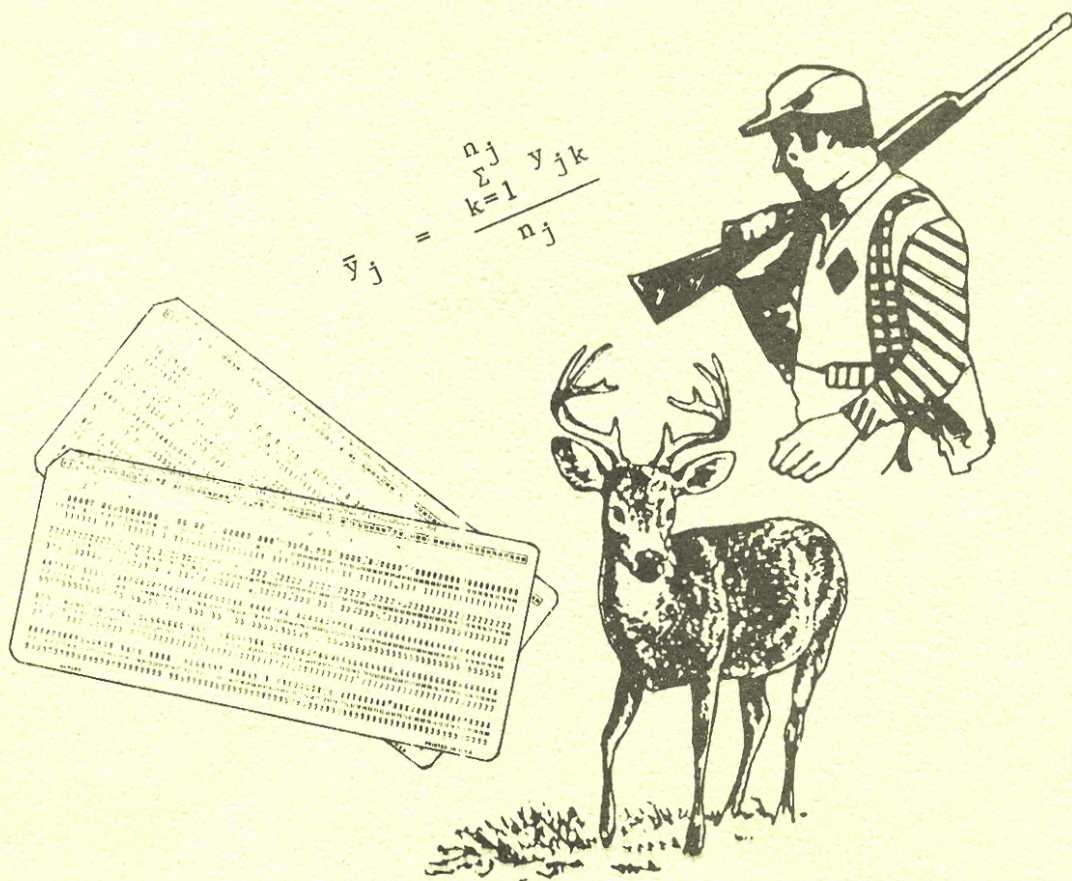


Mississippi Mail Survey of Game Harvest and Hunter Effort for 1981-82



David E. Steffen

Mississippi Department of Wildlife Conservation

**MISSISSIPPI MAIL SURVEY OF GAME
HARVEST AND HUNTER EFFORT FOR 1981-82**

by

David E. Steffen

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**Mississippi Department of Wildlife Conservation
P. O. Box 451
Jackson, Mississippi 39205
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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 1981-82 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 3,325 sportsmen to be mailed a survey questionnaire was selected from the 1981-82 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 1981-82 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, 1982. 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). However the mechanics of the stub selection was changed. Using a Pitney Bowes Tickometer, a systematic sample was drawn from each box of sales stubs based on the percent of total stubs to be sampled for that month (e.g. if five percent of all the stubs were to be sampled, every twentieth stub would be selected throughout each box). If the designated stub was not usable, stubs were examined one at a time toward the front of the box until a usable stub was encountered. The last stub in the box was selected only if its count was greater than half the designated systematic count (e.g. using a systematic count of 20, only select the last stub in the box if it was more than 10 stubs after the last sampled stub). 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, 1981 and the end of January, 1982 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 19, 1982 to the sampled

hunters. About three weeks after the initial mailing (April 9, 1982), reminder post cards (Figure 3) were mailed to 2,210 sampled hunters who had not returned their questionnaires by April 8, 1982. 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 (April 29, 1982) to the 1,873 nonrespondents as of April 28, 1982. First mailing questionnaires were given identification numbers from 100,001 to 103,325 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 27, 1982) were not considered in the analyses.

Questionnaire design and mailing procedures were outlined by Steffen (1981). However the mailings for the 1981-82 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, 212 (6.4%) of the 3,325 questionnaires were returned as non-deliverable by the post office. Therefore 3,113 individuals were assumed to have been contacted to participate in the survey. Of these, 1,831 (58.8%) returned their questionnaires for possible analysis and 1,282 (41.2%) were nonresponses. Based on those questionnaires returned, 1,786 were answered and usable to some extent, 39 were returned after the acceptance deadline (4 weeks after the final mailing) and only 6 were considered completely useless.

statewide expansions were calculated based on the 243,240 total hunting licenses sold and accounted for by the end of June, 1982. The total sales for each resident hunting license type were as follows: Type 00 = 17,388, Type 01 = 188,313, Type 02 = 21,290 and Type 05 = 16,249. Therefore there existed 243,240 individuals licensed to hunt small game and 205,701 (Types 00 + 01) of these license holders also were eligible to pursue big game (deer and turkey).

Based on the 1,786 usable responses, 94.5 ± 0.5 (SE) percent of all resident license holders actually participated in a hunting activity during the 1981-82 hunting season. Therefore an estimated $229,862 \pm 1,313$ (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. Steffen and Beckman (1982) provided the results to questions three, four and seven. Other 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.

Because there were legal hunters during the 1981-82 seasons who purchased their license during the 1980-81 fiscal year, the sampling frame was not the population of interest (Steffen 1981). In all future surveys this potential sampling bias will be eliminated. Beginning with the 1982-83 hunting seasons, licenses will be valid for the fiscal year of purchase only.

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 resulted in adequate precision with the reduced sample sizes for the 1981-82 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 at least 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

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TABLE 1. Expanded statewide summary of the 1981-82 Mississippi mail survey of game harvest based on 243,240 small game license holders and 205,701 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 ^a
Dove	3,375,777.	647	27.69	92.4	523,435	4.32	122,573	50.4
Quail	1,284,291	3.04	23.14	89.2	424,676	7.71	56,248	23.1
Woodcock	56,520	1.04	5.19	97.5	49,938	5.43	10,895	4.5
Rabbit	1,321,974	1.79	12.50	89.8	691,802	6.75	106,775	43.9
Squirrel	2,545,308	2.37	16.46	93.8	1,048,472	6.87	155,260	63.8
Raccoon	208,199	0.57	8.42	86.3	323,309	14.48	24,923	10.2
All Ducks	694,151	1.88	14.78	87.7	366,921	7.92	48,076	19.8
Mallard	347,252	0.94	7.29	63.4				
Wood Duck	219,053	0.58	4.62	68.0				
Other	131,994	0.35	2.77	37.7				
Geese	1,090	0.16	0.57	35.7	6,813	3.85	1,907	0.8
Red Fox	7,086	0.07	3	61.5	58,756	14.30	5,448	2.2
Gray Fox	9,811	0.09	240	66.7	52,289	17.36	4,222	1.7
Bobcat	6,537	0.52	1.60	90.0	9,429	2.88	4,086	1.7
Coyote	8,585	0.13	1.03	80.3	49,913	8.07	8,444	3.5
All Deer	210,684	0.079	1.26	51.7	2,541,459	15.44	167,063	81.2
Buck	166,276	0.062	1.00	47.6				
Doe	45,373	0.017	0.27	17.6				
Archery Deer	14,860	0.043	0.42	23.1	321,642	9.29	35,888	17.4
Buck	7,705	0.021	0.22	14.2				
Doe	7,155	0.022	0.20	75.8				
Primitive Deer	20,501	0.106	0.58	40.7	186,360	5.35	35,613	17.3
Buck	9,356	0.048	0.26	22.5				
Doe	11,145	0.059	0.31	26.0				
Gun Deer	176,355	0.083	1.08	50.1	2,017,850	12.51	163,763	79.6
Buck	149,538	0.070	0.91	46.9				
Doe	27,528	0.013	0.17	12.3				
Turkey	43,400	0.134	0.98	50.0	908,413	7.12	44,825	21.8
Spring '81	37,338	0.122	0.89	49.7	288,703	7.07	42,350	20.6
Fall '81	5,920	0.307	0.93	60.9	19,289	3.11	6,333	3.1

^aDeer 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 1981-82 hunting season.

Species	Total Harvest	Standard Error		95% Confidence Interval	
		\$ E	As % of Total ^a	Lower Limit	Upper Limit
Dove	3,375,777	171,010	5.1	3,033,757	3,717,797
Quail	1,284,291	131,463	10.2	1,021,365	1,547,216
Woodcock	56,520	9,976	17.7	36,568	76,472
Rabbit	1,321,974	87,539	6.6	1,146,897	1,497,052
Squirrel	2,545,308	107,746	4.2	2,329,817	2,760,800
Raccoon	208,199	31,736	15.2	144,727	271,671
All Ducks	694,151	62,506	9.0	569,138	819,163
Mallard	347,252	37,981	10.9	271,290	423,213
Wood Duck	219,053	20,207	9.2	178,639	259,466
Other	131,994	15,775	12.0	100,444	163,543
Geese	1,090	544	49.9	1	2,178
Red Fox	7,086	2,912	41.1	1,261	12,911
Gray Fox	9,811	3,953	40.3	1,905	17,718
Bobcat	6,537	1,581	24.2	3,375	9,700
Coyote	8,585	1,460	17.0	5,664	11,506
All Deer	210,684	9,403	4.5	191,878	229,490
Buck	166,276	7,580	4.6	151,116	181,436
Doe	45,373	3,623	8.0	38,126	52,620
Archery Deer	14,860	2,246	15.1	10,369	19,351
Buck	7,705	1,430	18.6	4,846	10,565
Doe	7,155	1,186	16.6	4,784	9,526
Primitive Deer	20,501	2,254	11.0	15,994	25,009
Buck	9,356	1,268	13.6	6,820	11,893
Doe	11,145	1,461	13.1	8,224	14,066
Gun Deer	176,355	7,660	4.3	161,035	191,674
Buck	149,538	6,730	4.5	136,078	162,997
Doe	27,528	2,720	9.9	22,088	32,968
Turkey	43,400	3,831	8.8	35,738	51,061
Spring '81	37,338	3,307	8.9	30,723	43,952
Fall '81	5,920	1,215	20.5	3,491	8,350

^a % = 100 (SE/Total Harvest)

TABLE 3. Expanded statewide and regional summaries of DOVE hunting in Mississippi during the 1981-82 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	768,594	6.89	32.19	93.0	111,868	4.75	24,020	19.9
	(SE)	(95,060)	(0.45)	(3.24)	(1.9)	(11,449)	(0.34)	(1,729)	(1.3)
	N	1752	168	172	172	1746	169	876	876
	Estimate	1,494,982	6.65	28.71	93.1	224,990	4.33	52,320	43.3
	(SE)	(127,019)	(0.34)	(2.06)	(1.3)	(16,160)	(0.24)	(2,382)	(1.7)
	N	1752	369	375	376	1746	373	876	876
	Estimate	233,522	5.99	25.88	92.4	41,097	4.47	9,249	7.6
	(SE)	(48,195)	(0.50)	(4.34)	(3.3)	(7,264)	(0.58)	(1,109)	(0.9)
	N	1752	64	65	66	1746	66	876	876
	Estimate	672,797	6.33	25.91	92.0	105,320	4.04	26,091	21.6
	(SE)	(70,847)	(0.38)	(2.06)	(2.0)	(9,328)	(0.22)	(1,794)	(1.4)
	N	1752	185	187	188	1746	187	876	876
	Estimate	209,781	5.13	22.55	91.0	39,425	4.35	9,249	7.6
	(SE)	(45,228)	(0.79)	(4.07)	(3.5)	(6,576)	(0.50)	(1,109)	(0.9)
	N	1752	65	67	67	1746	65	876	876
									Percent of Total Licensees
Statewide	Estimate	3,375,777	6.47	27.69	92.4	523,435	4.32	122,573	50.4
	(SE)	(171,010)	(0.20)	(1.24)	(0.9)	(21,324)	(0.14)	(2,879)	(1.2)
	N	1776	869	890	893	1764	878	1786	1786

TABLE 4. Expanded statewide and regional summaries of QUAIL hunting in Mississippi during the 1981-82 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	120,378	3.04	18.55	89.4	40,057	6.04	6,600	12.1
	(SE)	(39,150)	(0.68)	(5.47)	(4.5)	(9,931)	(1.24)	(940)	(1.6)
	N	1762	47	47	47	1761	48	396	396
	Estimate	735,794	3.29	26.39	88.6	225,974	8.06	28,188	51.8
	(SE)	(106,583)	(0.21)	(3.41)	(2.2)	(27,518)	(0.83)	(1,852)	(2.5)
	N	1762	200	202	202	1761	203	396	3%
3	Estimate	19,327	2.46	10.77	100.0	7,873	4.38	1,788	3.3
	(SE)	(7,324)	(0.57)	(2.90)	(0.0)	(3,772)	(1.79)	(494)	(0.9)
	N	1762	13	13	13	1761	13	396	396
	Estimate	236,890	2.67	21.19	90.4	89,506	7.90	11,550	21.2
	(SE)	(51,286)	(0.34)	(3.99)	(3.3)	(16,252)	(1.16)	(1,230)	(2.1)
	N	1762	80	81	83	1761	82	396	396
	Estimate	160,964	2.91	25.35	87.0	53,455	9.21	6,325	11.6
	(SE)	(50,142)	(0.68)	(7.06)	(5.0)	(13,492)	(1.88)	(921)	(1.6)
	N	1762	42	46	46	1761	42	396	3%
									Percent of Total Licensees
Statewide	Estimate	1,284,291	3.04	23.14	89.2	424,676	7.71	56,248	23.12
	(SE)	(131,463)	(0.17)	(2.14)	(1.5)	(35,408)	(0.55)	(2,427)	(1.0)
	N	1779	396	406	408	1775	402	1786	1786

TABLE 5. Expanded statewide and regional summaries of WOODCOCK hunting in Hississippi during the 1981-82 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
	Estimate	10,647	2.60	8.67	100.0	4,118	3.33	1,229	11.8
	(SE)	(4,988)	(0.36)	(3.03)	(0.0)	(1,701)	(0.87)	(409)	(3.7)
	N	1782	9	9	9	1772	9	76	76
	Estimate	13,240	0.49	3.73	100.0	18,943	7.26	3,549	34.2
	(SE)	(3,876)	(0.19)	(0.83)	(0.0)	(7,099)	(2.22)	(691)	(5.5)
	N	1782	19	26	26	1772	19	76	76
	Estimate	3,139	1.53	3.29	100.0	2,059	2.14	956	9.2
	(SE)	(1,329)	(0.24)	(0.68)	(0.0)	(920)	(0.55)	(361)	(3.3)
	N	1782	7	7	7	1772	7	76	76
	Estimate	15,151	1.18	6.17	94.4	12,766	5.47	2,457	23.7
	(SE)	(5,434)	(0.28)	(1.72)	(5.6)	(4,445)	(1.41)	(576)	(4.9)
	N	1782	17	18	18	1772	17	76	76
	Estimate	13,377	1.10	6.13	100.0	11,942	6.21	2,184	21.1
	(SE)	(5,456)	(0.28)	(2.04)	(0.0)	(3,953)	(1.27)	(544)	(4.7)
	N	1782	14	16	16	1772	14	76	76
									Percent of Total Licenses
Statewide	Estimate	56,520	1.04	5.19	97.5	49,938	5.43	10,895	4.5
	(SE)	(9,976)	(0.18)	(0.72)	(1.8)	(9,403)	(0.79)	(1,191)	(0.5)
	N	1786	67	80	80	1773	67	1786	1786

TABLE 6. Expanded statewide and regional summaries of RABBIT hunting in Mississippi during the 1981-82 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	279,123	2.11	15.14	90.8	136,336	7.38	18,494	18.2
	(SE)	(38,720)	(0.25)	(1.67)	(2.5)	(22,211)	(1.03)	(1,554)	(1.4)
	N	1715	127	130	131	1686	128	721	721
	Estimate	450,739	1.72	11.73	88.2	230,833	6.13	38,681	38.0
	(SE)	(61,752)	(0.14)	(1.47)	(2.0)	(23,827)	(0.53)	(2,144)	(1.8)
	N	1715	258	271	271	1686	261	721	721
	Estimate	93,183	1.99	9.66	89.7	42,848	4.79	9,600	9.4
	(SE)	(18,905)	(0.29)	(1.60)	(3.7)	(7,405)	(0.58)	(1,141)	(1.1)
	N	1715	62	68	68	1686	62	721	721
	Estimate	270,046	1.73	11.83	95.1	151,917	6.71	23,152	22.7
	(SE)	(35,734)	(0.17)	(1.29)	(1.7)	(17,841)	(0.60)	(1,720)	(1.6)
	N	1715	155	161	163	1686	157	721	721
	Estimate	153,036	1.56	13.16	84.3	83,244	7.69	11,717	11.5
	(SE)	(31,859)	(0.29)	(2.36)	(4.0)	(18,232)	(1.45)	(1,255)	(1.2)
	N	1715	75	82	83	1686	75	721	721
									Percent of Total Licensees
Statewide	Estimate	1,321,974	1.79	12.50	89.8	691,802	6.75	106,775	43.9
	(SE)	(87,539)	(0.09)	(0.76)	(1.1)	(40,686)	(0.35)	(2,857)	(1.2)
	N	1773	723	771	777	1732	730	1786	1786

TABLE 7. Expanded statewide and regional summaries of SQUIRREL hunting in Mississippi during the 1981-82 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
	Estimate	447,923	2.91	18.94	92.8	152,624	6.45	23,811	15.8
	(SE)	(55,034)	(0.20)	(1.86)	(2.0)	(16,178)	(0.49)	(1,751)	(1.1)
	N	1697	161	165	166	1675	163	1060	1060
	Estimate	929,529	2.18	16.09	94.6	424,908	7.35	58,172	38.5
	(SE)	(70,878)	(0.12)	(1.01)	(1.1)	(34,719)	(0.51)	(2,513)	(1.5)
	N	1697	393	403	404	1675	398	1060	1060
	Estimate	473,723	3.09	22.95	97.2	147,977	7.44	20,531	13.6
	(SE)	(63,712)	(0.20)	(2.49)	(1.4)	(18,898)	(0.73)	(1,638)	(1.1)
	N	1697	137	144	144	1675	137	1060	1060
	Estimate	497,947	2.22	14.60	93.3	216,956	6.38	34,076	22.5
	(SE)	(46,939)	(0.14)	(1.06)	(1.6)	(20,053)	(0.45)	(2,045)	(1.3)
	N	1697	233	238	238	1675	234	1060	1060
	Estimate	175,729	1.85	12.26	91.1	88,728	6.36	14,401	9.5
	(SE)	(30,914)	(0.18)	(1.81)	(2.8)	(14,393)	(0.82)	(1,390)	(0.9)
	N	1697	96	100	101	1675	96	1060	1060
									Percent of Total Licensees
Statewide	Estimate	2,545,308	2.37	16.46	93.8	1,048,472	6.87	155,260	63.8
	(SE)	(107,746)	(0.07)	(0.63)	(0.7)	(43,427)	(0.25)	(2,766)	(1.1)
	N	1773	1079	1127	1131	1733	1087	1786	1786

TABLE 8. Expanded statewide and regional summaries of RACCOON hunting in Mississippi during the 1981-82 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	84,474	1.02	15.74	95.0	80,895	15.76	5,500	24.1
	(SE)	(26,185)	(0.40)	(4.25)	(3.5)	(31,236)	(5.59)	(860)	(3.3)
	N	1768	37	39	40	1753	37	166	166
2	Estimate	44,300	0.35	5.85	76.4	127,240	17.63	7,563	33.1
	(SE)	(11,401)	(0.13)	(1.30)	(5.8)	(45,912)	(5.95)	(1,004)	(3.7)
	N	1768	52	55	55	1753	52	166	166
3	Estimate	18,848	1.21	6.23	81.8	14,014	5.32	3,025	13.3
	(SE)	(6,873)	(0.24)	(1.89)	(8.4)	(4,401)	(1.18)	(641)	(2.6)
	N	1768	19	22	22	1753	19	166	166
4	Estimate	30,543	0.37	7.82	85.7	54,254	15.64	3,850	16.9
	(SE)	(10,535)	(0.14)	(2.35)	(6.7)	(26,228)	(7.03)	(722)	(2.9)
	N	1768	25	28	28	1753	25	166	166
5	Estimate	23,113	0.61	8.00	90.5	26,641	11.29	2,888	12.7
	(SE)	(7,773)	(0.15)	(2.11)	(6.6)	(9,782)	(3.22)	(627)	(2.6)
	N	1768	17	21	21	1753	17	166	166
Statewide	Estimate	208,199	0.57	8.42	86.3	323,309	14.48	24,923	10.2
	(SE)	(31,736)	(0.12)	(1.14)	(2.5)	(62,552)	(2.59)	(1,746)	(0.7)
	N	1784	162	181	183	1765	162	1786	1786

TABLE 9. Expanded statewide and regional summaries of ALL DUCK hunting in Mississippi during the 1981-82 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	383,809	2.25	22.46	92.8	174,375	10.34	17,296	37.2
	(SE)	(51,981)	(0.15)	(2.35)	(2.3)	(20,590)	(0.82)	(1,485)	(2.6)
	N	1765	120	124	125	1759	122	339	339
	Estimate	161,930	1.56	11.99	87.8	98,596	7.35	13,727	29.5
	(SE)	(26,580)	(0.14)	(1.58)	(3.3)	(13,533)	(0.70)	(1,334)	(2.5)
	N	1765	95	98	98	1759	97	339	339
	Estimate	78,553	2.18	13.90	93.0	37,751	6.35	5,903	12.7
	(SE)	(22,102)	(0.26)	(3.31)	(3.9)	(7,838)	(0.92)	(889)	(1.8)
	N	1765	41	41	43	1759	43	339	339
	Estimate	30,043	1.04	5.29	75.6	24,891	4.86	5,628	12.1
	(SE)	(8,935)	(0.19)	(1.37)	(6.8)	(6,201)	(0.93)	(869)	(1.8)
	N	1765	37	41	41	1759	37	339	339
	Estimate	25,771	0.95	6.68	82.8	26,274	7.04	3,981	8.6
	(SE)	(6,883)	(0.15)	(1.29)	(7.1)	(6,627)	(1.18)	(733)	(1.5)
	N	1765	26	28	29	1759	27	339	339
									Percent of Total Licensees
Statewide	Estimate	694,151	1.88	14.70	87.7	366,921	7.92	48,076	19.8
	(SE)	(62,506)	(0.09)	(1.12)	(1.8)	(26,488)	(0.42)	(2,293)	(0.9)
	N	1778	329	345	350	1770	337	1786	1786

TABLE 10. Expanded statewide and regional summaries of MALLARD, WOOD DUCK, and OTHER DUCK hunting in Mississippi during the 1981-82 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	219,164	1.28	12.74	82.4	90,165	0.53	5.28	68.8	73,880	0.43	4.30	48.8
	(SE)	(32,376)	(0.12)	(1.53)	(3.4)	(14,439)	(0.06)	(0.71)	(4.2)	(12,677)	(0.05)	(0.64)	(4.5)
	N	1768	121	125	125	1761	120	124	125	1768	121	125	125
	Estimate	65,900	0.62	4.89	60.2	73,096	0.71	5.42	71.4	22,701	0.23	1.68	31.6
	(SE)	(14,407)	(0.10)	(0.96)	(5.0)	(11,902)	(0.08)	(0.71)	(4.6)	(5,613)	(0.05)	(0.38)	(4.7)
	N	1768	95	98	98	1767	95	98	98	1768	95	98	98
	Estimate	40,999	1.11	7.10	67.4	22,576	0.62	3.90	67.4	15,271	0.41	2.58	44.2
	(SE)	(13,878)	(0.22)	(2.17)	(7.2)	(5,042)	(0.07)	(0.64)	(7.2)	(4,920)	(0.08)	(0.74)	(7.7)
	N	1768	42	42	43	1767	42	42	43	1768	43	43	43
4	Estimate	5,778	0.23	1.00	26.8	23,402	0.78	4.15	68.3	825	0.03	0.15	4.9
	(SE)	(2,223)	(0.07)	(0.37)	(7.0)	(7,023)	(0.14)	(1.08)	(7.4)	(615)	(0.02)	(0.11)	(3.4)
	N	1768	37	41	41	1767	37	41	41	1768	37	41	41
5	Estimate	2,053	0.23	1.52	41.4	9,498	0.32	2.38	65.5	10,181	0.39	2.64	48.3
	(SE)	(2,231)	(0.07)	(0.49)	(9.3)	(2,692)	(0.07)	(0.52)	(9.0)	(3,695)	(0.10)	(0.84)	(9.4)
	N	1768	27	29	29	1767	27	29	29	1768	26	28	29
Statewide	Estimate	347,252	0.94	7.29	63.4	219,053	0.58	4.62	68.0	131,994	0.35	2.78	37.7
	(SE)	(37,981)	(0.07)	(0.72)	(2.6)	(20,207)	(0.04)	(0.36)	(2.5)	(15,775)	(0.03)	(0.30)	(2.6)
	N	1782	333	349	350	1780	331	347	350	1782	333	349	350

TABLE 11. Expanded statewide and regional summaries of GOOSE hunting in Mississippi during the 1981-82 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	817	0.23	1.20	60.0	3,543	5.20	681	35.7
	(SE)	(509)	(0.14)	(0.58)	(24.5)	(2011)	(2.03)	(304)	(13.3)
	N	1786	5	5	5	1785	5	14	14
	Estimate	136	0.14	0.20	20.0	954	1.75	681	35.7
	(SE)	(136)	(0.16)	(0.20)	(20.0)	(491)	(0.25)	(304)	(13.3)
	N	1786	4	5	5	1785	4	14	14
	Estimate	136	0.07	0.50	50.0	1,908	7.00	272	14.3
	(SE)	(136)	(0.02)	(0.50)	(50.0)	(1658)	(5.00)	(193)	(9.7)
	N	1786	2	2	2	1785	2	14	14
4	Estimate	0	0	0	0	136	1.00	136	7.1
	(SE)	(0)	-	-	-	(136)	-	(136)	(7.1)
	N	1786	1	1	1	1785	1	14	14
	Estimate	0	0	0	0	273	2.00	136	7.1
	(SE)	(0)	-	-	-	(273)	-	(136)	(7.1)
	N	1786	1	1	1	1785	1	14	14
									Percent of Total Licensees
Statewide	Estimate	1,090	0.16	0.57	35.7	6,813	3.85	1,907	0.8
	(SE)	(544)	(0.07)	(0.25)	(13.3)	(2666)	(1.11)	(508)	(0.2)
	N	1786	13	14	14	1785	13	1786	1786

TABLE 12. Expanded statewide and regional summaries of RED FOX hunting in Mississippi during the 1981-82 hunting season.

Region	Statistic	Total Harvest	Average Oaily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Days Hunting	Total Hunters	Percent Hunters Per Region	
1	Estimate	1,363	1.14	1.43	100.0	959	1.40	954	17.9	
	(SE)	(578)	(0.37)	(0.30)	(0.0)	(454)	(0.24)	(360)	(6.2)	
	N	1784	5	7	7	1775	5	39	39	
	Estimate	4,227	0.15	1.82	58.8	8,496	4.43	2,317	43.6	
	(SE)	(2,777)	(0.06)	(1.15)	(12.3)	(3,616)	(1.53)	(559)	(8.0)	
	N	1784	14	17	17	1775	14	39	39	
	Estimate	409	0.02	0.75	50.0	21,104	38.50	545	10.3	
	(SE)	(305)	(0.03)	(0.48)	(28.9)	(20,694)	(37.50)	(272)	(4.9)	
	N	1784	4	4	4	1775	4	39	39	
	Estimate	273	0.01	0.33	33.3	24,804	36.20	954	17.9	
	(SE)	(193)	(0.01)	(0.21)	(21.1)	(15,619)	(17.96)	(360)	(6.2)	
	N	1784	4	6	6	1775	5	39	39	
	Estimate	273		0.50	50.0	274	2.00	545	10.3	
	(SE)	(193)		-	(28.9)	(274)	-	(272)	(4.9)	
	N	1784		1	4	4	1	39	39	
										Percent of Total Licensees
	Statewide	Estimate	7,086	0.07	1.33	61.5	58,756	14.30	5,448	22
		(SE)	(2,912)	(0.04)	(0.51)	(7.9)	(26,332)	(5.96)	(852)	(0.4)
N		1785	29	39	39	1776	30	1786	1786	

TABLE 13. Expanded statewide and regional summaries of GRAY FOX hunting in Mississippi during the 1981-82 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	0	-	-	-	0	-	0	0.0
	(SE)	(0)	-	-	-	(0)	-	(0)	(0.0)
	N	1782	-	-	-	1776	-	27	27
2	Estimate	5.5%	0.13	4.10	60.0	9,313	8.50	1,365	37.0
	(SE)	(3,254)	(0.06)	(2.11)	(16.3)	(4,866)	(3.50)	(431)	(9.5)
	N	1782	8	10	10	1776	8	27	27
3	Estimate	546	0.01	1.00	75.0	23,557	57.33	546	14.8
	(SE)	(334)	(0.01)	(0.41)	(25.0)	(20,860)	(47.15)	(273)	(7.0)
	N	1782	3	4	4	1776	3	27	27
4	Estimate	2,866	0.14	2.10	50.0	18,900	17.25	1,365	37.0
	(SE)	(2,213)	(0.16)	(1.56)	(16.7)	(14,012)	(12.02)	(431)	(9.5)
	N	1782	8	10	10	1776	8	27	27
5	Estimate	409	0.67	1.00	100.0	411	1.50	410	11.1
	(SE)	(236)	(0.22)	(0.00)	(0.0)	(306)	(0.50)	(236)	(6.2)
	N	1782	2	3	3	1776	2	27	27
									Percent of Total Licensees
Statewide	Estimate	9,811	0.09	2.40	66.7	52,289	17.36	4,222	1.7
	(SE)	(3,953)	(0.06)	(0.88)	(8.8)	(25,565)	(7.83)	(752)	(0.3)
	N	1785	22	30	30	1777	22	1786	1786

TABLE 14. Expanded statewide and regional summaries of BOBCAT hunting in Mississippi during the 1981-82 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
	Estimate	1,636	0.85	1.50	100.0	1,778	1.86	1,091	28.6
	(SE)	(639)	(0.16)	(0.27)	(0.0)	(831)	(0.55)	(385)	(8.7)
	N	1784	7	8	8	1778	7	28	28
	Estimate	1,772	0.50	2.60	100.0	1,915	3.50	682	17.9
	(SE)	(973)	(0.19)	(0.93)	(0.0)	(1,408)	(2.18)	(305)	(7.4)
	N	1784	4	5	5	1778	4	28	28
	Estimate	1,227	0.30	1.80	60.0	4,104	6.00	682	17.9
	(SE)	(873)	(0.03)	(1.11)	(24.5)	(2,849)	(3.56)	(305)	(7.4)
	N	1784	5	5	5	1778	5	28	28
	Estimate	818	0.57	0.86	85.7	958	1.40	954	25.0
	(SE)	(334)	(0.31)	(0.14)	(14.3)	(493)	(0.40)	(360)	(8.3)
	N	1784	5	7	7	1778	5	28	28
	Estimate	818	1.00	2.00	100.0	410	3.00	409	10.7
	(SE)	(510)	(-)	(0.58)	(0.0)	(410)	(-)	(236)	(6.0)
	N	1784	1	3	3	1778	1	28	28
									Percent of Total Licensees
Statewide	Estimate	6,537	0.52	1.60	93.0	9,429	2.88	4,086	1.7
	(SE)	(1,581)	(0.09)	(0.26)	(5.6)	(3,344)	(0.85)	(740)	(0.3)
	N	1786	24	30	30	1780	24	1786	1786

TABLE 15. Expanded statewide and regional summaries of COYOTE hunting in Mississippi during the 1981-82 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	2,458	0.23	1.06	94.1	6,060	4.89	2,322	29.8
	(SE)	(638)	(0.15)	(0.10)	(5.9)	(4,584)	(3.52)	(561)	(6.1)
	N	1781	9	17	17	1766	9	57	57
2	Estimate	2,049	0.26	0.88	70.6	7,989	3.41	2,322	29.8
	(SE)	(708)	(0.11)	(0.22)	(11.4)	(3,172)	(1.11)	(561)	(6.1)
	N	1781	17	17	17	1766	17	57	57
3	Estimate	1,639	0.05	1.33	88.9	27,272	28.3	1,229	15.8
	(SE)	(610)	(0.03)	(0.24)	(11.1)	(21,166)	(20.7)	(409)	(4.9)
	N	1781	7	9	9	1766	7	57	57
4	Estimate	956	0.17	0.64	63.6	3,168	2.88	1,502	19.3
	(SE)	(361)	(0.12)	(0.15)	(15.2)	(1,611)	(1.13)	(452)	(5.3)
	N	1781	8	11	11	1766	8	57	57
5	Estimate	410	1.00	1.00	100.0	138	1.00	410	5.3
	(SE)	(236)	(-)	(0.0)	(0.0)	(138)	(-)	(236)	(3.0)
	N	1781	1	3	3	1766	1	57	57
									Percent of Total Licensees
Statewide	Estimate	8,585	0.13	1.03	80.3	49,913	8.07	8,444	3.5
	(SE)	(1,460)	(0.06)	(0.12)	(5.1)	(22,302)	(3.44)	(1,054)	(0.4)
	N	1785	45	61	61	1769	45	1786	1786

TABLE 16. Expanded statewide and regional summaries of ARCHERY DEER hunting in Mississippi during the 1981-82 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
	Estimate	3,740	0.038	0.47	28.1	84,340	11.43	7,890	22.7
	(SE)	(1,060)	(0.010)	(0.12)	(6.0)	(15,140)	(1.37)	(1,025)	(2.6)
	N	1485	53	57	57	1478	53	251	251
	Estimate	4,017	0.049	0.38	15.6	83,088	7.65	10,797	31.1
	(SE)	(1,347)	(0.013)	(0.12)	(4.2)	(12,253)	(0.75)	(1,190)	(2.9)
	N	1485	77	77	77	1478	78	251	251
	Estimate	3,601	0.068	0.63	36.6	51,216	9.44	5,676	16.3
	(SE)	(1,156)	(0.019)	(0.18)	(7.6)	(9,792)	(1.03)	(874)	(2.3)
	N	1485	39	41	41	1478	39	251	251
	Estimate	1,939	0.029	0.28	20.0	68,057	10.19	6,921	19.9
	(SE)	(677)	(0.009)	(0.09)	(5.7)	(13,339)	(1.39)	(963)	(2.5)
	N	1485	48	50	50	1478	48	251	251
	Estimate	416	0.015	0.12	12.0	27,000	7.76	3,461	10.0
	(SE)	(240)	(0.009)	(0.07)	(6.6)	(6,608)	(1.13)	(687)	(1.9)
	N	1485	25	25	25	1478	25	251	251
	Estimate	14,860	0.043	0.42	23.1	321,642	9.29	35,888	17.4
Statewide	(SE)	(2,246)	(0.006)	(0.06)	(2.6)	(25,632)	(0.51)	(2,019)	(1.0)
	N	1495	249	260	260	1485	250	1496	1496

Percent of Total Licensees^a

^a 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 1981-82 hunting season.

Region	Statistic	BUCKS			WES				
		Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters
t	Estimate	2,078	0.020	0.26	17.5	1,662	0.018	0.21	19.3
	(SE)	(718)	(0.006)	(0.08)	(5.1)	(517)	(0.005)	(0.06)	(5.3)
	N	1485	53	57	57	1485	53	57	57
	Estimate	2,216	0.027	0.21	13.0	1,801	0.022	0.17	11.7
	(SE)	(782)	(0.008)	(0.07)	(3.9)	(663)	(0.007)	(0.06)	(3.7)
	N	1485	77	77	77	1485	77	77	77
	Estimate	1,385	0.027	0.24	14.6	2,216	0.041	0.39	31.7
	(SE)	(678)	(0.012)	(0.11)	(5.6)	(647)	(0.010)	(0.10)	(7.4)
	N	1485	39	41	41	1485	39	41	41
	Estimate	831	0.012	0.12	12.0	1,108	0.016	0.16	10.0
	(SE)	(339)	(0.005)	(0.05)	(4.6)	(518)	(0.007)	(0.07)	(4.3)
	N	1485	48	50	50	1485	48	50	50
	Estimate	139	0.005	0.04	4.0	277	0.010	0.08	8.0
	(SE)	(139)	(0.005)	(0.04)	(4.0)	(196)	(0.007)	(0.06)	(5.5)
	N	1485	25	25	25	1485	25	25	25
Statewide	Estimate	7,705	0.021	0.22	14.2	7,155	0.022	0.20	15.8
	(SE)	(1,430)	(0.004)	(0.04)	(2.2)	(1,186)	(0.003)	(0.03)	(2.3)
	N	1495	249	260	260	1495	249	260	260

TABLE 18. Expanded statewide and regional summaries of PRIMITIVE WEAPON DEER hunting in Mississippi during the 1981-82 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
	Estimate	4,433	0.101	0.60	41.5	40,612	5.62	7,475	21.7
	(SE)	(1,012)	(0.021)	(0.11)	(6.8)	(6,562)	(0.49)	(999)	(2.6)
	N	1485	51	53	53	1479	52	249	249
	Estimate	4,571	0.076	0.40	33.7	58,275	5.11	11,489	33.3
	(SE)	(901)	(0.013)	(0.07)	(5.2)	(7,341)	(0.34)	(1,226)	(3.0)
	N	1485	82	83	83	1479	82	249	249
	Estimate	6,372	0.155	0.94	55.1	40,473	6.19	6,783	19.7
	(SE)	(1,509)	(0.029)	(0.18)	(7.2)	(6,945)	(0.59)	(953)	(2.5)
	N	1485	47	49	49	1479	47	249	249
	Estimate	3,601	0.117	0.59	43.2	29,763	5.10	6,091	17.7
	(SE)	(955)	(0.027)	(0.13)	(7.6)	(5,567)	(0.56)	(905)	(2.4)
	N	1485	42	44	44	1479	42	249	249
	Estimate	1,247	0.097	0.47	36.8	12,935	4.89	2,630	7.6
	(SE)	(499)	(0.023)	(0.16)	(11.4)	(3,752)	(0.90)	(600)	(1.7)
	N	1485	19	19	19	1479	19	249	249
	Estimate	20,501	0.106	0.58	40.7	186,360	5.35	35,613	17.3
Statewide	(SE)	(2,254)	(0.010)	(0.05)	(3.1)	31,999	(0.22)	(2,013)	(1.0)
	N	1495	251	258	258	1489	252	1496	14%

TABLE 19. Expanded statewide and regional summaries of PRIMITIVE WEAPON BUCK and DOE hunting in Mississippi during the 1981-82 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	2,078	0.045	0.28	24.5	2,355	0.056	0.32	30.2
	(SE)	(602)	(0.013)	(0.07)	(6.0)	(601)	(0.014)	(0.07)	(6.4)
	N	1485	51	53	53	1485	51	53	53
2	Estimate	2,216	0.036	0.19	18.1	2,355	0.041	0.20	20.5
	(SE)	(585)	(0.009)	(0.05)	(4.2)	(568)	(0.009)	(0.04)	(4.5)
	N	1485	82	83	83	1485	82	83	83
3	Estimate	3,047	0.072	0.45	34.7	3,324	0.082	0.49	32.7
	(SE)	(780)	(0.015)	(0.10)	(6.9)	(956)	(0.020)	(0.12)	(6.8)
	N	1485	47	49	49	1485	47	49	49
4	Estimate	1,524	0.051	0.25	22.7	2,078	0.065	0.34	27.3
	(SE)	(498)	(0.015)	(0.07)	(6.4)	(633)	(0.019)	(0.09)	(6.8)
	N	1485	42	44	44	1485	42	44	44
5	Estimate	554	0.043	0.21	15.8	693	0.054	0.26	21.1
	(SE)	(339)	(0.025)	(0.12)	(8.6)	(366)	(0.020)	(0.13)	(9.6)
	N	1485	19	19	19	1485	19	19	19
Statewide	Estimate	9,356	0.048	0.26	22.5	11,145	0.059	0.31	26.0
	(SE)	(1,268)	(0.006)	(0.03)	(2.6)	(1,461)	(0.007)	(0.04)	(2.7)
	N	1495	251	258	258	14%	251	258	258

TABLE 20. Expanded statewide and regional summaries of REGULAR GUN OEBR hunting in Mississippi during the 1981-82 hunting season.

Region	Statistic	Total Harvest	Average Daily Kill	Average Seasonal Harvest	Percent Successful Hunters	Total Mandays	Average Seasonal Oays Hunting	Total Hunters	Percent Hunters Per Region
1	Estimate	30,554	0.101	1.15	54.3	300,386	11.08	26,676	16.4
	(SE)	(3,565)	(0.009)	(0.11)	(3.7)	(26,786)	(0.62)	(1,820)	(1.1)
	N	1434	180	186	186	1373	181	1137	1137
	Estimate	58,239	0.077	0.95	44.1	731,115	12.08	61,054	37.6
	(SE)	(4,885)	(0.005)	(0.07)	(2.4)	(40,572)	(0.44)	(2,476)	(1.4)
	N	1434	402	426	426	1373	404	1137	1137
	Estimate	35,431	0.103	1.53	62.6	314,619	13.91	23,395	14.4
	(SE)	(4,263)	(0.009)	(0.15)	(3.8)	(29,286)	(0.73)	(1,720)	(1.0)
	N	1434	148	161	163	1373	151	1137	1137
	Estimate	38,587	0.077	1.09	52.8	468,183	13.53	35,377	21.8
	(SE)	(4,070)	(0.006)	(0.10)	(3.2)	(35,722)	(0.64)	(2,045)	(1.2)
	N	1434	230	246	246	1373	231	1137	1137
	Estimate	13,484	0.057	0.86	48.6	216,638	14.32	15,549	9.6
	(SE)	(2,156)	(0.008)	(0.11)	(4.8)	(26,204)	(1.06)	(1,432)	(0.9)
	N	1434	101	109	109	1373	101	1137	1137
									Percent of
									Total Licensees
Statewide	Estimate	176,355	0.083	1.08	50.1	2,017,850	12.51	163,763	79.6
	(SE)	(7,660)	(0.003)	(0.04)	(1.5)	(52,667)	(0.28)	(2,143)	(1.0)
	N	1486	1101	1181	1183	1413	1108	14%	14%

TABLE 21. Expanded statewide and regional summaries of REGULAR GUN BUCK and DOE hunting in Mississippi during the 1981-82 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	25,802	0.085	0.97	50.5	4,730	0.017	0.18	14.0
	(SE)	(3,120)	(0.008)	(0.10)	(3.7)	(996)	(0.003)	(0.04)	(2.5)
	N	1435	180	186	186	1435	180	186	186
2	Estimate	49,884	0.066	0.82	40.8	8,314	0.011	0.14	9.9
	(SE)	(4,381)	(0.005)	(0.06)	(2.4)	(1,460)	(0.002)	(0.02)	(1.4)
	N	1435	402	426	426	1435	402	426	426
3	Estimate	29,959	0.087	1.29	58.9	6,307	0.018	0.27	22.7
	(SE)	(3,768)	(0.008)	(0.13)	(3.9)	(1,117)	(0.003)	(0.04)	(3.3)
	N	1435	149	162	163	1435	149	162	163
4	Estimate	32,109	0.063	0.91	48.8	6,451	0.014	0.18	13.4
	(SE)	(3,468)	(0.005)	(0.08)	(3.2)	(1,295)	(0.003)	(0.04)	(2.2)
	N	1435	230	246	246	1435	230	246	246
5	Estimate	12,471	0.053	0.80	48.6	1,003	0.004	0.06	5.5
	(SE)	(2,016)	(0.008)	(0.11)	(4.8)	(429)	(0.002)	(0.03)	(2.2)
	N	1435	101	109	109	1435	101	109	109
Statewide	Estimate	149,538	0.070	0.91	46.9	27,528	0.013	0.17	12.3
	(SE)	(6,730)	(0.003)	(0.04)	(1.5)	(2,720)	(0.001)	(0.02)	(1.0)
	N	1487	1102	1182	1183	1487	1102	1182	1183

TABLE 22. Expanded statewide and regional summaries of SPRING TURKEY hunting in Mississippi during the 1981 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	5,997	0.160	0.96	57.8	37,719	6.11	6,267	15.6
	(SE)	(1,322)	(0.022)	(0.16)	(7.4)	(7,187)	(0.74)	(920)	(2.1)
	N	1475	44	45	45	1467	44	289	289
	Estimate	6,136	0.099	0.66	41.8	57,910	6.35	9,331	23.2
	(SE)	(1,284)	(0.015)	(0.11)	(6.1)	(10,456)	(0.86)	(1,114)	(2.5)
	N	1475	65	67	67	1467	65	289	289
	Estimate	7,252	0.103	0.91	48.3	70,951	8.72	8,217	20.4
	(SE)	(1,517)	(0.016)	(0.15)	(6.6)	(11,671)	(0.90)	(1,049)	(2.4)
	N	1475	57	57	58	1467	58	289	289
	Estimate	12,691	0.138	0.99	52.2	85,253	6.91	12,813	31.8
	(SE)	(2,076)	(0.015)	(0.13)	(5.2)	(12,058)	(0.67)	(1,294)	(2.7)
	N	1475	88	92	92	1467	88	289	289
	Estimate	3,486	0.098	0.96	50.0	25,800	7.67	3,621	9.0
	(SE)	(1,121)	(0.027)	(0.25)	(10.0)	(6,967)	(1.40)	(704)	(1.7)
	N	1475	24	26	26	1467	24	289	289
									Percent of Total Licensees
Statewide	Estimate	37,338	0.122	0.89	49.7	288,703	7.07	42,350	20.6
	(SE)	(3,307)	(0.008)	(0.06)	(2.9)	(21,647)	(0.38)	(2,151)	(1.0)
	N	1493	293	305	306	1482	294	1496	1496

TABLE 23. Expanded statewide and regional summaries of FALL TURKEY hunting in Mississippi during the 1981 hunting season.

Region ^a	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	44,20	02 87	.01 6	55.5	14,920	3.09	4 ,970	85.7
	(SE)	(.,03)	(004 2)	(016)	(8.4)	(2,413)	(0.32)	(8319)	(5.5)
	N	149	35	6	36	1489	35	42	42
3	Estimate	6 690	0.333	0.83	66.7	2,072	2.00	828	4.3
	(SE)	(6 65)	(0.150)	(0.31)	(21.1)	(946)	(0.56)	(338)	(5.5)
	N	14 90	6	6	6	1489	6	42	42
									Percent of Total Licensees ^b
Statewide	Estimate	5,920	0.307	0.93	60.9	19,289	3.11	6,333	3.1
	(SE)	(1,215)	(0.036)	(0.14)	(7.3)	(3,390)	(0.30)	(920)	(0.4)
	N	1494	45	46	46	1493	45	1494	1494

^a Fall turkey hunting was legal only in regions 1 and 3.

^b 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 1981-82 hunting season and ALL TURKEY hunting (combining spring and fall data) during the 1981 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 ^a
Deer	Estimate	210,684	0.079	1.26	51.7	2,541,459	15.44	167,063	81.2
	(SE)	(9,403)	(0.003)	(0.05)	(1.4)	(72,974)	(0.39)	(2,078)	(1.0)
	N	1486	1120	1205	1208	1408	1127	1496	1496
Buck	Estimate	166,276	0.062	1.00	47.6				
	(SE)	(7,580)	(0.003)	(0.04)	(1.4)				
	N	1487	1121	1206	1208				
Doe	Estimate	45,373	0.017	0.27	17.6				
	(SE)	(3,623)	(0.001)	(0.02)	(1.1)				
	N	1487	1121	1206	1207				
Turkey	Estimate	43,400	0.134	0.98	50.0	308,413	7.12	44,825	21.8
	(SE)	(3,831)	(0.009)	(0.07)	(2.8)	(22,535)	(0.38)	(2,196)	(1.1)
	N	1493	311	323	324	1482	312	1496	1496

^a Calculated as a percent of big game license holders only.



1981-82 MISSISSIPPI HUNTER QUESTIONNAIRE

A. Please fill in the blocks below for each game species you hunted during the 1981-82 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
	Bucks	Does		
1 Dove				
2 Quail				
3 Woodcock				
4 Rabbit				
5 Squirrel				
6 Raccoon				
7 Deer (archery)				
8 Deer (prim. weapon)				
9 Deer (gun)				
10 Turkey (Spring 81)				
11 Turkey (Fall 81)				
12 Ducks	Mallard	Wood	Other	
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 two 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. Have you ever completed a Hunter Education (Safety) training course? (check one)

- 1 Yes
- 2 NO

4. Would you favor requiring new hunters to complete a Hunter Education (Safety) training course before purchasing their first hunting license? (check one)

- 1 Yes
- 2 No
- 3 Not sure

6. Did you see any of the following animals during the past year? (check one box for each animal)

- | | | | |
|---------|----------------------------|----------------------------|------------------------------|
| | Yes | No | Maybe, hard to tell for sure |
| Beaver | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| Panther | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| Coyote | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| Eagle | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |

If so, when and where? _____

8. Complete the following:

I would favor increasing the cost of a resident hunting and fishing license: (check one)

- 1 \$1.00 to provide funds to purchase land for public hunting and fishing.
- 2 \$10.00 to provide funds to administer wildlife and fisheries programs.
- 3 \$2.00 - provided \$1.00 is used to purchase land and \$1.00 is used to administer wildlife and fisheries programs.
- 4 I do not favor increasing the cost of a hunting and fishing license.

7. Do you have any children who hunt, will hunt in the future, or have hunted in the past? (check one)

- 1 Yes
- 2 NO

8. Do you currently receive or read Mississippi Outdoors, the magazine published by the Mississippi Department of Wildlife Conservation? (check one)

- 1 Yes
- 2 No

9. How many game violations did you observe during the past hunting season? (check one)

- 1 None (0)
- 2 1-2
- 3 3-5
- 4 More than 5

10. Your age: _____ yrs.

Fig. 1. Questionnaire used for the 1981-82 mail 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,

A handwritten signature in black ink, appearing to read "Lon Strong", with a long horizontal flourish extending to the right.

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 1981-82 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 1981-82 hunting season and last spring's (1981) 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 1981-82 survey of game harvest and hunter effort in Mississippi.