS; D. Rave, MN DNR; J. Robison, MI DNR; N. Saake, NV DOW (retired); R. Samerdyke, USFWS; K. Schaap, MN DNR; R. Vinson, MO DOC; J. Warren, OH DOW; G. Westerfield, OH DOW; N. Wirwa, USFWS

Central Flyway wingbee, Emporia, KS; February 15-18, 2011

D. Benning, USFWS (retired); T. Bidrowski, KS DWP; A.J. Brown, ND GFD; D. Butler, TX PWD; S. Crook, TX PWD; J. Dehoux, KS DWP; K. Frankki, USFWS; A. Friesen, KS DWP; J. Gammonley, CO DOW; S. Grace, OK DOW; M. Grovijahn, SD GFP; L. Hancock, USFWS; J. Hansen, USFWS; K. Hartke, TX PWD; J. Hoskins, USFWS; M. Johnson, ND GFD; Z. Kincaid, USFWS; K. Kraai, TX PWD; K. Kruse, USFWS; J. Laing, TX PWD; S. Leamon, KS DWP; N. Lyman, NE GFC (retired); F. McNew, KS DWP; R. Mort, NE GPC; R. Murano, SD GFP; J. Neal, OK DWC; M. Olds, USFWS; B. Raftovich, USFWS; J. Richardson, OK DWC; K. Richkus, USFWS; K. Schoonover, OK DWC; D. Sharp, USFWS (retired); R. Slemmons, OSU; J. Solberg, USFWS (retired); H. Spriggs, USFWS; R. Stutheit, NE GPC; M. Szymanski, ND GFD; P. Thorpe, USFWS; M. Vrtiska, NE GPC; R. Warhurst, DU

Pacific Flyway wingbee, Anderson, CA; February 21-25, 2011

K. Agner, CSU; T. Albro, USFWS; D. Bachman, USFWS; B. Bales, OR DFW; N. Baucom, USFWS; J. Beckstrand, USFWS; C. Bell, USFWS; C. Bird, CA DFG; J. Bogiatto, CSU; C. Brady, USFWS; J. Bredy, USFWS; M. Brubaker, CSU; M. Carpenter, USFWS; M. Castillo, CSU; D. Collins, USFWS; S. Cordes, CA DFG; C. Dau, USFWS; N. Garver, USFWS; G. Gerstenberg, CA DFG; B. Greeves, USFWS; J. Hoskins, USFWS; A. Inslee, USFWS; I. Jorata, USFWS; J. Journey, OR DFW; C. King, CA DFG; J. Laughlin, USDA; V. Loverti, USFWS; K. Neil, NV DOW; T. Nichols, USFWS; C. Nowak, OR DFW; S. Oldenburger, CA DFG; R. Prince, OR DFW; C. Provence, USFWS; B. Raftovich, USFWS; B. Ramey, USFWS (volunteer); S. Ramey, USFWS (volunteer); K. Richkus, USFWS; J. Rydalch, ID DFG; N. Saake, NV DOW (retired); J. Schultz, CA DFG; G. Spaan, USFWS; T. Thornton, OR DFW; B. Trost, USFWS; M. Weaver, CA DFG; B. West, USFWS; M. Wolder, USFWS; D. Yparraguirre, CA DFG

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

<http://www.fws.gov>

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