

CHARACTERISTICS AND OPINIONS OF MISSISSIPPI DEER HUNTERS USING PUBLIC AREAS¹

RICHARD W. WHITESIDE², Department of Wildlife and Fisheries, Mississippi State University, Mississippi State, MS 29762

DAVID C. GUYNN, JR.³, Department of Wildlife and Fisheries, Mississippi State University, Mississippi State, MS 39762

HARRY A. JACOBSON, Department of Wildlife and Fisheries, Mississippi State University, Mississippi State, MS 39762

Abstract: Characteristics and opinions of deer hunters using the Choctaw and Tallahala Wildlife Management Areas (WMA) were determined from a mail questionnaire. Respondents were typically white, middle-class males. Characteristics of education, occupation and community size of residence were significantly different ($P < 0.05$) between the WMAs. The quality of hunting and current management practices, with the exception of hunting with dogs, were favorably rated on both WMAs. Significantly more respondents from the Tallahala WMA (66%) than the Choctaw WMA (42%) favored hunting with dogs. Respondents from both WMAs rated the suspense and challenge of the hunt as the most important benefit derived from hunting, followed by getting outdoors, hunting success, solitude, companionship, meat and exercise.

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Managers have traditionally focused on the biological aspects of wildlife management through the assumptions that wildlife provides direct benefits to people and that the magnitude of these benefits is a function of wildlife abundance. With increasing activity of other natural resources management, these assumptions are being challenged (Langenau 1979). Many of the current problems in wildlife administration can be attributed to changes in objectives from "game bagged" to "days afield" to "multiple satisfactions" (Hendee and Potter 1976). There are a variety of human experiences and utilities derived from hunting that are products of management, are measurable, and can be used to evaluate management programs (Hendee 1974). Human dimensions data, as well as biological data, are required to evaluate the effectiveness of wildlife management efforts in providing human benefits.

About 90,000 deer hunters annually use public Wildlife Management Areas (WMA) in Mississippi (Lowe 1978). This paper reports on a study to determine the characteristics of hunters, their attitudes toward current management practices and the benefits derived by deer hunters on 2 of these WMAs.

¹ A contribution to Federal Aid Project W-48-27. No. 5003, Mississippi Agricultural and Forest Experiment Station, Mississippi State University, Mississippi State, MS 39762.

² Present address: Department of Range and Wildlife Management, Texas Tech University, Lubbock, TX 79409.

³ Present address: Department of Forestry, Clemson University, Clemson, SC 29631.

METHODS

A questionnaire was mailed to a random sample of deer hunters (40%) who completed daily hunting permits on the Choctaw and Tallahala WMAs during the 1977 - 78 season. Three reminder mailings to nonrespondents were conducted to increase return rate. No attempt was made to assess nonresponse bias.

Responses were analyzed using the Statistical Package for the Social Sciences (SPSS) (Nie et al. 1979). Chi-square contingency tables were used to test for significant differences ($P < 0.05$) between responses of hunters using the 2 areas (Snedecor and Cochran 1967).

RESULTS AND DISCUSSION

Of the 493 and 525 questionnaires sent to Choctaw and Tallahala deer hunters, 359 (73%) and 365 (70%) useable questionnaires were returned, respectively.

The age and income of respondents from the WMAs were similar (Table 1). The majority of hunters were from 21 - 40 years of age. The \$10,000 - 14,999 income category was reported most frequently. Educational attainment of respondents for the Tallahala WMA was significantly higher than that for the Choctaw WMA (Table 1). Occupation was significantly different between WMAs with Tallahala respondents reporting a higher proportion of occupations in the "white collar" category and Choctaw respondents reporting a higher proportion of "students" (Table 1). Community size of residence was significantly different between WMA with Tallahala hunters showing a higher tendency to reside in cities (Table 1). Ninety-seven percent of the respondents from both WMAs were males. All respondents from the Tallahala WMA were white and 98% of the respondents from the Choctaw WMA were white. The remaining 2% of Choctaw respondents were black.

Respondents from both WMAs generally favored current management practices (Table 2). A major exception was hunting deer with dogs. Neither WMA was open to deer hunting with dogs during the 1977 - 78 season, but a majority (66%) of Tallahala respondents were in favor of hunting with dogs. A majority (58%) of Choctaw respondents disapproved of hunting deer with dogs. A possible reason for this response may be that the Tallahala WMA has a past tradition of deer hunting with dogs, whereas the Choctaw WMA does not. Significant differences of opinions by WMA were found regarding daily hunting permits, hunting with dogs, and implementation of a trophy management program. A higher proportion of Choctaw respondents favored the daily hunting permit and the implementation of a trophy management program (Table 2).

Responses from both WMAs concerning 7 benefits derived from deer hunting were similar (Table 3). Nonsuccess related benefits, "suspense and challenge of the hunt" and "getting outdoors," were ranked most important by about 67% of the respondents. Hunting success was ranked most important by 15% and 19%, respectively, of Choctaw and Tallahala respondents.

Quality ratings of deer hunting on the 2 WMAs were similar except that a significantly higher proportion of Choctaw respondents rated natural beauty as "good or excellent" than did Tallahala respondents (Table 4). A rating of "poor" or "fair" for size and antler development of deer by about 72% of the respondents suggests that sportsmen are aware that these herds are in less than optimal

Table 1. Characteristics of deer hunters using the Choctaw and Tallahala WMAs during the 1977 - 78 season (% of respondents).

Characteristic	Choctaw WMA	Tallahala WMA	X ²	df
Age of respondents				
20 or under	17	17		
21 - 30	35	37		
31 - 40	28	21		
41 - 64	18	21		
65 or older	3	3		
			4.16	4
Income of respondents				
\$0 - 5,999	31	28		
\$6,000 - 9,999	19	17		
\$10,000 - 14,999	27	26		
\$15,000 - 19,999	12	16		
\$20,000 or more	10	13		
			4.14	4
Education of respondents				
8 or less years	10	0		
1-3 years of high school	17	28		
High school graduate	33	34		
1-3 years of college	25	25		
4 or more yrs. of college	16	14		
			42.49 ^a	4
Occupation of respondents				
Farmer or rancher	3	4		
Blue collar	45	45		
White collar	14	18		
Professional	10	10		
Government	6	10		
Student	12	6		
Unemployed	2	3		
Other	8	5		
			15.97 ^a	7
Community size of residence				
Rural	51	46		
Town of less than 2,500	7	9		
Town of 2,500 - 9,999	18	12		
City of 10,000 - 19,999	16	6		
City of 20,000 - 49,999	4	12		
City of 50,000 or more	5	15		
			55.57 ^a	5

^a Significant at P < 0.05.

Table 2. Opinions of current management practices expressed by deer hunters using the Choctaw and Tallahala WMAs during the 1977 - 78 season (% of respondents).

Management Practice	Choctaw WMA	Tallahala WMA	X ²	df
Daily hunting permit				
Approve	91	82		
Disapprove	7	18		
			12.38 ^a	1
Anterless hunting				
Approve	46	51		
Disapprove	36	31		
No opinion	18	18		
			1.93	2
Hunting with dogs				
Approve	42	66		
Disapprove	58	34		
			38.11 ^a	1
Bag limit of 1 buck/day				
Approve	87	87		
Disapprove	13	13		
			0.02	2
Closing logging roads				
Approve	66	61		
Disapprove	29	36		
No opinion	5	4		
			3.12	2
Food plots				
Approve	82	85		
Disapprove	18	15		
			2.25	2
Implementing a trophy program				
Favor	76	70		
Oppose	24	30		
			8.50 ^a	2

^a Significant at $P < 0.05$.

physical condition. Overall satisfaction with deer hunting was rated as "good or excellent" by a majority (69%) of respondents from both areas.

CONCLUSIONS

Deer hunting on the Choctaw and Tallahala WMAs is predominantly a sport of white, middle-class males. The population of Mississippi in 1977 was 63% white and 37% non-white (Bryant and Clarke, 1977), but only 2% of Choctaw and none of the Tallahala respondents were non-white. Place of residence of deer hunters using the Choctaw and Tallahala WMAs is similar to that of the general populace,

Table 3. Summary of responses ranking 7 benefits derived from deer hunting on the Choctaw and Tallahala WMAs during the 1977 - 78 season (% of respondents ranking as most important).

Value	Choctaw WMA	Tallahala WMA	Overall Rank
Suspense & challenge	41	44	1
Getting outdoors	26	22	2
Hunting success	15	19	3
Solitude	9	6	4
Companionship	5	5	5
Meat	3	4	6
Exercise	1	1	7

as 55.5% of the general populace lived in a rural environment in 1970 (Bryant and Clarke 1977). A majority of respondents from both areas reported annual incomes of at least \$10,000. Respondents were better educated than the general population, 39% of whom had 8 or less years and 17% of whom had 1 or more years of college in 1970 (Bryant and Clarke 1977).

In spite of differences in demographic characteristics, support of current management practices was similar for the 2 groups of respondents. That a majority of respondents favored both the current bag limit of 1 buck per day and the implementation of trophy management is perplexing as these strategies are contradictory. Also, more hunters wanted a trophy management program than wanted a doe harvest. This observation, in conjunction with increasing numbers of hunters on the WMAs, draws attention to the importance of public education in the management of wildlife resources.

Hendee (1974) proposed a multiple-satisfaction approach to game management for measuring success of management programs. The importance assigned to the nonsuccess related benefits derived from deer hunting by respondents supports this approach. Other studies provided similar results (McDonough and Harris 1977, Burt 1980, Decker et al. 1980). Respondents appear to be well satisfied with the quality of deer hunting on the 2 WMAs, but this could change with increasing numbers of hunters. Peterle and Scott (1977) and Langenau and Mellon (1980) suggested that inadequate attention to the quality aspects of hunting may explain the high drop-out rate of hunters in other regions of the nation.

There is currently little antihunting sentiment in Mississippi relative to the other southeastern states (Horvath 1974). As the population of Mississippi increases, this sentiment and the demand for non-hunting wildlife benefits will likely increase, changing the clientele of wildlife managers. Information concerning the perception and use of wildlife by the general public and not just hunters, will play an increasing role in the formulation of management objectives and selection of management alternatives.

Table 4. Quality rating of deer hunting on the Choctaw and Tallahala WMA during the 1977 - 78 season (% of respondents).

Aspect of deer hunting	Choctaw WMA	Tallahala WMA	X ²	df
Number of deer and signs				
Good or excellent	65	68		
Fair	25	25		
Poor	10	7		
			2.62	2
Degree of solitude				
Good or excellent	44	41		
Fair	42	42		
Poor	14	18		
			2.28	2
Size and antler development of deer				
Good or excellent	30	26		
Fair	40	38		
Poor	30	36		
			3.23	2
Natural beauty of WMA				
Good or excellent	83	77		
Fair	13	22		
Poor	4	2		
			11.02 ^a	2
Access on WMA				
Good or excellent	76	74		
Fair	18	21		
Poor	6	5		
			1.29	2
Law enforcement				
Good or excellent	72	74		
Fair	16	15		
Poor	12	11		
			0.32	2
Quality of hunting relative to other areas hunted				
Better	40	41		
About the same	32	34		
Not as good	28	25		
			0.90	2
Overall satisfaction				
Good or excellent	70	67		
Fair	24	28		
Poor	6	5		
			2.05	2

^a Significant P < 0.05.

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