

MISSISSIPPI MAIL SURVEY OF GAME  
HARVEST AND HUNTER EFFORT FOR 1982-83

by

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## INTRODUCTION

The importance of game harvest surveys is to provide indices which will monitor changes in kill and hunter effort among seasons to determine trends. Changes in harvest regulations, habitat conditions, game population numbers and the socio-economic environment may be reflected in and monitored by changes in hunting (kill and effort) indices.

Mail surveys to obtain game harvest data result in parameter estimates (e.g. total harvest, average daily kill, average seasonal harvest, total man-days hunting) which contain serious sampling, response and nonresponse biases. As a result, the accuracy of these estimates is unknown. Filion (1980) provided a good review of these biases and their effect on the estimates.

Although there are public relation benefits from obtaining accurate figures pertaining to hunter harvest and effort, management practices require only indices of kill and effort. Parameter estimates obtained from mail surveys may not be accurate, but assuming all biases remain constant the estimates will provide good indices for trend determination. Further, Wright (1978) noted that until the wildlife profession can develop more accurate methods of estimating population numbers, measures of absolute harvest are relatively meaningless and indices to harvest should be adequate. For consumer purposes, these data (however inaccurate) are often the best available.

Therefore the primary objective of the mail survey for the 1982-83 hunting season was to provide a reliable set of statewide hunting indices for each game species in Mississippi. No attempt was made to identify potential biases and correct for their effect. For dissemination to the public these indices were to also serve as harvest and effort estimators. Secondary objectives were to obtain these indices on a regional basis and to evaluate hunter attitudes and responses on specific issues.

## METHODS

An initial sample of 3,936 sportsmen to be mailed a survey questionnaire was selected from the 1982-83 file of licenses sold. The sampling



frame was restricted to only resident holders of Sportsman's (Type 00), All Game Hunting and Fishing (Type 01), Small Game Hunting (Type 02) and Small Game Hunting and Fishing (Type 05) licenses who made their purchase during the 1982-83 fiscal year.

Steffen (1981:14) recommended sampling from 3,000-4,000 hunters in future surveys. Therefore a 1.6 percent sample of hunting sales stubs (Types 01, 02 and 05) was drawn from every box of license sales processed by the end of January, 1983. Discontinuing sampling at the end of January expedited the survey mailing as soon as possible after the close of the hunting season in February.

The total number of hunting stubs sampled each month was calculated according to Steffen (1981:45). Sampling procedures were described by Steffen (1982:8). Names and addresses were directly keypunched for each stub sampled.

All Sportsman's license (Type 00) information was maintained in a computer file. To provide a sample comparable to the other license types, only those individuals who made an initial purchase of a Sportsman's license or who renewed their old license between July 1, 1982 and the end of January, 1983 were sampled. A 1.6 percent computer generated random sample was made of these hunters. Both stub and Sportsman's license samples were combined into a single computer file for mailing purposes.

The initial mailing consisting of the questionnaire (Figure 1), a cover letter (Figure 2) and a No. 9 postage-paid business reply envelope was mailed in a No. 10 window envelope on March 18, 1983 to the sampled hunters. About three weeks after the initial mailing (April 8, 1983), reminder post cards (Figure 3) were mailed to 2,639 sampled hunters who had not returned their questionnaires by April 7, 1983. The final mailing composed of an identical questionnaire, cover letter (Figure 4) and business reply envelope was mailed about three weeks after the reminder post card mailing (May 2, 1983) to the 2,271 nonrespondents as of April 30, 1983. First mailing questionnaires were given identification numbers from 100,001 to 103,936 while the final mailing was given a 200,000 numbering sequence to differentiate responses between mailings. Questionnaires returned four weeks after the final mailing (after May 30, 1983) were not considered in the analyses.



Questionnaire design and mailing procedures were outlined by Steffen (1981). However, the mailings for the 1982-83 survey were not presorted by zip codes for reduced postal rates. Procedures for editing and keypunching returned questionnaires were also identical to Steffen (1981).

Estimates (and their standard errors) for each species were calculated for the following indices; total kill, average seasonal kill per hunter, proportion of licensed hunters, total licensed hunters, proportion of hunters who were successful, total man-days spent hunting, average days afield per hunter and the average daily kill. These indices were calculated both on a statewide and regional (as shown by the questionnaire, Figure 1) basis. The statistical and computer programming aspects of the analyses were provided by Steffen (1981).

### RESULTS

Based on all three mailings, 257 (6.5%) of the 3,936 questionnaires were returned as non-deliverable by the post office. Therefore 3,679 individuals were assumed to have been contacted to participate in the survey. Of these, 2,168 (58.9%) returned their questionnaires for possible analysis and 1,511 (41.1%) were nonresponses. Based on those questionnaires returned, 2,101 were answered and usable to some extent, 51 were returned after the acceptance deadline (4 weeks after the final mailing) and only 16 were considered completely useless.

Statewide expansions were calculated based on the 262,336 total hunting licenses sold and accounted for by the end of June, 1983. The total sales for each resident hunting license type were as follows: Type 00 = 18,849, Type 01 = 205,471, Type 02 = 21,172 and Type 05 = 16,844. Therefore there existed 262,336 individuals licensed to hunt small game and 224,320 (Types 00 + 01) of these license holders also were eligible to pursue big game (deer and turkey).

Based on the 2,101 usable responses,  $94.6 \pm 0.5$  (SE) percent of all resident license holders actually participated in a hunting activity during the 1982-83 hunting season. Therefore an estimated  $248,170 \pm 1,285$  (SE) licensees actually utilized their license for hunting purposes.

The expanded statewide summaries of total harvest, average daily kill, average seasonal kill, the percent of hunters successful, total

man-days, average seasonal days hunting, total hunters and the percent of total licensees that hunted are provided in Table 1 for all game species included in the survey. Table 2 provides the expanded statewide estimates of total harvest and the variability of these estimates (standard errors and 95 percent confidence limits) for all game species surveyed. Tables 3 - 8 summarize small game hunting on a statewide and regional basis. Waterfowl hunting is summarized in Tables 9 - 11. Tables 12 - 15 summarize fox (red and gray), bobcat and coyote hunting. Statewide and regional summaries of deer (buck and doe data from the archery, primitive weapon and gun seasons) and turkey (spring and fall) hunting are provided in Tables 16 - 24. Statewide totals will not necessarily equal the sum of the regional totals. All figures were calculated independently and were the best statistical estimates available.

The analysis of the hunter attitude and opinion questions (Part B of the questionnaire) has been completed. Results will be released as separate reports or will be available upon request from the Mississippi Department of Wildlife Conservation.

#### DISCUSSION

For management purposes, it should be reemphasized that the hunting data provided are only indices to harvest and effort, for use in conjunction with past (and future) mail surveys to determine trends. The current survey was conducted similarly to all past surveys and is therefore useful for comparison purposes.

During the 1982-83 hunting seasons, licenses were valid only for the fiscal year of purchase. Therefore unlike the two previous surveys (Steffen 1981, 1982), the current survey had a sampling frame more similar to the hunter population of interest.

Other response and nonresponse biases continue to exist with the survey as previously noted by Steffen (1981). Therefore discretion must be used when considering these data as absolute estimates. Assuming the biases remain consistent over time, the best uses of these data are as indices for trend determinations.

Harvest and effort estimates for the major game species continue to result in adequate precision with the reduced sample sizes for the



1982-83 survey. As expected, the estimates for the species of lesser hunting importance were quite poor (particularly the regional estimates).

#### RECOMMENDATIONS

As noted by Steffen (1981), it is recommended that the survey continue to be conducted annually with the reduced sample size of 3,000 - 4,000 hunters. To provide an adequate monitoring program for all game species, the survey should be expanded (11,000 - 12,000 hunters) at least every five years. Since the last large scale survey was for 1980-81, the next large survey should occur for the 1984-85 hunting season. To avoid changes in biases, attention to the consistency of survey methodologies should be continued in future surveys.

#### ACKNOWLEDGMENTS

This survey could not have been accomplished without the conscientious efforts of many MDWC personnel from all divisions. J. Adcock, S. Adcock, G. M. Allen, J. E. Dale, B. M. Ellison, C. J. Evans, E. A. Goss, B. K. Hellums, M. A. Kelly, R. L. Majors, and V. L. Womack all significantly contributed to the survey. Accounting and data processing coordination was assisted by C. K. Briscoe and J. L. Given, respectively.

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TABLE 1. Expanded statewide summary of the 1982-83 Mississippi mail survey of game harvest based on 262,336 small game license holders and 224,320 big game license holders.

Species	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Man-days	Average Seasonal Days Hunting	Total Hunters	Percent of Total Licensees <sup>a</sup>
Dove	3,349,858	6.04	24.51	92.1	559,500	4.09	137,099	52.3
Quail	1,226,987	2.98	21.46	89.1	412,475	7.24	57,562	21.9
Woodcock	36,352	0.88	4.16	91.5	38,943	4.78	8,865	3.4
Rabbit	1,753,344	1.90	14.85	92.1	884,686	7.59	118,869	45.3
Squirrel	2,625,497	2.37	15.66	93.8	1,083,956	6.52	168,315	64.2
Raccoon	224,055	0.89	8.37	92.1	243,346	9.53	27,220	10.4
All Ducks	504,425	1.69	12.53	85.8	284,657	7.21	40,455	15.4
Mallard	260,836	0.89	6.48	61.3				
Wood Duck	149,656	0.49	3.71	63.8				
Other	93,861	0.31	2.33	34.1				
Geese	1,498	0.20	0.92	38.5	7,499	5.45	1,623	0.6
Red Fox	6,743	0.11	1.32	73.2	52,167	11.27	5,119	2.0
Gray Fox	3,246	0.04	1.04	68.0	60,356	25.37	3,122	1.2
Bobcat	5,869	0.13	1.00	78.7	32,525	7.40	5,869	2.2
Coyote	19,978	0.21	1.44	82.2	54,526	6.13	13,360	5.1
All Deer	243,776	0.075	1.29	53.5	2,940,847	15.65	189,721	84.6
Buck	190,259	0.059	1.00	48.1				
Doe	53,537	0.017	0.28	20.4				
Archery Deer	16,222	0.045	0.44	25.3	317,265	8.91	37,006	16.5
Buck	8,745	0.023	0.24	16.1				
Doe	7,477	0.022	0.20	16.1				
Primitive Deer	19,771	0.080	0.51	37.3	220,749	5.93	38,401	17.1
Buck	10,012	0.040	0.26	21.1				
Doe	9,759	0.040	0.25	22.4				
Gun Deer	207,661	0.079	1.11	52.0	2,389,148	12.93	186,680	83.2
Buck	171,449	0.066	0.92	47.3				
Doe	36,242	0.013	0.19	15.3				
Turkey	45,422	0.123	0.99	52.3	355,853	7.89	46,131	20.6
Spring '82	42,123	0.121	0.95	51.7	332,911	7.62	44,737	19.9
Fall '82	3,295	0.144	0.63	43.9	22,825	4.50	5,196	2.3

<sup>a</sup>Deer and turkey percentages based on big game license holders; all others based on small game license holders.



TABLE 2. Expanded statewide estimates of total harvest (and the variability of the estimates) for all game species in Mississippi during the 1928-83 hunting season.

Species	Total Harvest	Standard Error		95% Confidence Interval	
		S E	As % of Total <sup>a</sup>	Lower Limit	Upper Limit
Dove	3,349,858	143,129	4.3	3,063,600	3,636,116
Quail	1,226,987	114,429	9.3	998,129	1,455,845
Woodcock	36,352	8,168	22.5	20,016	52,688
Rabbit	1,753,344	124,354	7.1	1,504,636	2,002,052
Squirrel	2,625,497	100,077	3.8	2,425,343	2,825,651
Raccoon	224,055	33,440	14.9	157,175	290,935
All Ducks	504,425	50,629	10.0	403,167	605,683
Mallard	260,836	31,020	11.9	198,796	322,876
Wood Duck	149,656	15,688	10.5	118,280	181,032
Other	93,861	14,670	15.6	64,521	123,201
Geese	1,498	865	57.7	232	3,228
Red Fox	6,743	2,055	30.5	2,633	10,853
Gray Fox	3,246	1,169	36.0	908	5,584
Bobcat	5,869	1,045	17.8	3,779	7,959
Coyote	19,978	2,613	13.1	14,752	25,204
All Deer	243,776	10,093	4.1	223,590	263,962
Buck	190,259	8,314	4.4	173,631	206,887
Doe	53,537	3,701	6.9	46,135	60,939
Archery Deer	16,222	2,381	14.7	11,460	20,984
Buck	8,745	1,702	19.5	5,341	12,149
Doe	7,477	1,196	16.0	5,085	9,869
Primitive Deer	19,771	2,084	10.5	15,603	23,939
Buck	10,012	1,397	14.0	7,218	12,806
Doe	9,759	1,214	12.4	7,331	12,187
Gun Deer	207,661	8,523	4.1	190,615	224,707
Buck	171,449	7,316	4.3	156,817	186,081
Doe	36,242	3,039	8.4	30,164	42,320
Turkey	45,422	3,580	7.9	38,262	52,582
Spring '82	42,123	3,371	8.0	35,381	48,865
Fall '82	3,295	875	26.6	1,545	5,045

<sup>a</sup> % = 100 (SE/Total Harvest)

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Turkey	45,422	0.123	0.99	52.3	355,853	7.89	46,131	20.6
Spring '82	42,123	0.121	0.95	51.7	332,911	7.62	44,737	19.9
Fall '82	3,295	0.144	0.63	43.9	22,825	4.50	5,196	2.3

<sup>a</sup>Deer and turkey percentages based on big game license holders; all others based on small game license holders.



TABLE 2. Expanded statewide estimates of total harvest (and the variability of the estimates) for all game species in Mississippi during the 1928-83 hunting season.

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Woodcock	36,352	8,168	22.5	20,016	52,688
Rabbit	1,753,344	124,354	7.1	1,504,636	2,002,052
Squirrel	2,625,497	100,077	3.8	2,425,343	2,825,651
Raccoon	224,055	33,440	14.9	157,175	290,935
All Ducks	504,425	50,629	10.0	403,167	605,683
Mallard	260,836	31,020	11.9	198,796	322,876
Wood Duck	149,656	15,688	10.5	118,280	181,032
Other	93,861	14,670	15.6	64,521	123,201
Geese	1,498	865	57.7	232	3,228
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All Deer	243,776	10,093	4.1	223,590	263,962
Buck	190,259	8,314	4.4	173,631	206,887
Doe	53,537	3,701	6.9	46,135	60,939
Archery Deer	16,222	2,381	14.7	11,460	20,984
Buck	8,745	1,702	19.5	5,341	12,149
Doe	7,477	1,196	16.0	5,085	9,869
Primitive Deer	19,771	2,084	10.5	15,603	23,939
Buck	10,012	1,397	14.0	7,218	12,806
Doe	9,759	1,214	12.4	7,331	12,187
Gun Deer	207,661	8,523	4.1	190,615	224,707
Buck	171,449	7,316	4.3	156,817	186,081
Doe	36,242	3,039	8.4	30,164	42,320
Turkey	45,422	3,580	7.9	38,262	52,582
Spring '82	42,123	3,371	8.0	35,381	48,865
Fall '82	3,295	875	26.6	1,545	5,045

<sup>a</sup> % = 100 (SE/Total Harvest)



TABLE 3. Expanded statewide and regional summaries of DOVE hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	769,468	6.22	25.41	90.4	126,189	4.15	30,308	22.3
	(SE)	(76,395)	(0.28)	(2.00)	(1.9)	(10,867)	(0.25)	(1,837)	(1.3)
	N	2079	240	240	240	2081	241	1083	1083
2	Estimate	1,381,586	6.37	26.84	93.6	219,475	4.25	51,562	37.9
	(SE)	(108,891)	(0.29)	(1.75)	(1.2)	(14,791)	(0.22)	(2,283)	(1.5)
	N	2079	408	408	409	2081	410	1083	1083
3	Estimate	218,172	4.94	19.87	89.8	44,878	4.05	11,193	8.2
	(SE)	(36,075)	(0.63)	(2.55)	(3.2)	(6,721)	(0.44)	(1,161)	(0.8)
	N	2079	86	87	88	2081	88	1083	1083
4	Estimate	732,875	6.07	23.05	91.7	121,146	3.81	31,943	23.5
	(SE)	(64,738)	(0.28)	(1.52)	(1.7)	(9,332)	(0.19)	(1,879)	(1.3)
	N	2079	251	252	254	2081	252	1083	1083
5	Estimate	230,412	5.04	20.52	95.5	43,996	4.01	11,193	8.2
	(SE)	(35,583)	(0.46)	(2.36)	(2.2)	(6,175)	(0.38)	(1,161)	(0.8)
	N	2079	87	89	89	2081	87	1083	1083
									Percent of Total Licensees
Statewide	Estimate	3,349,858	6.04	24.51	92.1	559,500	4.09	137,099	52.3
	(SE)	(143,129)	(0.16)	(0.91)	(0.8)	(19,953)	(0.12)	(2,859)	(1.1)
	N	2094	1085	1091	1095	2094	1091	2101	2101

TABLE 4. Expanded statewide and regional summaries of QUAIL hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	141,800	3.02	18.78	83.6	46,954	6.22	7,660	13.6
	(SE)	(37,913)	(0.31)	(4.45)	(4.8)	(10,333)	(1.13)	(967)	(1.6)
	N	2085	60	60	61	2084	60	449	449
2	Estimate	704,973	3.13	25.47	90.9	225,453	8.18	27,753	49.2
	(SE)	(94,185)	(0.26)	(3.00)	(1.9)	(27,032)	(0.83)	(1,766)	(2.4)
	N	2085	218	220	220	2084	219	449	449
3	Estimate	51,712	2.91	21.63	90.0	18,253	7.25	2,512	4.5
	(SE)	(24,069)	(0.58)	(9.01)	(6.9)	(7,896)	(2.76)	(559)	(1.0)
	N	2085	19	19	20	2084	20	449	449
4	Estimate	203,326	2.66	17.57	89.2	76,284	6.59	11,679	20.7
	(SE)	(39,647)	(0.29)	(2.93)	(3.2)	(13,017)	(0.91)	(1,184)	(1.9)
	N	2085	91	92	93	2084	92	449	449
5	Estimate	117,391	3.07	17.28	87.0	37,890	5.68	6,781	12.0
	(SE)	(34,676)	(0.57)	(4.59)	(4.6)	(7,969)	(0.92)	(911)	(1.5)
	N	2085	53	54	54	2084	53	449	449
									Percent of Total Licensees
Statewide	Estimate	1,226,987	2.98	21.46	89.1	412,475	7.24	57,562	21.9
	(SE)	(114,429)	(0.17)	(1.80)	(1.5)	(33,023)	(0.50)	(2,369)	(0.9)
	N	2097	452	457	460	2095	455	2101	2101

TABLE 5. Expanded statewide and regional summaries of WOODCOCK hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	2,253	0.58	1.80	80.0	3,887	3.10	1,251	14.9
	(SE)	(848)	(0.33)	(0.39)	(13.3)	(2,554)	(1.88)	(395)	(4.4)
	N	2096	10	10	10	2092	10	67	67
2	Estimate	6,008	0.69	2.53	100.0	8,151	3.82	2,377	28.4
	(SE)	(1,801)	(0.18)	(0.50)	(0.0)	(3,685)	(1.51)	(543)	(5.5)
	N	2096	17	19	19	2092	17	67	67
3	Estimate	1,252	1.33	2.50	80.0	878	1.75	626	7.5
	(SE)	(849)	(0.88)	(1.32)	(20.0)	(546)	(0.75)	(279)	(3.2)
	N	2096	3	4	5	2092	4	67	67
4	Estimate	19,775	1.00	7.52	90.5	18,559	7.40	2,627	31.3
	(SE)	(7,547)	(0.27)	(2.42)	(6.6)	(6,368)	(1.98)	(571)	(5.7)
	N	2096	20	21	21	2092	20	67	67
5	Estimate	6,133	0.89	4.08	100.0	6,772	4.91	1,501	17.9
	(SE)	(2,294)	(0.20)	(1.02)	(0.0)	(2,851)	(1.52)	(432)	(4.7)
	N	2096	11	12	12	2092	11	67	67
									Percent of Total Licensees
Statewide	Estimate	36,352	0.88	4.16	91.5	38,943	4.78	8,865	3.4
	(SE)	(8,168)	(0.15)	(0.80)	(3.3)	(8,282)	(0.84)	(1,034)	(0.4)
	N	2100	64	70	71	2095	65	2101	2101



TABLE 6. Expanded statewide and regional summaries of RABBIT hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	398,864	2.16	16.97	89.0	159,558	7.02	23,499	20.5
	(SE)	(63,174)	(0.26)	(2.41)	(2.3)	(25,785)	(1.02)	(1,658)	(1.4)
	N	2031	174	182	182	2019	175	894	894
2	Estimate	567,297	2.11	15.74	92.1	268,573	7.49	36,339	31.7
	(SE)	(74,128)	(0.20)	(1.86)	(1.6)	(25,261)	(0.57)	(2,005)	(1.6)
	N	2031	273	279	280	2019	276	894	894
3	Estimate	125,033	1.56	10.08	92.8	81,988	6.51	12,584	11.0
	(SE)	(21,118)	(0.21)	(1.38)	(2.6)	(13,081)	(0.82)	(1,241)	(1.0)
	N	2031	95	96	97	2019	97	894	894
4	Estimate	335,315	1.64	11.80	93.7	200,098	7.03	28,635	24.9
	(SE)	(49,500)	(0.20)	(1.57)	(1.6)	(21,843)	(0.62)	(1,810)	(1.4)
	N	2031	217	220	222	2019	219	894	894
5	Estimate	283,132	1.88	20.87	95.3	143,317	10.71	13,740	12.0
	(SE)	(69,077)	(0.34)	(4.71)	(2.1)	(26,127)	(1.67)	(1,293)	(1.1)
	N	2031	102	105	106	2019	103	894	894
									Percent of Total Licensees
Statewide	Estimate	1,753,344	1.90	14.85	92.1	884,686	7.59	118,869	45.3
	(SE)	(124,354)	(0.10)	(0.99)	(0.9)	(48,197)	(0.37)	(2,850)	(1.1)
	N	2089	910	940	945	2068	919	2101	2101

TABLE 7. Expanded statewide and regional summaries of SQUIRREL hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	363,054	2.33	12.35	94.2	154,223	5.31	29,479	17.9
	(SE)	(34,879)	(0.18)	(0.90)	(1.6)	(17,078)	(0.48)	(1,840)	(1.1)
	N	2016	219	226	226	1997	221	1276	1276
2	Estimate	856,105	2.40	15.66	91.9	351,139	6.43	54,691	33.2
	(SE)	(72,193)	(0.15)	(1.13)	(1.3)	(25,294)	(0.37)	(2,366)	(1.3)
	N	2016	414	420	421	1997	416	1276	1276
3	Estimate	397,668	2.48	18.30	95.2	163,024	7.52	21,851	13.2
	(SE)	(43,437)	(0.22)	(1.47)	(1.6)	(19,290)	(0.69)	(1,610)	(0.9)
	N	2016	163	167	168	1997	165	1276	1276
4	Estimate	733,656	2.45	17.96	94.3	289,660	7.16	41,115	24.9
	(SE)	(61,595)	(0.15)	(1.19)	(1.3)	(24,304)	(0.47)	(2,118)	(1.2)
	N	2016	305	314	316	1997	308	1276	1276
5	Estimate	248,022	2.13	14.01	95.6	114,550	6.51	17,842	10.8
	(SE)	(29,683)	(0.21)	(1.21)	(1.8)	(15,745)	(0.71)	(1,467)	(0.9)
	N	2016	132	136	136	1997	134	1276	1276
									Percent of Total Licensees
Statewide	Estimate	2,625,497	2.37	15.66	93.8	1,083,956	6.52	168,315	64.2
	(SE)	(100,077)	(0.08)	(0.54)	(0.7)	(40,457)	(0.22)	(2,745)	(1.0)
	N	2087	1289	1334	1339	2054	1301	2101	2101



TABLE 8. Expanded statewide and regional summaries of RACCOON hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	52,945	0.98	10.79	89.7	51,810	11.08	4,895	18.8
	(SE)	(15,668)	(0.11)	(2.73)	(4.9)	(15,563)	(2.83)	(777)	(2.7)
	N	2086	37	39	39	2076	37	207	207
2	Estimate	73,821	0.81	8.89	92.6	91,489	11.68	8,535	32.9
	(SE)	(20,769)	(0.13)	(2.28)	(3.2)	(19,796)	(2.08)	(1,018)	(3.3)
	N	2086	61	66	68	2076	62	207	207
3	Estimate	46,783	1.16	12.83	89.7	36,014	10.56	3,766	14.5
	(SE)	(17,897)	(0.39)	(4.37)	(5.8)	(12,518)	(3.12)	(683)	(2.5)
	N	2086	26	29	29	2076	27	207	207
4	Estimate	29,679	0.78	5.13	95.7	35,003	6.16	5,899	22.7
	(SE)	(9,098)	(0.15)	(1.40)	(3.0)	(8,074)	(1.10)	(851)	(2.9)
	N	2086	44	46	46	2076	45	207	207
5	Estimate	10,690	0.44	3.70	91.3	24,136	8.68	2,887	11.1
	(SE)	(3,033)	(0.13)	(0.73)	(6.0)	(9,001)	(2.73)	(599)	(2.2)
	N	2086	22	23	23	2076	22	207	207
									Percent of Total Licensees
Statewide	Estimate	224,055	0.89	8.37	92.1	243,346	9.53	27,220	10.4
	(SE)	(33,440)	(0.09)	(1.13)	(1.8)	(30,236)	(1.00)	(1,746)	(0.7)
	N	2097	200	214	216	2086	203	2101	2101

TABLE 9. Expanded statewide and regional summaries of ALL DUCK hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	265,738	2.00	18.03	89.7	123,341	8.42	14,854	38.4
	(SE)	(41,795)	(0.17)	(2.34)	(2.8)	(15,752)	(0.76)	(1,328)	(2.8)
	N	2082	115	117	117	2078	116	307	307
2	Estimate	128,648	1.50	11.22	83.5	83,448	7.43	11,455	29.6
	(SE)	(23,841)	(0.14)	(1.74)	(3.9)	(12,370)	(0.79)	(1,175)	(2.6)
	N	2082	89	91	91	2078	89	307	307
3	Estimate	34,903	1.56	9.23	83.3	22,345	5.90	3,776	9.8
	(SE)	(11,048)	(0.33)	(2.44)	(6.9)	(5,955)	(1.17)	(685)	(1.7)
	N	2082	30	30	30	2078	30	307	307
4	Estimate	31,248	1.12	6.20	82.5	28,026	5.55	5,035	13.0
	(SE)	(8,205)	(0.17)	(1.32)	(6.1)	(6,720)	(1.02)	(789)	(1.9)
	N	2082	40	40	40	2078	40	307	307
5	Estimate	29,106	1.38	8.56	82.1	21,209	6.46	3,525	9.1
	(SE)	(10,628)	(0.39)	(2.71)	(7.4)	(5,083)	(0.92)	(662)	(1.6)
	N	2082	25	27	28	2078	26	307	307
									Percent of Total Licensees
Statewide	Estimate	504,425	1.69	12.53	85.8	284,657	7.21	40,455	15.4
	(SE)	(50,629)	(0.10)	(1.08)	(1.9)	(21,988)	(0.41)	(2,067)	(0.8)
	N	2099	313	322	323	2092	315	2101	2101



TABLE 10. Expanded statewide and regional summaries of MALLARD, WOOD DUCK, and OTHER DUCK in Mississippi during the 1982-83 hunting season.

Region	Statistic	MALLARDS				WOOD DUCKS				OTHER DUCKS			
		Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters
1	Estimate	168,465	1.32	11.43	84.6	50,503	0.35	3.43	59.0	46,747	0.33	3.17	41.9
	(SE)	(26,560)	(0.14)	(1.49)	(3.3)	(10,060)	(0.04)	(0.61)	(4.6)	(10,489)	(0.05)	(0.65)	(4.6)
	N	2082	115	117	117	2083	115	117	117	2082	115	117	117
2	Estimate	62,245	0.74	5.43	61.5	48,865	0.56	4.26	67.0	17,514	0.20	1.53	34.1
	(SE)	(14,920)	(0.12)	(1.18)	(5.1)	(9,654)	(0.08)	(0.72)	(5.0)	(4,179)	(0.04)	(0.33)	(5.0)
	N	2082	89	91	91	2083	89	91	91	2082	89	91	91
3	Estimate	13,104	0.59	3.47	43.3	12,972	0.58	3.43	66.7	8,820	0.40	2.33	26.7
	(SE)	(5,410)	(0.18)	(1.31)	(9.2)	(3,821)	(0.14)	(0.81)	(8.8)	(3,961)	(0.14)	(0.97)	(8.2)
	N	2082	30	30	30	2083	30	30	30	2082	30	30	30
4	Estimate	6,174	0.22	1.23	30.0	21,158	0.76	4.20	75.0	3,906	0.14	0.78	12.5
	(SE)	(2,655)	(0.08)	(0.50)	(7.3)	(5,543)	(0.09)	(0.89)	(6.9)	(1,979)	(0.07)	(0.38)	(5.3)
	N	2082	40	40	40	2083	40	40	40	2082	40	40	40
5	Estimate	3,402	0.16	1.00	28.6	10,327	0.49	2.93	53.6	15,372	0.72	4.52	42.9
	(SE)	(1,505)	(0.07)	(0.41)	(8.7)	(3,396)	(0.09)	(0.80)	(9.6)	(8,525)	(0.38)	(2.40)	(9.5)
	N	2082	25	27	28	2083	26	28	28	2082	25	27	28
Statewide	Estimate	260,836	0.89	6.48	61.3	149,656	0.49	3.71	63.8	93,861	0.31	2.33	34.1
	(SE)	(31,020)	(0.08)	(0.70)	(2.7)	(15,688)	(0.04)	(0.34)	(2.7)	(14,670)	(0.04)	(0.34)	(2.6)
	N	2099	313	322	323	2100	314	323	323	2099	313	322	323

TABLE 11. Expanded statewide and regional summaries of GOOSE hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	125	0.09	0.33	33.3	1,375	3.67	375	25.0
	(SE)	(125)	(0.08)	(0.33)	(33.3)	(838)	(0.88)	(216)	(13.1)
	N	2100	3	3	3	2099	3	12	12
2	Estimate	1,124	0.24	1.50	33.3	4,624	6.17	750	50.0
	(SE)	(838)	(0.08)	(1.02)	(21.1)	(2,470)	(2.33)	(306)	(15.1)
	N	2100	6	6	6	2099	6	12	12
3	Estimate	250	0.17	1.00	100.0	1,500	6.00	250	16.7
	(SE)	(177)	(0.14)	(0.00)	(0.0)	(1,380)	(5.00)	(177)	(11.2)
	N	2100	2	2	2	2099	2	12	12
4	Estimate	0	-	-	-	0	-	0	0
	(SE)	(0)	-	-	-	(0)	-	(0)	(0.0)
	N	2100	-	-	-	2099	-	12	12
5	Estimate	0	-	0.00	0.0	0	-	125	8.3
	(SE)	(0)	-	-	-	(0)	-	(125)	(8.3)
	N	2100	-	1	1	2099	-	12	12
									Percent of Total Licensees
Statewide	Estimate	1,498	0.20	0.92	38.5	7,499	5.45	1,623	0.6
	(SE)	(865)	(0.06)	(0.49)	(14.0)	(2,948)	(1.45)	(449)	(0.2)
	N	2101	11	13	13	2099	11	2101	2101



TABLE 12. Expanded statewide and regional summaries of RED FOX hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	3,378	0.89	2.70	80.0	3,383	3.00	1,251	27.0
	(SE)	(1,917)	(0.62)	(1.34)	(13.3)	(1,578)	(1.04)	(395)	(7.4)
	N	2097	9	10	10	2094	9	37	37
2	Estimate	1,251	0.04	1.00	60.0	26,810	23.78	1,251	27.0
	(SE)	(530)	(0.03)	(0.30)	(16.3)	(14,685)	(10.97)	(395)	(7.4)
	N	2097	9	10	10	2094	9	37	37
3	Estimate	375	0.16	1.00	66.7	2,380	6.33	375	8.1
	(SE)	(280)	(0.19)	(0.58)	(33.3)	(1,920)	(4.37)	(217)	(4.5)
	N	2097	3	3	3	2094	3	37	37
4	Estimate	1,251	0.08	0.91	90.9	14,658	11.70	1,376	29.7
	(SE)	(395)	(0.08)	(0.09)	(9.1)	(13,048)	(10.26)	(414)	(7.6)
	N	2097	10	11	11	2094	10	37	37
5	Estimate	250	0.40	0.67	66.7	626	1.67	375	8.1
	(SE)	(177)	(0.36)	(0.33)	(33.3)	(415)	(0.67)	(217)	(4.5)
	N	2097	3	3	3	2094	3	37	37
									Percent of Total Licensees
Statewide	Estimate	6,743	0.11	1.32	73.2	52,167	11.27	5,119	2.0
	(SE)	(2,055)	(0.06)	(0.35)	(7.0)	(20,116)	(3.99)	(792)	(0.3)
	N	2101	37	41	41	2097	37	2101	2101

TABLE 13. Expanded statewide and regional summaries of GRAY FOX hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	625	0.04	1.25	75.0	12,277	32.67	500	17.4
	(SE)	(414)	(0.01)	(0.63)	(25.0)	(10,849)	(26.77)	(250)	(8.1)
	N	2099	3	4	4	2094	3	23	23
2	Estimate	1,750	0.05	1.40	70.0	27,812	31.71	1,250	43.5
	(SE)	(1,045)	(0.04)	(0.75)	(15.3)	(14,947)	(13.10)	(394)	(10.6)
	N	2099	7	10	10	2094	7	23	23
3	Estimate	125	0.06	0.50	50.0	2,004	8.00	250	8.7
	(SE)	(125)	(0.12)	(0.50)	(50.0)	(1,883)	(7.00)	(177)	(6.0)
	N	2099	2	2	2	2094	2	23	23
4	Estimate	500	0.03	0.80	80.0	16,036	25.60	625	21.7
	(SE)	(250)	(0.03)	(0.20)	(20.0)	(13,217)	(19.82)	(279)	(8.8)
	N	2099	5	5	5	2094	5	23	23
5	Estimate	125	0.00	0.50	50.0	1,754	14.00	250	8.7
	(SE)	(125)	-	(0.50)	(50.0)	(1,754)	-	(177)	(6.0)
	N	2099	1	2	2	2094	1	23	23
									Percent of Total Licensees
Statewide	Estimate	3,246	0.04	1.04	68.0	60,356	25.37	3,122	1.2
	(SE)	(1,169)	(0.02)	(0.32)	(9.5)	(22,825)	(7.85)	(621)	(0.2)
	N	2101	19	25	25	2094	19	2101	2101



TABLE 14. Expanded statewide and regional summaries of BOBCAT hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	1,502	0.06	0.92	69.2	12,828	12.75	1,627	31.0
	(SE)	(530)	(0.04)	(0.21)	(13.3)	(10,892)	(10.52)	(450)	(7.2)
	N	2096	8	13	13	2086	8	42	42
2	Estimate	1,377	0.30	1.22	88.9	4,150	4.13	1,126	21.4
	(SE)	(545)	(0.08)	(0.28)	(11.1)	(2,114)	(1.62)	(375)	(6.4)
	N	2096	8	9	9	2086	8	42	42
3	Estimate	375	0.09	1.00	66.7	2,767	11.00	375	7.1
	(SE)	(280)	(0.12)	(0.58)	(33.3)	(2,081)	(4.00)	(217)	(4.0)
	N	2096	2	3	3	2086	2	42	42
4	Estimate	1,502	0.13	0.86	71.4	9,809	6.50	1,752	33.3
	(SE)	(530)	(0.09)	(0.21)	(12.5)	(6,646)	(4.16)	(467)	(7.4)
	N	2096	12	14	14	2086	12	42	42
5	Estimate	501	1.00	1.33	100.0	252	1.00	375	7.1
	(SE)	(306)	(0.00)	(0.33)	(0.0)	(178)	(0.00)	(217)	(4.0)
	N	2096	2	3	3	2086	2	42	42
									Percent of Total Licensees
Statewide	Estimate	5,869	0.13	1.00	78.7	32,525	7.40	5,869	2.2
	(SE)	(1,045)	(0.05)	(0.11)	(6.0)	(13,215)	(2.78)	(847)	(0.3)
	N	2101	35	47	47	2089	35	2101	2101

TABLE 15. Expanded statewide and regional summaries of COYOTE hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	3,640	0.15	1.45	75.0	13,867	8.38	2,510	20.8
	(SE)	(1,168)	(0.07)	(0.34)	(9.9)	(11,026)	(6.50)	(559)	(4.2)
	N	2090	13	20	20	2062	13	96	96
2	Estimate	8,912	0.33	1.74	84.2	17,557	4.93	4,770	39.6
	(SE)	(1,995)	(0.14)	(0.29)	(6.0)	(7,267)	(1.85)	(767)	(5.0)
	N	2090	28	38	38	2062	28	96	96
3	Estimate	1,004	0.20	1.14	85.7	2,544	5.00	879	7.3
	(SE)	(434)	(0.21)	(0.26)	(14.3)	(1,954)	(3.37)	(332)	(2.7)
	N	2090	4	7	7	2062	4	96	96
4	Estimate	3,766	0.20	1.30	78.3	13,613	5.63	2,887	24.0
	(SE)	(1,017)	(0.10)	(0.23)	(8.8)	(7,013)	(2.67)	(599)	(4.4)
	N	2090	19	23	23	2062	19	96	96
5	Estimate	1,004	0.15	1.00	87.5	3,308	6.50	1,004	8.3
	(SE)	(396)	(0.07)	(0.19)	(12.5)	(2,143)	(3.10)	(354)	(2.8)
	N	2090	4	8	8	2062	4	96	96
									Percent of Total Licensees
Statewide	Estimate	19,978	0.21	1.44	82.2	54,526	6.13	13,360	5.1
	(SE)	(2,613)	(0.05)	(0.13)	(3.7)	(15,402)	(1.59)	(1,259)	(0.5)
	N	2101	70	107	107	2064	70	2101	2101



TABLE 16. Expanded statewide and regional summaries of ARCHERY DEER hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	2,038	0.044	0.31	23.5	46,861	7.18	6,496	18.0
	(SE)	(622)	(0.014)	(0.09)	(6.0)	(10,584)	(1.30)	(897)	(2.3)
	N	1761	51	51	51	1752	51	283	283
2	Estimate	3,057	0.029	0.30	19.8	82,712	8.61	10,318	28.6
	(SE)	(880)	(0.008)	(0.08)	(4.5)	(12,681)	(0.90)	(1,120)	(2.7)
	N	1761	75	81	81	1752	75	283	283
3	Estimate	3,821	0.052	0.59	37.3	68,756	10.74	6,496	18.0
	(SE)	(966)	(0.013)	(0.13)	(6.8)	(13,083)	(1.40)	(897)	(2.3)
	N	1761	50	51	51	1752	50	283	283
4	Estimate	5,350	0.062	0.57	24.3	83,224	8.90	9,426	26.1
	(SE)	(1,761)	(0.019)	(0.18)	(5.0)	(11,882)	(0.76)	(1,073)	(2.6)
	N	1761	73	74	74	1752	73	283	283
5	Estimate	892	0.028	0.27	15.4	32,393	10.12	3,312	9.2
	(SE)	(555)	(0.013)	(0.16)	(7.2)	(9,663)	(2.30)	(645)	(1.7)
	N	1761	25	26	26	1752	25	283	283
									Percent of Total Licensees <sup>a</sup>
Statewide	Estimate	16,222	0.045	0.44	25.3	317,265	8.91	37,006	16.5
	(SE)	(2,381)	(0.007)	(0.06)	(2.5)	(25,180)	(0.51)	(1,980)	(0.9)
	N	1770	279	292	292	1757	279	1770	1770

<sup>a</sup> Calculated as a percent of big game license holders only.

TABLE 17. Expanded statewide and regional summaries of ARCHERY BUCK and DOE hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	BUCKS				DOES			
		Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters
1	Estimate	1,146	0.025	0.18	15.7	892	0.019	0.14	11.8
	(SE)	(422)	(0.010)	(0.06)	(5.1)	(382)	(0.008)	(0.06)	(4.6)
	N	1761	51	51	51	1761	51	51	51
2	Estimate	1,401	0.012	0.14	7.4	1,656	0.017	0.16	13.6
	(SE)	(685)	(0.007)	(0.07)	(2.9)	(524)	(0.005)	(0.05)	(3.8)
	N	1761	75	81	81	1761	75	81	81
3	Estimate	2,038	0.028	0.31	25.5	1,783	0.024	0.27	25.5
	(SE)	(622)	(0.008)	(0.09)	(6.2)	(508)	(0.007)	(0.07)	(6.2)
	N	1761	50	51	51	1761	50	51	51
4	Estimate	2,802	0.032	0.30	17.6	2,548	0.029	0.27	18.9
	(SE)	(1,247)	(0.014)	(0.13)	(4.5)	(783)	(0.008)	(0.08)	(4.6)
	N	1761	73	74	74	1761	73	74	74
5	Estimate	255	0.008	0.08	7.7	637	0.020	0.19	11.5
	(SE)	(180)	(0.005)	(0.05)	(5.3)	(422)	(0.010)	(0.12)	(6.4)
	N	1761	25	26	26	1761	25	26	26
Statewide	Estimate	8,745	0.023	0.24	16.1	7,477	0.022	0.20	16.1
	(SE)	(1,702)	(0.005)	(0.04)	(2.2)	(1,196)	(0.003)	(0.03)	(2.2)
	N	1770	279	292	292	1770	279	292	292



TABLE 18. Expanded statewide and regional summaries of PRIMITIVE WEAPON DEER hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	4,458	0.113	0.60	44.8	36,106	5.04	7,388	19.7
	(SE)	(939)	(0.024)	(0.10)	(6.6)	(6,033)	(0.52)	(954)	(2.3)
	N	1761	56	58	58	1752	56	294	294
2	Estimate	4,713	0.085	0.47	36.7	53,007	5.45	10,063	26.9
	(SE)	(938)	(0.014)	(0.08)	(5.5)	(7,247)	(0.43)	(1,107)	(2.6)
	N	1761	76	79	79	1752	76	294	294
3	Estimate	3,949	0.081	0.58	35.8	41,100	6.17	6,751	18.0
	(SE)	(1,185)	(0.023)	(0.16)	(6.7)	(7,145)	(0.67)	(914)	(2.2)
	N	1761	52	53	53	1752	52	294	294
4	Estimate	5,605	0.075	0.54	39.0	70,292	6.78	10,445	27.9
	(SE)	(1,088)	(0.012)	(0.09)	(5.4)	(9,979)	(0.62)	(1,127)	(2.6)
	N	1761	81	82	82	1752	81	294	294
5	Estimate	510	0.022	0.18	13.6	17,285	6.75	2,802	7.5
	(SE)	(312)	(0.016)	(0.11)	(7.5)	(5,213)	(1.41)	(594)	(1.5)
	N	1761	20	22	22	1752	20	294	294
									Percent of Total Licensees
Statewide	Estimate	19,771	0.080	0.51	37.3	220,749	5.93	38,401	17.1
	(SE)	(2,084)	(0.008)	(0.05)	(2.8)	(15,709)	(0.28)	(2,009)	(0.9)
	N	1770	292	303	303	1759	292	1770	1770

TABLE 19. Expanded statewide and regional summaries of PRIMITIVE WEAPON BUCK and DOE hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	BUCKS			Total Harvest	DOES		
			Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters		Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters
1	Estimate	1,783	0.039	0.24	20.7	2,675	0.074	0.36	32.8
	(SE)	(539)	(0.012)	(0.07)	(5.4)	(634)	(0.017)	(0.07)	(6.2)
	N	1761	56	58	58	1761	56	58	58
2	Estimate	2,038	0.039	0.20	20.3	2,675	0.046	0.27	21.5
	(SE)	(507)	(0.008)	(0.05)	(4.6)	(683)	(0.011)	(0.06)	(4.7)
	N	1761	76	79	79	1761	76	79	79
3	Estimate	2,293	0.047	0.34	22.6	1,656	0.034	0.25	22.6
	(SE)	(843)	(0.018)	(0.12)	(5.8)	(492)	(0.010)	(0.07)	(5.8)
	N	1761	52	53	53	1761	52	53	53
4	Estimate	3,312	0.042	0.32	24.4	2,293	0.033	0.22	20.7
	(SE)	(802)	(0.009)	(0.07)	(4.8)	(567)	(0.007)	(0.05)	(4.5)
	N	1761	81	82	82	1761	81	82	82
5	Estimate	510	0.022	0.18	13.6	0	0.000	0.00	0.0
	(SE)	(312)	(0.016)	(0.11)	(7.5)	0	(0.000)	(0.00)	(0.0)
	N	1761	20	22	22	1761	20	22	22
Statewide	Estimate	10,012	0.040	0.26	21.1	9,759	0.040	0.25	22.4
	(SE)	(1,397)	(0.005)	(0.03)	(2.3)	(1,214)	(0.005)	(0.03)	(2.4)
	N	1770	292	303	303	1770	292	303	303



TABLE 20. Expanded statewide and regional summaries of REGULAR GUN DEER hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	41,169	0.106	1.28	57.2	367,256	11.62	31,971	17.3
	(SE)	(4,351)	(0.008)	(0.11)	(3.2)	(28,919)	(0.58)	(1,900)	(1.0)
	N	1700	231	243	243	1640	231	1408	1408
2	Estimate	57,268	0.065	0.88	46.2	852,142	13.03	64,994	35.1
	(SE)	(4,451)	(0.004)	(0.06)	(2.2)	(46,678)	(0.51)	(2,465)	(1.3)
	N	1700	478	493	493	1640	478	1408	1408
3	Estimate	38,530	0.107	1.48	62.6	352,483	13.71	26,182	14.1
	(SE)	(4,393)	(0.010)	(0.14)	(3.4)	(30,182)	(0.70)	(1,745)	(0.9)
	N	1700	186	197	198	1640	188	1408	1408
4	Estimate	50,670	0.082	1.17	57.0	589,661	13.82	43,417	23.4
	(SE)	(4,609)	(0.006)	(0.09)	(2.7)	(38,708)	(0.57)	(2,147)	(1.1)
	N	1700	311	329	330	1640	312	1408	1408
5	Estimate	12,404	0.043	0.67	36.2	238,819	13.03	18,682	10.1
	(SE)	(2,023)	(0.006)	(0.09)	(4.1)	(24,928)	(0.83)	(1,502)	(0.8)
	N	1700	133	141	141	1640	134	1408	1408
									Percent of Total Licensees
Statewide	Estimate	207,661	0.079	1.11	52.0	2,389,148	12.93	186,680	83.2
	(SE)	(8,523)	(0.003)	(0.04)	(1.3)	(57,037)	(0.27)	(1,993)	(0.9)
	N	1764	1381	1467	1470	1683	1386	1770	1770

TABLE 21. Expanded statewide and regional summaries of REGULAR GUN BUCK and DOE hunting in Mississippi during the 1982-83 hunting season.

Region	Statistic	BUCKS				DOES			
		Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters
1	Estimate	34,308	0.088	1.07	53.5	6,862	0.018	0.21	18.5
	(SE)	(3,849)	(0.007)	(0.10)	(3.2)	(1,076)	(0.003)	(0.03)	(2.5)
	N	1700	231	243	243	1700	231	243	243
2	Estimate	47,371	0.054	0.73	41.4	9,896	0.012	0.15	13.2
	(SE)	(3,923)	(0.004)	(0.05)	(2.2)	(1,264)	(0.001)	(0.02)	(1.5)
	N	1700	478	493	493	1700	478	493	493
3	Estimate	31,537	0.087	1.21	56.6	6,994	0.020	0.27	19.7
	(SE)	(3,642)	(0.008)	(0.11)	(3.5)	(1,302)	(0.003)	(0.05)	(2.8)
	N	1700	186	197	198	1700	186	197	198
4	Estimate	43,017	0.070	0.99	51.5	7,653	0.012	0.18	15.5
	(SE)	(4,177)	(0.006)	(0.08)	(2.8)	(1,151)	(0.002)	(0.03)	(2.0)
	N	1700	311	329	330	1700	311	329	330
5	Estimate	10,160	0.036	0.55	32.6	2,243	0.007	0.12	9.9
	(SE)	(1,688)	(0.005)	(0.08)	(4.0)	(658)	(0.002)	(0.03)	(2.5)
	N	1700	133	141	141	1700	133	141	141
Statewide	Estimate	171,449	0.066	0.92	47.3	36,242	0.013	0.19	15.3
	(SE)	(7,316)	(0.003)	(0.04)	(1.3)	(3,039)	(0.001)	(0.02)	(0.9)
	N	1765	1382	1468	1470	1764	1381	1467	1469



TABLE 22. Expanded statewide and regional summaries of SPRING TURKEY hunting in Mississippi during the 1982 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	5,362	0.127	0.81	44.2	39,202	6.00	6,631	15.2
	(SE)	(1,245)	(0.026)	(0.15)	(7.0)	(6,505)	(0.56)	(906)	(1.9)
	N	1757	51	52	52	1751	51	342	342
2	Estimate	7,660	0.122	0.91	56.1	58,674	7.27	8,417	19.3
	(SE)	(1,422)	(0.019)	(0.13)	(6.2)	(9,540)	(0.77)	(1,017)	(2.1)
	N	1757	63	66	66	1751	63	342	342
3	Estimate	10,724	0.143	1.18	53.5	70,076	8.04	9,054	20.8
	(SE)	(1,877)	(0.016)	(0.16)	(6.0)	(10,566)	(0.75)	(1,053)	(2.2)
	N	1757	68	71	71	1751	68	342	342
4	Estimate	13,789	0.121	1.00	52.3	115,171	8.32	13,900	31.9
	(SE)	(2,033)	(0.012)	(0.11)	(4.8)	(14,633)	(0.72)	(1,290)	(2.5)
	N	1757	107	108	109	1751	108	342	342
5	Estimate	3,575	0.082	0.65	44.2	44,454	7.89	5,611	12.9
	(SE)	(899)	(0.019)	(0.13)	(7.7)	(9,365)	(1.19)	(836)	(1.8)
	N	1757	43	43	43	1751	44	342	342
									Percent of Total Licensees
Statewide	Estimate	42,123	0.121	0.95	51.7	332,911	7.62	44,737	19.9
	(SE)	(3,371)	(0.008)	(0.06)	(2.7)	(22,390)	(0.36)	(2,131)	(1.0)
	N	1768	341	351	352	1760	343	1770	1770

TABLE 23. Expanded statewide and regional summaries of FALL TURKEY hunting in Mississippi during the 1982 hunting season.

Region <sup>a</sup>	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	1,902	0.179	0.60	44.0	10,652	3.36	3,170	62.5
	(SE)	(607)	(0.046)	(0.15)	(10.1)	(2,420)	(0.38)	(630)	(7.8)
	N	1769	25	25	25	1769	25	40	40
3	Estimate	1,395	0.115	0.73	46.7	12,173	6.40	1,902	37.5
	(SE)	(633)	(0.041)	(0.28)	(13.3)	(4,620)	(1.85)	(489)	(7.8)
	N	1769	15	15	15	1769	15	40	40
									Percent of Total Licensees <sup>b</sup>
Statewide	Estimate	3,295	0.144	0.63	43.9	22,825	4.50	5,196	2.3
	(SE)	(875)	(0.032)	(0.14)	(7.8)	(5,202)	(0.76)	(802)	(0.4)
	N	1770	40	41	41	1769	40	1770	1770

<sup>a</sup> Fall turkey hunting was legal only in regions 1 and 3.

<sup>b</sup> Calculated as a percent of big game license holders only.



TABLE 24. Expanded statewide summaries of ALL DEER, BUCK and DOE hunting in Mississippi during the 1982-83 hunting season and ALL TURKEY hunting (combining spring and fall data) during the 1982 calendar year in Mississippi.

Species	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent of Total of Licensees <sup>a</sup>
Deer	Estimate	243,776	0.075	1.29	53.5	2,940,847	15.65	189,721	84.6
	(SE)	(10,093)	(0.003)	(0.05)	(1.3)	(76,844)	(0.37)	(1,926)	(0.9)
	N	1764	1403	1491	1494	1681	1408	1770	1770
Buck	Estimate	190,259	0.059	1.00	48.1				
	(SE)	(8,314)	(0.002)	(0.04)	(1.3)				
	N	1765	1404	1492	1494				
Doe	Estimate	53,537	0.017	0.28	20.4				
	(SE)	(3,701)	(0.001)	(0.02)	(1.0)				
	N	1764	1403	1491	1493				
Turkey	Estimate	45,422	0.123	0.99	52.3	355,853	7.89	46,131	20.6
	(SE)	(3,580)	(0.008)	(0.06)	(2.6)	(23,412)	(0.36)	(2,156)	(1.0)
	N	1768	352	362	363	1760	354	1770	1770

<sup>a</sup> Calculated as a percent of big game license holders only.



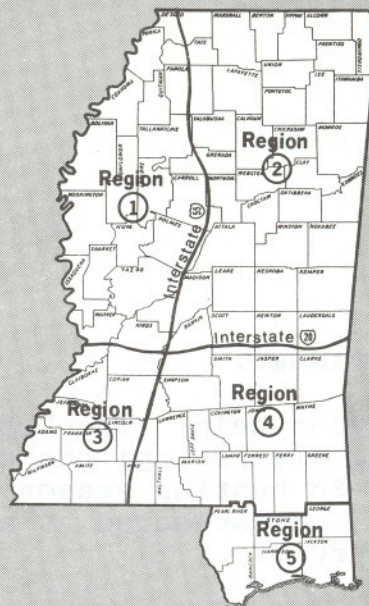


## 1982-83 MISSISSIPPI HUNTER QUESTIONNAIRE

A. Please fill in the blocks below for each game species you hunted during the 1982-83 hunting season (even if you were unsuccessful). If you hunted more than one kind of game on a particular day, count it as a day for each type of game you hunted. Report only game taken by you. Your answers will be kept confidential.

SPECIES	TOTAL KILL	TOTAL DAYS HUNTED	REGION HUNTED MOST
1 Dove			
2 Quail			
3 Woodcock			
4 Rabbit			
5 Squirrel			
6 Raccoon			
	Bucks Does		
7 Deer (archery)			
8 Deer (prim. weapon)			
9 Deer (gun)			
10 Turkey (Spring 82)			
11 Turkey (Fall 82)			
	Mallard Wood Other		
12 Ducks			
13 Geese			
14 Red Fox			
15 Gray Fox			
16 Bobcat			
17 Coyote			

Determine REGION HUNTED MOST from map.



B. Please answer the following questions.

1. Morning hunting of doves has been permitted for the past three seasons. Are you in favor of continuing dove hunting during the morning hours in future seasons? (check one)

- ☐ 1 Yes  
☐ 2 No  
☐ 3 Not sure

2. If you hunted doves, when did you hunt? (check one)

- ☐ 1 morning only  
☐ 2 afternoon only  
☐ 3 both morning and afternoon

3. If you killed a bobcat, how many did you kill while:

- a. deer hunting during regular gun season? \_\_\_\_\_ bobcat(s)  
b. hunting for other game? \_\_\_\_\_ bobcat(s)  
c. hunting specifically for bobcat? \_\_\_\_\_ bobcat(s)

4. If you killed a coyote, how many did you kill while:

- a. deer hunting during regular gun season? \_\_\_\_\_ coyote(s)  
b. hunting for other game? \_\_\_\_\_ coyote(s)  
c. hunting specifically for coyote? \_\_\_\_\_ coyote(s)

5. How much land do you own? (check one)

- ☐ 1 None  
☐ 2 Less than 20 acres  
☐ 3 20-100 acres  
☐ 4 More than 100 acres

6. If you currently subscribe to *MS Outdoors*, would you be willing to pay a subscription fee of \$5 a year to receive six issues of *MS Outdoors*?

- ☐ 1 Yes  
☐ 2 No  
☐ 3 Undecided

7. If you hunted deer during the regular gun season, please answer the following questions:

a. Rank the following methods of hunting deer according to which you enjoy the most. Place a one (1) in the box by the method which you enjoy doing the most; place a two (2) beside the next most enjoyable; and a three (3) beside the least enjoyable method for you. Do not give two methods the same number and fill all boxes.

- Hunting with dogs  
 Still hunting, stalking, or hunting from a tree stand  
 Hunting with organized man-drives

b. Do you own and maintain a dog (or dogs) for deer hunting? (check one)

- ☐ 1 Yes  
☐ 2 No

c. Indicate the number of days you spent deer hunting during the regular gun season in each of the following areas.

- days : Department of Wildlife Conservation Management Area  
•  days : Other public owned land (National Forest, National Wildlife Refuge, etc.)  
•  days : Private lands (excluding clubs or leased lands)  
•  days : Private hunting clubs or leases  
•  days : Other (please specify: \_\_\_\_\_)

d. If you hunted on a Department of Wildlife Conservation Wildlife Management Area during the regular gun season, how many deer did you kill? (Even if you were unsuccessful, please write a zero.)  
 deer killed

8. Your age: \_\_\_\_\_ yrs.

Fig. 1. Questionnaire used for the 1982-83 mail survey of game harvest and hunter effort in Mississippi.





## MISSISSIPPI DEPARTMENT OF WILDLIFE CONSERVATION

P. O. Box 451 • Phone (601) 961-5300 • Jackson, MS 39205

Lon Strong, Executive Director

Dear Sportsman:

We need your help! The Department of Wildlife Conservation is surveying Mississippi hunters to obtain information concerning the 1982-83 hunting season and last spring's (1982) turkey season. You have been selected as a representative hunter to participate in the survey.

The purpose of this survey is to obtain reasonable estimates of game harvest, hunter effort and hunter opinions for the season just completed. Information supplied by you and other selected hunters will assist us in managing our game resources for the greatest public benefit.

For meaningful results, information is needed from everyone receiving a questionnaire since only a limited number of sportsmen can be contacted. Please fill in the enclosed questionnaire as accurately as possible (even if you did not hunt) and return it in the self-addressed, postage-paid envelope.

Our records are often difficult to read and we apologize if your name or address has been misspelled. A prompt reply will be sincerely appreciated.

Yours for better conservation,

Lon Strong  
Executive Director

LS:be

Enclosure

Fig. 2. Cover letter mailed with the initial mailing of the 1982-83 survey of game harvest and hunter effort in Mississippi.

Dear Sportsman:

Recently we mailed you a questionnaire on your hunting experiences. If you have not yet answered the questionnaire, will you please do so today? If you have already returned the questionnaire, disregard this notice and we thank you very much for your cooperation.

Your response is important. It is the only way we have of estimating the harvest, effort and opinions of hunters in Mississippi for management purposes.

Sincerely,



Lon Strong  
Executive Director

**MISSISSIPPI DEPARTMENT  
OF WILDLIFE CONSERVATION  
P.O. Box 451/Jackson, MS 39205**

Fig. 3. Post card used as the first reminder mailing to nonrespondents during the 1982-83 survey of game harvest and hunter effort in Mississippi.





## MISSISSIPPI DEPARTMENT OF WILDLIFE CONSERVATION

P. O. Box 451 • Phone (601) 961-5300 • Jackson, MS 39205

Lon Strong, Executive Director

Dear Sportsman:

The Department of Wildlife Conservation is striving to provide quality hunting for Mississippi sportsmen. While not wanting to impose, we are depending on you to help us evaluate hunting activity and success for the 1982-83 hunting season and last spring's (1982) turkey season.

Another copy of the questionnaire is enclosed which we hope you will complete and return as soon as possible in the enclosed self-addressed, postage-paid envelope. If you have already returned the questionnaire please disregard this notice.

Remember, you can be of assistance even if you did not hunt or were not successful in your efforts. Your cooperation is needed and will be sincerely appreciated.

Sincerely for better conservation,

Lon Strong  
Executive Director

LS:be

Enclosure

Fig. 4. Cover letter mailed with the second (and final) reminder mailing to nonrespondents during the 1982-83 survey of game harvest and hunter effort in Mississippi.