Forest Industry Hunt-lease Programs in the Southern United States: 1989

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Abstract: Selected characteristics of forest industry hunt-lease programs were evaluated for 11 southern states in 1989. Mail questionnaires were returned by 62 (70%) of 89 landowners. The respondents reported owning 8.7 million ha of which 6.5 million ha (75%) were leased for hunting. The weighted average lease fee received was \$5.31 per ha, a 60% increase from 1984 as reported by Busch and Guynn (1988). Additionally, respondents reported that public relations had a relative value equal to the lease fee and access control had a relative value of 1.45 times the lease fee. The total value of leasing was \$19.19 per ha.

Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies 46:104-109

As hunting activities increase in the southern United States, sportsmen are becoming more inclined to pay for the right to hunt and fish (Noonan and Zagota 1982). Because of this trend, hunt lease programs and lease fees are constantly changing. Along with change comes the need to gather current information about the characteristics of hunting leases, and several studies have been conducted in recent years. Lassiter (1985) found that average annual hunt-lease fees in 4 southern states ranged from \$3.06–6.45 per ha in 1983. An Alabama study found that higher returns could be generated by managing for both timber and wildlife rather than by managing for only optimal timber production (McKee 1986). Busch and Guynn (1988) determined that the 2 main reasons for leasing lands were access control and revenues. They reported annual lease fees ranging from \$2.47–26.87 per ha in 11 southern states during 1984.

Industrial forest landowners seem to lead the trend toward economic utilization

and intensive management of wildlife resources on private forest lands in the South (Busch 1987). This is the reason for surveying only industrial forest landowners in this study rather than both industrial and non-industrial forest landowners. However, information from the survey should aid both industrial and non-industrial forest landowners who hold approximately 90% of the forest lands in the South (Yoho 1981). This study was conducted to determine the nature and extent of economic values associated with hunting leases on forest industry lands and to determine the characteristics of forest industry hunt-lease programs in the southern United States during 1989.

Methods

A mail questionnaire based on Busch's (1987) design was used to determine current lease prices, size of land parcels, wildlife management practices employed, leasing practices, non-monetary benefits, and costs of leasing. A pre-test questionnaire was mailed to a subsample of chosen corporations throughout the study area. Results of the pre-test were used to develop the final questionnaire. The mailing list for this study was a revision of Busch's initial mailing list with additional information from Clephane and Carroll (1980) and Moody's Industrials (Moody's Investor's Serv. 1987). In April 1990, phone contacts were attempted to the 104 potential respondents. It was determined that some firms had been sold, gone out of business, or did not own land. The final mailing list consisted of 89 potential respondents. In May 1990, questionnaires were mailed to a combination of wildlife biologists and hunt-lease administrators employed by these forest industry corporations in Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia. Respondents' jurisdictional lands also included Texas and West Virginia. In June a reminder letter was sent to the nonrespondents. In July a second reminder letter and a second copy of the questionnaire were sent to non-respondents. Results of the returned questionnaires were compared to Busch's (1987) findings to determine changes between 1984 and 1989.

Results and Discussion

Sixty-two (70%) of the 89 surveys mailed were returned. Two (3%) of the respondents reported that the questionnaire would take too much time to complete. Thus, the results are based on 60 (67%) of the surveys mailed. Non-response bias was not assessed and the results may not be representative of all forest industry programs in the South. Ten (16%) of the respondents did not lease lands for hunting in 1989. The reasons for not leasing hunting rights were (by rank from most to least important): small tract sizes which could present potential risk to employees, hunting reserved for company employees, currently working on lease programs, company policy, free access by permit for hunting, and land holdings are in the state public-access wildlife management area (WMA) programs. Respondents owned 8.7 million ha in the 11-state area of which 6.5 million ha (75%) was leased in 1989.

Eighty-one percent of the respondents reported that they leased hunting rights on their lands.

The average (weighted by hectares leased) lease fee received by respondents was \$5.31 per ha per year in 1989. Average lease fees ranged from \$2.89 per ha in Virginia to \$6.37 per ha in Alabama (Table 1). In 1989, the forest industries leased 5.9 million ha (68%) to hunting clubs and individuals, 500,000 ha (5.8%) to state administered WMA, and donated gratis 114,900 ha (1.3%) to WMA programs. The percent of land leased per state to hunt clubs and individuals ranged from 45.2% in Virginia to 87.9% in Texas (Table 1). The respondents received an average lease fee of \$3.31 per ha per year on WMA lands (Table 2).

The majority (70%) of land leased was in the Coastal Plain physiographic region (Table 3). The unweighted average lease fees by physiographic regions ranged from an average low fee of \$2.57 per ha per year in the mountain region to \$37.35 in the delta region (Table 3). Fifty-six percent of the area available for leasing was pine plantations, while 21% was mixed natural stands, 19% was hard-wood stands, and 4% was marsh. The majority (64%) of the respondents preferred annual all-game leases while 16% of the respondents preferred a multi-year, all-

State	N	Average fee (\$/ha.)	Hectares owned	Hectares leased	% Leased
AL	14	6.37	1,134,918	747,108	65.8
AR	7	4.17	871,615	430,536	49.4
FL	12	5.93	939,511	716,460	76.3
GA	13	5.31	1,435,017	1,155,159	80.5
LA	6	4.42	885,923	586,183	66.2
MS	9	5.43	687,631	476,543	69.3
NC	12	4.15	654,699	486,422	74.3
SC	13	6.00	916,799	641,978	70.0
ТХ	4	5.66	569,387	500,728	87.9
VA	5	2.89	234,839	106,089	45.2
Other	5	3.16	376,525	62,871	16.7
Total	100	5.31	8,706,864	5,910,077	67.9

 Table 1.
 Summary of average lease fees for forest industry land leased to hunt clubs and individuals in the southern United States (1989).

 Table 2.
 Summary of average lease fees for forest industry land leased to state administered Wildlife Management Areas in the southern United States (1989).

State	N	Average fee (\$/ha)	Hectares owned	Hectares leased (WMA)	% Leased
FL	4	3.01	939,511	78,884	8.4
GA	5	4.54	1,435,017	69,437	4.8
NC	4	1.24	654,699	16,356	2.5
SC	7	4.54	916,799	85,913	9.4
Other	10	2.77	4,760,838	251,207	5.3
Total	30	3.31	8,706,864	501,797	5.8

Region		Lease fees (\$/ha) ^a			
	% ha	Low	Average	High	
Coastal plain	70	3.04	5.01	8.99	
Piedmont	21	4.27	6.35	9.24	
Mountain	3	2.57	4.27	5.38	
Delta	2	5.80	7.14	37.35	
Marsh	4	b	ъ	b	

Table 3.Distribution of forest industry lands and lease fees byphysiographic region in the southern United States (1989).

aunweighted average.

bnot reported due to confidentiality requirements.

game lease arrangement and 16% preferred multi-year, annual, or seasonal speciesspecific lease arrangements. Fifty-seven percent of the respondents reported that they actively managed for game animal abundance on corporate lands. The management practices employed most by the respondents were prescribed burning (68%), gates (61%), and food plots (54%). Other practices included clearcut size limits (43%), streamside management zones (39%), wildlife travel corridors (29%), retention of old house sites (21%), forest stand age class diversity (32%), retention of mast trees (29%), the employment of wildlife managers (39%), and posting (21%). Sixty-nine percent of the respondents made available some lands in 1989 that were not leased the previous year.

Fifty-one percent of the respondents routinely considered income from hunt leases in their economic analysis and investment decisions. Bush and Guynn (1988) reported only 25% of their respondents in 1984 considered such income in economic analysis.

Lease fees were not the only reason for leasing hunting rights on company owned lands. Two major non-monetary benefits were public relations and protection. Protection consisted mainly of access control and reduction of property damage. Respondents reported that public relations had a relative value equal to the lease fee and protecion had a relative value of 1.45 times the lease fee. In other words, on average public relations was worth \$5.31 per ha per year and protection was worth \$7.68 per ha per year. Other non-monetary benefits (reduced trash dumping, education, road maintenance, better wildlife populations and habitats, and taxes) were reported to be worth \$0.89 per ha per year. Respondents reported that the value of protection had increased 30% and that of public relations had increased 13% over the past 5 years (1984-1989). They expected the value of protection to increase 25% and that of public relations to increase 13% over the next 5 years (1989-1994). The majority (64%) of the respondents determined lease fees by the lease prices on surrounding lands. The majority (84%) of the respondents reported monitoring lessees to prevent game law violations and abuse of land or game populations. The 3 major actions that the respondents were willing to take against violators were lease revocations (83%), reporting of violators to state wildlife authorities (62%), and verbal or written reprimands (60%). The unweighted average lease size was 563.3 ha and the unweighted average hunter density was 185.2 ha per hunter (Table 4).

1992 Proc. Annu. Conf. SEAFWA

Average size of lease (ha)	Hunter density (ha/hunters)	
606	230	
199	185	
1,042	195	
406	133	
563	185	
436	116	
	size of lease (ha) 606 199 1,042 406 563	

Table 4.	Summary of lease size and hunter density by	
physiograph	ic region in the southern United States (1989).	

^aBusch 1987.

Busch and Guynn (1988) reported an average lease size of 435.8 ha and an average hunter density of 1 hunter per 116.1 ha in 1984. From 1984 to 1989 the respondents had 33 hunting related accidents reported on leased lands. Only 4 cases resulted in lawsuits to determine company liability. None of the suits resulted in an award of damage or settlement out of court; however, 2 suits are still pending. Seventy-seven percent of the respondents required lessees to carry liability insurance with an average cost of \$0.47 per ha per year. Problems reported by the respondents that occurred on leased lands included (by rank from most to least important): road damage and damage to trees, trash dumping, illegal hunting, fire, unauthorized timber cutting, legal over-harvest of game, and livestock grazing.

Respondents reported the average annual cost associated with hunt leasing was \$0.99 per ha per year; however, 1 response involving a large ownership with an unusually high cost had a significant effect on this cost. The average cost calculated without this response was \$0.52 per ha per year. The annual cost associated with hunt leases consisted of costs of administration, liability protection, land management assistance, and maintenance.

Busch (1987) reported an average lease fee for the southern states during 1984 of \$3.31 per ha per year. This fee has increased 60% to \$5.31 per ha per year in 1989 (Table 5). State increases ranged from 8% in Virginia to 81% in South Carolina (Table 5).

Conclusion

The interest in, and extent of, hunt-lease programs in the South are increasing. Most (81%) of the surveyed forest industry corporations leased lands, with 75% of the total land owned being leased (to hunt clubs, individuals, and WMA). These corporations receive 3 major benefits from their hunt-lease programs: access control, public relations, and annual revenue. The average annual fee received by forest industry in the South during 1989 was \$5.31 per ha. This is a 60% increase in the 1984 lease fee reported by Busch and Guynn (1988). This increase in revenues can

State	1984ª	1989	% Change
AL	3.63	6.37	+ 76
AR	3.43	4.17	+ 22
FL	3.46	5.93	+ 71
GA	4.69	5.31	+13
LA	3.58	4.42	+ 23
MS	3.85	5.43	+41
NC	3.21	4.15	+ 29
SC	3.31	6.00	+81
VA	2.67	2.89	+ 8
Average for South	3.31	5.31	+ 60

 Table 5.
 Average hunt lease fees (\$/ha.) and percent change in the southern United States.

^aBusch 1987.

help explain why 51% of the respondents reported they routinely used income from hunt leases in their economic analysis. Using income in economic analyses has greatly increased since 1984 when Busch and Guynn (1988) reported only 25% of the respondents using lease income in their economic analysis. Although non-industrial landowners were not included in this survey, it is likely that many of these changes apply to their lands.

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