MISSISSIPPI NON-RESIDENT MAIL SURVEY OF

GAME HARVEST AND HUNTER EFFORT FOR

1994-95

by

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INTRODUCTION

The purpose of the non-resident game harvest survey is to establish indices of harvest and hunter effort for each game species taken by non-residents. These indices will provide trend data which will allow staff to monitor changes in harvest and effort through time. When interpreting these data, it is important to consider habitat changes, species abundance, the current socio-economic climate of the state as well as changes in management strategies.

The Mississippi Department of Wildlife Fisheries and Parks (MDWFP) used a mail survey to obtain data on total harvest, average daily kill, average seasonal harvest, and total man-days hunted for each game species hunted by non-residents. The estimates obtained for each of these categories contain serious sampling, response and nonresponse biases, therefore the accuracy of these estimates is unknown. Filion (1980) provided a good review of these biases and their effect on the estimates. Recognizing that these biases exist and assuming all biases remain constant, the estimates obtained from the survey provide adequate indices for monitoring trends in non-resident hunter harvest and effort.

The primary objective of the non-resident mail survey for the 1994-95 hunting season was to obtain a reliable set of statewide indices for each game species in Mississippi. The survey also wil be used as a tool to monitor hunter attitudes and perceptions on specific issues. The results of the survey will be used to help guide future management decisions.

METHODS

The sampling frame for the survey consisted of non-resident holders of a Type 30 - All Game Hunting, Type 31 - 5 Day All Game Hunting, Type 33 Small Game Hunting or Type 34 - 5 Day Small Game Hunting license purchased during the 1994-95 license year.

An approximate 0.25 percent random sample of these hunting license buyers was selected from the 20,118 licenses processed from July 1, 1994 - January 31, 1995.

An initial sample of 2,565 Type 30 - All Game Hunting, 616 Type 31 - 5 Day All Game Hunting, 426 Type 33 - Small Game Hunting and 743 Type 05 - 5 Day Small Game Hunting licenses holders was selected. All types 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 April 4, 1995 to the 4,350 sampled hunters. Three weeks after the initial mailing reminder post cards (Figure 3) were mailed to 2,614 sampled hunters who had not returned their questionnaire. The final mailing, composed of the identical questionnaire, cover letter (Figure 4) and business reply envelope was mailed approximately three weeks after the reminder post card mailing to the 2,119 nonrespondents. First mailing questionnaires were given identification numbers from 100,001 to 104,350, while the final mailing was given a 200,000 numbering sequence to differentiate responses between mailings.

Questionnaire design and mailing procedures were outlined by Steffen (1981).

Procedures for editing and data entry of returned questionnaires were also identical to Steffen (1981).

Estimates 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 on a statewide (Figure 5) basis.

The 1994-95 survey obtained information about two different license years. Turkey harvest indices were partially calculated from hunters who hunted during the spring 1994 turkey season, which was the 93/94 license year. Indices for other species were determined for the 1994-95 season alone. Spring 1994 turkey indices were calculated based on the respondents who also purchased a big game license during the previous July 1, 1993 - June 30, 1994 fiscal year (Question 12 on survey).

RESULTS

Based on all three mailings, 467 (10.7%) of the 4,530 questionnaires were returned as non-deliverable by the post office. Therefore 3,883 individuals were assumed to have been contacted to participate in the survey. Of these 2,700 (69.5%) returned their questionnaires for possible analysis and 1,183 (30.5%) were nonresponses.

Statewide expansions were calculated based on the total hunting licenses sold for each type and accounted for by the middle of July 1995. There existed 14,120 individuals licensed to hunt all game, 5,019 licensed for 5 day all game hunting, 2,286 licensed for small game hunting and 4,737 licensed for 5 day small game hunting. The spring, 1994 turkey hunting estimates were based on the 13,775 All Game Hunting and 4,550 5-day All Game Hunting licence holders accounted for in the 1993-94 license sales totals.

The expanded statewide summaries of total harvest, average daily kill, average seasonal kill, the percent of hunters and the percent of total licenses that hunted are provided in Table 1 - 24 for all game species included in the survey.

Table 25 summarizes the responses to the opinion questions in Part B.

DISCUSSION

This was the first year this survey was conducted. Response rates were good, indicating a willingness on the part of non-residents to report their hunting activities.

Response and nonresponse biases exist with the survey as previously noted. 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. For management purposes, it should be reemphasized that the hunting data provided are only indices to harvest and effort.

The survey should be continued with a sample of 3,000-5,000 non-resident hunters. To avoid changes in biases, attention to the consistency of survey methodology should be continued in future surveys.

ACKNOWLEDGEMENTS

This survey could not have been accomplished without the conscientious efforts of many MDWFP personnel from all divisions. Special thanks goes to Theresa Laymon for data entry and anything else that needed to be done. Appreciation is extended to C. Blakeney, D. Kincaid, Scott Neely and C. Thornhill for technical expertise and B. Ellison, J. Fleeman, J. Hazelwood, D. Smith, R. Spencer, B. Thomason and J. Tindall for help with mailing preparation.

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- Steffen, D.E. 1981. Mississippi mail survey of game harvest and hunter effort for 1980-81. Miss. Dept. Wildl. Cons., Fed.Aid Proj. No. W-48-28, Job VI-a. 87 pp.

TABLE 1. TOTAL 1994-95 DEER HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
30,444				296,718	•		
BUCK							
18,173							
DOE							
12,365							

TABLE 2. TOTAL 1994-95 GUN DEER HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
22,905				211,672			
BUCK						,	
15,182							
DOE							
7,821							

TABLE 3. TOTAL 1994-95 ARCHERY DEER HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL	% SUCCESSFUL TOTAL HUNTERS MANDAYS	TOTAL MANDAYS	AVERAGE SEASONAL	TOTAL HUNTERS	% TOTAL LICENSEES
		HARVEST			DAYS		
3,977				61,188	٠		
BUCK							
1,612							
DOE							
2,365							

TABLE 4. TOTAL 1994-95 PRIMITIVE WEAPON DEER HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL	% SUCCESSFUL HUNTERS	TOTAL	AVERAGE SEASONAL	TOTAL HUNTERS	% TOTAL LICENSEES
		HARVEST			DAYS HUNTING		
3,562				23,858			
BUCK							
1,379							
DOE							
2,179							

TABLE 5. 1994-95 GUN DEER HARVEST IN MISSISSIPPI BY NON-RESIDENT TYPE 30 - ALL GAME HUNTING LICENSE BUYERS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
20,577	0.105	1.655	0.72	194,591	15.66	12,426 (1,480)	88.0
BUCK							
13,580	690.0	1.09	0.61				
DOE							
966'9	0.036	0.56	0.36				

DISTRICT HUNTED MOST

					TOTOTOTO C
DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 0
		3	800	25 O 02	7 0%
1 59	10.3%	%/.0	8.370	05.0%	27.77
20.1	20.01				

TABLE 6. 1994-95 GUN DEER HARVEST IN MISSISSIPPI BY NON-RESIDENT TYPE 31 - 5 DAY ALL GAME HUNTING LICENSE BUYERS

					111111111111111111111111111111111111111	TOTAT	% TOTAI
TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL	AVEKAGE SEASONAL DAYS HUNTING	HUNTERS	LICENSEES
2,328	.14	.59	.43	17,081	4.15	4,116 (287)	82.0
BUCK							
1,602	60.	.39	.34				
DOE							
825	.05	.20	.16				

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
8	16.0%	13.8%	15.3%	38.9%	6.2%
8.5.6	20.01	20.01			

TABLE 7. 1994-95 ARCHERY DEER HARVEST IN MISSISSIPPI BY NON-RESIDENT TYPE 30 - ALL GAME HUNTING LICENSE BUYERS

AVERAGE DAILY KILL	E	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HIINTING	TOTAL HUNTERS	% TOTAL LICENSEES
							0
.064		692.	.46	59,579	12.09	4,928 (585)	34.9
920		.31	.23				
270.							
	_						
						-	
.038		.45	.34				
	- 1						

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
1.1%	7.6%	6.4%	7.8%	68.8%	8.2%

TABLE 8. 1994-95 ARCHERY DEER HARVEST IN MISSISSIPPI BY NON-RESIDENT TYPE 31 - 5 DAY ALL GAME HUNTING LICENSE BUYERS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
187	0.116	0.419	0.29	1,609	3.6	447	60.0
BUCK							
58	0.04	0.129	0.13				
DOE							
129	0.08	0.288	0.23				

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
7.1%	10.7%	17.9%	10.7%	46.4%	7.1%

TABLE 9. 1994-95 PRIMITIVE WEAPON DEER HARVEST IN MISSISSIPPI BY NON-RESIDENT TYPE 30 - ALL GAME HUNTING LICENSE BUYERS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL TOTAL HUNTERS MANDAYS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
3,434	.14	.765	.49	23,348	5.2	4,490 (533)	31.0
BUCK							
1,315	950.	.29	.23				
DOE							
2,115	.090	.47	.33			-	

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
1.2%	9.7%	86.5	6.5%	%9.89	8.1%

TABLE 10. 1994-95 PRIMITIVE WEAPON DEER HARVEST IN MISSISSIPPI BY NON-RESIDENT TYPE 31 - 5 DAY ALL GAME HUNTING LICENSE BUYERS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
128	0.25	1.5	0.3	510	9	85 (13)	0.01
BUCK							
25	0.125	0.75	0.23				
DOE							
2	0.125	0.75	0.23				

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
16.7%	16.7%	16.7%	8.3%	41.7%	7.1%
10.7 %	10:1/0				

TABLE 11. 1994-95 DOVE HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
TYPE 30							
26,487	6.93	22.6	0.928	3,821	3.26	1,172 (139)	0.083
TYPE 31							
3,031	6.33	20.9	0.80	479	3.3	145 (10)	0.029
TVPF 33							
29,952	8.0	31.2	0.95	3,744	3.9	960 (103)	0.42
TYPE 34							
40,853	9.26	21.3	0.95	4,411	2.3	1,918 (154)	0.405
TOTAL							
100,323				12,455			

DISTRICT HUNTED MOST

				TOTAL C	DISTRICT 6
DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 3	DISTRICTO
		1	,	14.00	7 29%
14 50	36 89	17.4%	10.1%	14.0 %	0/ (5.1
14.2%	20.00				

TABLE 12. 1994-95 QUAIL HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
TYPE 30							
3,345	3.05	12.48	0.88	1,096	4.09	268 (33)	0.019
TYPE 31							
1,442	6.87	20.6	0.80	210	3.0	70 (5)	0.014
TYPE 33							
10,373	2.8	23.9	0.87	3,667	8.45	434 (47)	0.19
TYPE 34							
2,750	1.08	12.33	0.89	2,540	11.39	223 (18)	0.047
TOTAL							
17,910				7,513			

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
23.1%	46.2%	4.8%	5.8%	12.5%	7.7%

TABLE 13. 1994-95 WOODCOCK HARVEST IN MISSISSIPPI BY NON-RESIEDENTS

TOTAL	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
TVPE 30							
56	0.35	1.14	0.71	161	3.29	49 (7)	0.0035
TYPE 31							
0							
TYPE 33							
0							
TYPE 34							
127	1.39	3.33	99.0	171	4.67	38 (3)	0.008
TOTAL							
183				338			

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
80.00	20.0%	10.0%		40.0%	10.0%
20:07e	20.00	2/2121			

TABLE 14. 1994-95 RABBIT HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
TYPE 30							
10,056	1.7	7.34	0.89	5,905	4.31	1,370 (163)	0.097
TYPE 31							
786	1.46	6.0	0.89	538	4.11	131 (9)	0.026
TYPE 33							
4,278	2.48	14.5	0.97	1,723	5.84	29 5 (32)	0.129
TYPE 34							
2,180	0.65	4.6	0.87	3,380	7.03	474 (38)	0.100
TOTAL							
17,300				11,546			

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
87.7	27.77	%001	10.0%	46.8%	9.1%
84.0	17.7	2/2/27			

TABLE 15. 1994-95 SQUIRREL HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
TYPE 30							
55,799	3.12	15.2	0.91	17,878	4.87	3,671 (430)	0.26
TYPE 31							
1,504	1.93	9.64	1.00	08.2	5.00	156 (11)	0.031
TYPE 33							
6,313	1.34	16.23	0.91	4,708	4.39	389 (43)	0.17
TYPE 34							
6,245	3.49	9.42	0.85	1,790	2.70	663	0.14
TOTAL						(52)	
69,861				25,156			

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
2.6%	9.3%	11.3%	7.1%	61.8%	7.9%

TABLE 16. 1994-95 RACCOON HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TYPE 30 1.670 1.187 TYPE 31 14 0.50		AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	MANDAYS	SEASONAL DAYS HUNTING	HUNTERS	LICENSEES
	4.93	33	0.93	1,407	4.15	339 (40)	0.024
	1.00	00	1.00	28	2.00	14	0.003
TYPE 33	:						
1,312 0.62	16.00	00	0.89	2,132	26.00	(9)	0.036
TYPE 34							
971 0.47	7.09	09	1.00	2,055	15.00	137	0.029
TOTAL						(11)	
3,967				5,622			

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
11.5%	18.0%	11.5%	9.8%	42.6%	89.9

TABLE 17. 1994-95 SPRING TURKEY HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
TYPE 30						·	
1,637	0.094	0.66	0.41	17,360	7.00	2,480 (306)	0.18
TYPE 31							
55	0.178	0.50	0.33	308	2.83	109 (6)	0.017
TYPE 33							
TYPE 34							
TOTAL							
1,692				17,668			

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
1.8%	8.3%	8.0%	11.2%	61.9%	8.8%

TABLE 18. 1994-95 FALL TURKEY HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
TYPE 30							
158	.085	0.43	0.41	1,853	5.5	367	0.026
TYPE 31							
TYPE 33							
TYPE 34							
TOTAL							
158				1,853			

DISTRICT HUNTED MOST

				DICTRICT 5	DISTRICT 6
DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 3	
		1		26 6 92	
	10.0%	6.4%		70:0%	

TABLE 19. 1994-95 DUCK HARVEST IN MISSISSIPPI BY NON-RESIDENTS

0.319 2.036 0.73 3.05 5.83 1.0 2.19 19.07 0.98 2.44 9.00 0.90	TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
0.319 2.036 0.73 5,040 6.38 3.05 5.83 1.0 327 1.91 1 2.19 19.07 0.98 8,552 8.7 1 2.44 9.00 0.90 6,207 3.69 1 2.44 9.00 0.90 6,207 3.69	TYPE 30							
3.05 5.83 1.0 327 1.91 2.19 19.07 0.98 8,552 8.7 1 2.44 9.00 0.90 6,207 3.69 20,126 20,126 20,126	1,608	0.319	2.036	0.73	5,040	6.38	790 (95)	0.056
3.05 5.83 1.0 327 1.91 2.19 19.07 0.98 8,552 8.7 2.44 9.00 0.90 6,207 3.69 2.44 9.00 0.90 6,207 3.69	TYPE 31							
2.19 19.07 0.98 8,552 8.7 2.44 9.00 0.90 6,207 3.69 2.44 9.00 0.90 6,207 3.69	766	3.05	5.83	1.0	327	1.91	171 (12)	0.034
2.19 19.07 0.98 8,552 8.7 2.44 9.00 0.90 6,207 3.69 2.44 9.00 0.90 6,207 3.69	TYPE 33							
2.44 9.00 0.90 6,207 3.69 2.44 9.00 20.126	18,746	2.19	19.07	0.98	8,552	8.7	983 (107)	0.355
2.44 9.00 0.90 6,207 3.69 2.44 20.126	TYPE 34							
	15,155	2.44	00.6	06:0	6,207	3.69	1,682 (135)	0.355
	TOTAL							
	36,506				20,126			

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
7 69	37.4%	39.8%	4.9%	11.6%	2.4%
2.0 %	27				

TABLE 20. 1994-95 GOOSE HARVEST IN MISSISSIPPI BY NON-RESIDENTS

HARVEST D	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
T. V.D.F. 30							
+	0.55	3.67	1.00	167	6.67	25 (3)	0.0018
TYPE 31							
0							
TYPE 33							
	0.32	1.14	0.57	229	3.57	2 C	0.028
3 AC 190							
	1.13	4.16	0.83	279	3.67	97 (6)	0.016
TOTAL							
481				1,156			

DISTRICT HUNTED MOST

DISTRICT 6	
DISTRICT 5	12.5%
DISTRICT 4	
DISTRICT 3	43.8%
DISTRICT 2	37.5%
DISTRICT 1	6.3%

TABLE 21. 1994-95 RED FOX HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
TYPE 30							
131	0.17	3.20	0.40	762	18.6	41 (5)	0.0029
TYPE 31							
0							
TYPE 33							
0							
TYPE 34							
0							
TOTAL							
131				762			

DISTRICT HUNTED MOST

DISTRICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
		40.0%		80.09	

TABLE 22. 1994-95 GRAY FOX HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL	AVERAGE	AVERAGE	% SUCCESSFUL	TOTAL	AVERAGE	TOTAL	% TOTAL LICENSEES
ARVEST	DAILY KILL	SEASONAL HARVEST	HUNIEKS		DAYS HUNTING		
TYPE 30							
178	0.34	1.91	1.00	516	5.55	93 (11)	900.0
TVPF 31							
, Turk							
1 YPE 33							
0							
TYPE 34							
0							
TOTAL							
178				516			

DISTRICT HUNTED MOST

					COLUMNICA
DISTRICT	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 0
		8	27.70	45 5%	9.1%
	9.1%	9.1%	21.370	27.5.5	

TABLE 23. 1994-95 BOBCAT HARVEST IN MISSISSIPPI BY NON-RESIDENTS

TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL HUNTERS	% TOTAL LICENSEES
TYPE 30							
395	0.26	1.27	1.00	1,496	4.81	311 (37)	0.022
TVPF 31							
06	0:30	1.50	0.75	300	5.00	60 (4)	0.012
TVDE 33							
6	0.33	1.00	1.00	72	3.00	9 (1)	0.004
TYPE 34							
0							
TOTAL							
494				1,823			

DISTRICT HUNTED MOST

DIETDICT 1	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	DISTRICT 6
DISTRICT					
	80 0		18 4%	65.8%	7.9%
	7.9%		2/1:01		

TABLE 24. 1994-95 COYOTE HARVEST IN MISSISSIPPI BY NON-RESIDENTS

					r		W TOTAI
TOTAL HARVEST	AVERAGE DAILY KILL	AVERAGE SEASONAL HARVEST	% SUCCESSFUL HUNTERS	TOTAL MANDAYS	AVERAGE SEASONAL DAYS HUNTING	TOTAL	% IOIAL LICENSEES
TVDE 30							
87.9	0.59	1.27	96.0	1,145	2.70	424 (50)	0.030
TVDE 31							
90	0.40	3.00	0.50	225	7.50	30 (2)	9000
TVDE 22							
11FB 33							
TVBE 34							
48	0.25	09:0	09.0	192	2.40	80 (5)	0.017
TOTAI							
10101				1.562			
816							

DISTRICT HUNTED MOST

				PISTBICT 6	DISTRICT 6
DISTRICT	DISTRICT 2	DISTRICT 3	DISTRICT 4	DISTRICT 5	2 : 2 : 2 : 2
	1	1108	20.4%	46.3%	2.6%
3.7%	9.3%	14.8%	20.470		

TABLE 25. SUMMARY OF RESPONSES TO ADDITIONAL QUESTIONS IN PART B

1. How far did you travel one-way to hunt in Mississippi?

202 miles - mean

50% traveled 140 miles or less

2. How many hunting trips have you made to Mississippi since September 1, 1994?

849 35.5%

1 - 3 trips

377 15.7%

4 - 7 trips

1161 48.5%

8 or more trips

7 0.3%

Don't know

3. What is the average number of days you usually stay in Mississippi?

1681 70.8%

1 - 4 days

269 11.3%

5 - 7 days

410 17.3%

8 or more days

13 0.5%

Don't know

4. Where do you stay when you hunt in Mississippi?

1371 58.4%

Hunting camp

725 30.9%

Private home

177 7.5%

Hotel/Motel

45 1.9%

Camp on public land

11 0.5%

State park

17 0.7%

Don't know

6. Do you think non-residents should be able to harvest antlerless deer on public land in Mississippi?

1567 65.8% Yes

293 12.3% No

521 21.9% Don't know

7. Were you checked by a Mississippi Conservation Officer this year?

653 27.2% Yes

1736 72.4% No

8 0.3% Don't know

If yes, what were you hunting?

63 8.8% Dove

31 4.3% Squirrel

522 72.7% Deer

62 8.6% Waterfowl

24 3.3% Other

16 2.2% No response

8. How many years have you hunted in Mississippi?

10.3 Mean

9. Do you hunt in states other than your home state and Mississippi?

1105 43.1% Yes

1458 56.9% No

10. How do you get most of your information about hunting in Mississippi?

7.9% Newspaper
 26.9% Brochure
 16.9% Telephone call

Other

1234 48.3%

11. How much do you usually spend per hunting trip in Mississippi (gasoline, food, lodging, etc.)

561 21.9% 0 - \$50 799 31.2% \$51 - \$100 579 22.6% \$101 - \$200 623 24.3% \$201 - or more

12. Did you buy a license to hunt deer and/or turkey in Mississippi in the 1993-94 (last year) hunting season?

1799 70.2% Yes
750 29.3% No
15 0.6% Don't know

13. In what state are you a resident?

138 Alabama 5.4% 1 0.0% Alaska 2 0.1% Arizona 74 2.9% **Arkansas** California 3 0.1% 5 0.2% Colorado

2	0.1%	Delaware
1	0.0%	District of Columbia
48	1.9%	Florida
44	1.7%	Georgia
2	0.1%	Idaho
30	1.2%	Illinois
3	0.1%	Indiana
1	0.0%	Iowa
4	0.2%	Kansas
7	0.3%	Kentucky
1620	63.2%	Louisiana
3	0.1%	Maryland
1	0.0%	Massachusetts
13	0.5%	Michigan
6	0.2%	Minnesota

Missouri

Montana

Nebraska

Nevada

New Hampshire

New Jersey

New York

25

1

2

1

3

2

3

9.7%

0.0%

0.1%

0.0%

0.1%

0.1%

0.1%

18	0.7%	North Carolina
9	0.4%	Ohio
8	0.3%	Oklahoma
3	0.1%	Pennsylvania
11	0.4%	South Carolina
374	14.6%	Tennessee
86	3.4%	Texas
2	0.1%	Virginia
3	0.1%	West Virginia
4	0.2%	Wisconsin
1	0.0%	Wyoming

14. Your age

Mean 43.6

15. In which county is your lease?

68	6.0%	Adams
2	0.1%	Alcorn
118	10.4%	Amite
3	0.2%	Attala
13	1.1%	Benton
7	0.6%	Bolivar
4	0.3%	Calhoun
9	7.9%	Carroll

4	0.3%	Chickasaw
4	0.3%	Choctaw
53	4.7%	Claiborne
29	2.5%	Clarke
1	0.0%	Clay
11	9.7%	Coahoma
79	6.9%	Copiah
1	0.0%	Covington
9	7.9%	Desoto
5	0.4%	Forrest
104	9.2%	Franklin
4	0.3%	George
8	0.7%	Greene
7	0.6%	Grenada
8	0.7%	Hancock

Hinds

Holmes

Humphreys

Issaquena

Jackson

Jasper

Jefferson

0.9%

0.6%

0.2%

1.2%

0.2%

0.7%

9.8%

10

7

3

14

3

8

111

10	0.9%	Jefferson Davis
19	1.6%	Kemper
5	0.4%	Lafayette
17	1.5%	Lamar
11	1.0%	Lauderdale
24	2.1%	Lawrence
1	0.0%	Leake
4	0.3%	Leflore
19	1.6%	Lincoln
3	0.2%	Lowndes
4	0.3%	Madison
10	0.9%	Marion
11	1.0%	Marshall
4	0.3%	Monroe
5	0.4%	Montgomery
3	0.2%	Newton
5	0.4%	Noxubee
4	0.3%	Panola
12	1.1%	Pearl River
3	0.2%	Perry
10	0.9%	Pike
4	0.3%	Quitman

1	0.0%	Rankin
2	0.1%	Scott
5	0.4%	Sharkey
6	0.5%	Simpson
4	0.3%	Smith
7	0.6%	Stone
2	0.1%	Sunflower
14	1.2%	Tallahatchie
4	0.3%	Tate
6	0.5%	Tippah
15	1.3%	Tunica
2	0.1%	Walthall
18	1.6%	Warren
6	0.5%	Washington
9	0.8%	Wayne
5	0.4%	Webster
209	18.4%	Wilkinson
6	0.5%	Yalobusha
4	0.3%	Yazoo

- 16. How many acres are in your lease?
 - 256 23.7% 1 500 acres
 - 264 24.4% 501 1000 acres
 - 156 14.4% 1001 1500 acres
 - 125 11.4% 1501 2000 acres
 - 51 4.7% 2001 2500 acres
 - 48 4.5% 2501 3000 acres
 - 35 3.2% 3001 3500 acres
 - 43 3.9% 3501 4000 acres
 - 9 0.8% 4001 4500 acres
 - 23 2.1% 4501 5000 acres
 - 9 0.8% 5001 5500 acres
 - 19 1.7% 5501 6000 acres
 - 5 0.4% 6001 6500 acres
 - 8 0.7% 6501 7000 acres
 - 3 0.2% 7001 7500 acres
 - 7 0.6% 7501 8000 acres
 - 1 0.9% 8001 8500 acres
 - 1 0.9% 8501 9000 acres
 - 15 1.3% 10000 +

17. How much do you pay per acre for your hunting lease?

403 39.2%

\$1 - \$5

442 43.0%

\$5 - \$10

176 17.1%

\$10 or more

6 0.6% Don't know

18. Did you purchase FMAP permits this year?

324 30.5%

Yes

736 69.2%

No

0 0.4%

Don't know

19. If you are a member of a hunting club in Mississippi, how many members are in your club?

438 39.1%

1 - 10 members

304 27.1%

11 - 20 members

187 16.7%

21 - 30 members

84 7.5%

31 - 40 members

42 3.7%

41 - 50 members

30 2.6%

51 - 60 members

15 1.3%

61 - 70 members

3 0.2%

71 - 80 members

1 0.0%

81 - 90 members

7 0.6%

91 - 100 members

7 0.6%

100 + members

20. How many members of your club are non-residents?

675 61.7% 1 - 10 nonresident members 270 24.7% 11 - 20 nonresident members 84 7.6% 21 - 30 nonresident members 20 31 - 40 nonresident members 1.8% 18 1.6% 41 - 50 nonresident members 51 - 60 nonresident members 20 1.8% 3 0.2% 61 - 70 nonresident members 0 0.0% 71 - 80 nonresident members 1 0.1% 81 - 90 nonresident members

21. Does you club participate in DMAP?

284 25.6% Yes 408 36.8% No 417 37.6% Don't know

22. In which county(s) do you own land?

19 5.3% Adams 4 1.1% Alcorn 36 10.1% **Amite** 4 1.1% Attala 7 1.9% **Benton** 6 1.6% **Bolivar** Calhoun 1 0.2%

- 2 0.5% Carroll
- 4 1.1% Choctaw
- 2 0.5% Claiborne
- 4 1.1% Clarke
- 2 0.5% Coahoma
- 2 0.5% Copiah
- 7 1.9% Desoto
- 28 7.8% Franklin
- 2 0.5% George
- 3 0.8% Greene
- 6 1.6% Grenada
- 3 0.8% Hancock
- 1 0.2% Hinds
- 5 1.4% Holmes
- 1 0.2% Humphreys
- 2 0.5% Issaquena
- 2 0.5% Itawamba
- 1 0.2% Jackson
- 7 1.9% Jasper
- 1 0.2% Jefferson Davis
- 17 4.7% Jefferson
- 2 0.5% Kemper

6	1.6%	Lafayette
2	0.5%	Lamar
2	0.5%	Lawrence
3	0.8%	Leake
2	0.5%	Lee
1	0.2%	Leflore
10	2.8%	Lincoln
1	0.2%	Lowndes
1	0.2%	Madison
6	1.6%	Marion
7	1.9%	Marshall
6	1.6%	Montgomery
1	0.2%	Neshoba
4	1.1%	Newton
3	0.8%	Noxubee
4	1.1%	Panola
20	5.6%	Pearl River
4	1.1%	Perry
4	1.1%	Pike
2	0.5%	Pontotoc
2	0.5%	Quitman

0.8%

3

Rankin

- 1 0.2% Scott
- 2 0.5% Simpson
- 1 0.2% Smith
- 1 0.2% Stone
- 4 1.1% Sunflower
- 6 1.6% Tallahatchie
- 6 1.6% Tate
- 7 1.9% Tippah
- 1 0.2% Tishomingo
- 9 2.5% Tunica
- 9 2.5% Walthall
- 5 1.4% Warren
- 12 3.3% Washington
- 4 1.1% Wayne
- 3 0.8% Webster
- 37 10.4% Wilkinson
- 6 1.6% Yalobusha
- 5 1.4% Yazoo
- 23. How many acres do you own?
 - 104 29.7% 1 50 acres
 - 53 15.1% 51 100 acres
 - 109 31.1% 101 500 acres

35	10.0%	501 - 1000 acres
16	4.5%	1001 - 1500 acres
4	1.1%	1501 - 2000 acres
5	1.4%	2001 - 2500 acres
3	0.8%	2501 - 3000 acres
5	1.4%	3001 - 3500 acres
5	1.4%	3501 - 4000 acres
1	0.2%	4001 - 4500 acres
2	0.5%	4501 - 5000 acres
1	0.2%	5001 - 5500 acres
2	0.5%	5501 - 6000 acres
5	1.4%	6001 + acres

24. Did you purchase FMAP permits this year?

66 20.0% Yes

265 80.0% No

1994-95 Mississippi Non-Resident Hunter Questionnaire

Α.

Please fill in the blocks below for each game species you hunted in Mississippi during the 1994-95 hunting season (even if you were unsuccessful). If you hunted more than one kind of game on a particular day, count a day for each type of game you hunted. Report only game taken by you. Your answers will be kept confidential. Please answer the questions in part B, whether you hunted or not.

SPECIES	Total Kill	Total Days Hunted	District Hunted Most	
1. Dove 2. Quail 3. Woodcock				MISSISSIPPI Determine district HUNTED MOST from map.
4. Rabbit 5. Squirrel				District
7. Deer (archery)	Bucks Does			District
 Deer (prim. weep.) Deer (gun) Turkey (spring '94) 				District
11. Turkey (fall '94)	Mailard Wood Other			
12. Ducks 13. Geese				District — — — — — — — — — — — — — — — — — — —
14. Red Fox 15. Gray Fox 16. Bobcat				District
17. Coyote				District

FIGURE 1. Questionnaire used for the 1994-95 non-resident survey of game harvest and hunter effort in Mississippi

	6. Do you think non-residents should be able to harvest antieness user on public land in Mississippi?	Yes	ON	Don't know	7. Were you checked by a Mississippi Conservation Officer this year?	Yes	ON N		If yes, what were you hunting?	Dove	Squirrel	Deer	Waterfowi		Other		8. How many years have you hunted in Mississippi?	*****/					
B. Piease answer the following questions.	1. How far did you travel one-way to hunt in Mississippi?	Wiles	2. How many hunting trips have you made to Mississippi since September 1, 1994?	1-3 trips	4-7 trips	8 or more trips	3. What is the average number of days you usually stay in Mississippi?	1-4 days	5-7 days	8 or more days	4. Where do you stay when you hunt in Mississippi?	Hunting camp	Private home	HoteVmotei	Camp on public land	State Park		5. Where do you hunt in Mississippi	On your own land	Club or land you lease	Private land (that you do not own or lease)	Public land (Forest Service land, National Refuge, etc.)	State Wildlife Management Area

12. Did you buy a license to hunt deer and/or turkey in Mississippi in the 1993 (last year) hunting season? Yes	Don't know	13. In what state are you a resident?	14. Your age	If you <u>lease</u> land <i>in <u>Mississippi</u></i> as an individual or ciub member, please answ the following questions:	15. in which county(s) is your lease?	
Do you hunt in states other than your home state and Mississippi? Yes No	 How do you get most of your information about hunting in Mississippi? (Check only one) 	Newspaper Brochure	Telephone cali	11. How much do you usually spend per hunting trip in Mississippi (gasoline, food, iodging, etc.)	0 - \$50	\$101 - \$200 \$201 or more

21. Does your club participate in DMAP?	Yes No Don't know	if you hunted on land you <u>own in Mississippi,</u> please answer the following questions: 22. In which county(s) do you own land?	23. How many acres do you own?	acres	24. Did you purchase FMAP permits this year? Yes	No Is the appropriate information (season dates, license cost, regulations) available to you How could we improve that service?				
	16. How many acres are in your lease(s)?	17. How much do you pay per acre for your hunting lease?\$1 - \$5\$10	\$10 or more	23 18. Did you purchase FMAP permits this year?	Yes No	19. If you are a member of a hunting ciub in Mississippi, how many members are in your club?	members	20. How many members of your club are non-residents?	non-residents	



MISSISSIPPI DEPARTMENT OF WILDLIFE, FISHERIES AND PARKS

SAM POLLES, Ph.D Executive Director

Dear Sportsman:

The Mississippi Department of Wildlife, Fisheries and Parks is conducting its first non-resident hunter survey. This survey is designed to obtain reasonable estimates of game harvest, hunter effort and hunter opinions. Information supplied by you and other selected non-resident 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 sportsman can be contacted. Please complete the enclosed questionnaire as accurately as possible (even if you did not hunt) and return it in the addressed, stamped envelope.

Your answers will be kept confidential. The questionnaire has an identification number for mailing purposes only. This allows us to check your name off the list when your questionnaire is returned. Your name will never be placed on the questionnaire or used in association with any of the information you provide. A prompt reply will be sincerely appreciated.

Yours for better conservation,

Sam Polles, Ph.D.

Executive Director, Mississippi

FIGURE 2. Cover letter used for the initial mailing of the 1994-95 non-resident survey of game harvest and hunter effort in Mississippi

Survey Section DEPARTMENT OF WILDLIFE, FISHERIES & PARKS P. O. Box 451

JACKSON, MISSISSIPPI 39205



PRESORTED FIRST CLASS MAIL U.S. POSTAGE PAID PERMIT NO. 141

Dear Sportsman:

Recently we mailed you a questionnaire on your hunting experiences in Mississippi. 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, efforts and opinions of hunters in Mississippi for management purposes.

Sincerely

Sam Polles, Ph.D. Executive Director

FIGURE 3. Post card used as the first reminder mailing to nonrespondents during the 1994-95 non-resident survey if game harvest and hunter effort in Mississippi



MISSISSIPPI DEPARTMENT OF WILDLIFE, FISHERIES AND PARKS

SAM POLLES, Ph.D.

Dear Sportsman:

About six weeks ago I wrote you seeking information about your hunting activities during the past season in Mississippi. As of today we have not received your completed questionnaire.

Our research unit has undertaken this project because of the belief that citizen participation should be taken into account in the formation of efforts which will provide the best hunting opportunities for sportsmen in Mississippi.

I am writing to you again because of the significance each questionnaire has to the usefulness of this project. Your name was drawn through a scientific sampling process. In order for the results of the survey to be as complete as possible it is essential that each person in the sample return the questionnaire. Even if you had little success or if you did not hunt at all, your answers are important to us. Please return the survey in the enclosed addressed, stamped envelope so that your response can be included in the results.

Sincerely for better conservation,

Sam Polles, Ph.D.

Executive Director, Mississippi

FIGURE 4. Cover letter mailed with the second (and final) reminder mailing to non-respondents during the 1994-95 non-resident survey of game harvest and hunter effort in Mississippi

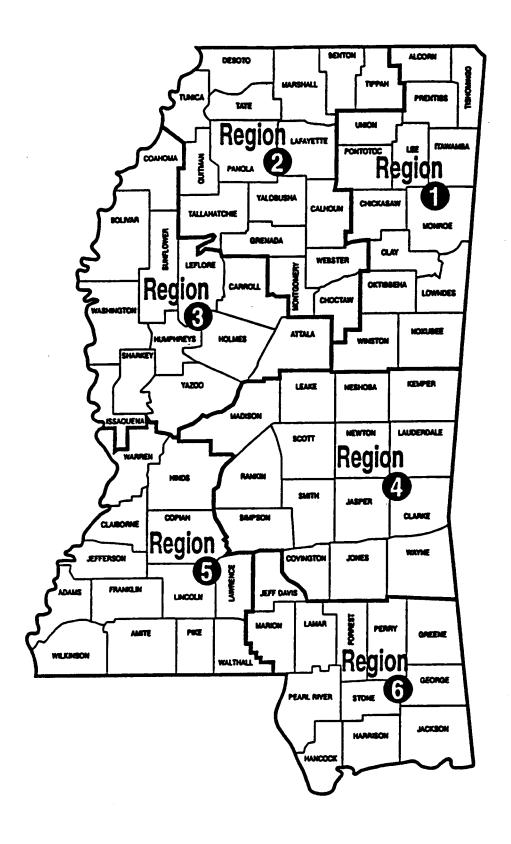


FIGURE 5. District partitions for district hunted most