

Forest Industry Hunt-lease Programs in the South: Economic Implications

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Abstract: Selected characteristics of forest industry hunt lease programs in the southern United States were evaluated for the 1994 calendar year. Results were compared with earlier similar surveys. Respondents owned 9,198,217 ha and leased 5,935,935 ha (64.5%) to hunt clubs and individuals. Estimated revenues generated from lease fees were about \$40 million based on an average annual fee of \$6.82 per hectare. Ninety-one percent of the respondents reported that they considered income from leases in their economic analyses and investment decisions which indicates an increasing awareness of the economic value of leasing. Utilization of the leased lands by lessees has increased over the last 5 years.

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Hunt leases are becoming more popular and diversified and are now being considered recreational leases by many forest industry firms in the southern United States. The increase in the demand for space on which to hunt or participate in other forms of outdoor recreation created a viable and profitable business opportunity for private forest landowners (Busch 1987, McKee 1986). Lease prices have increased since Stuckey et al. (1992) reported average annual lease fees of \$2.89–\$6.37 per hectare for 1989 in 11 southern states. As this market continues to develop, lessees are utilizing the land more intensively which has the potential to create additional opportunities and place greater demands on lessors.

Leases provide considerable revenue for forest landowners. In particular, leases provide a consistent, reliable source of annual revenue from each hectare of leased land. This contrasts with timber, which provides revenue only from final harvests and thinnings. Although only forest industry landowners were surveyed, much of the

information gathered from these data is general in nature and should be useful to non-industrial landowners who are considering leasing. Approximately 90% of the forest land in the southern United States is owned by nonindustrial private and industrial forest landowners (Powell et al. 1994).

This study was conducted to determine the nature and extent of change in recreational leasing over the past 5 years (1989–1994) on forest industry land in the southern United States. It is the third similar survey of forest industry landowners in the south. The first survey collected data for 1984 and the second collected data for 1989. This study, conducted in 1995 and 1996, collected data for 1994.

Methods

A mail questionnaire developed by Busch (1987) and Stuckey et al. (1992) was modified and used to determine total land base, current lease prices, cover type, wildlife management practices, value of non-monetary benefits, problems occurring on land, and trends over the past 5 years associated with recreational leasing. The questionnaire was sent to forest industry landowners in the southern United States. The mailing list for the study was an updated version of the list used in the 2 earlier studies.

In January 1995, phone contacts were attempted to 89 potential respondents. Several of these firms had gone out of business, changed ownership, or did not own land. The final mailing list consisted of 59 potential respondents representing 45 forest industry firms and over 9 million hectares of land. In June 1995, surveys were sent to wildlife biologists and hunt lease administrators working for these firms. In October, follow-up letters were sent to nonrespondents.

Data in this analysis are weighted by hectares where possible and all available data are used in the tables. In Table 1, for example, the average lease fees are calculated using figures that are weighted by hectares. Thus, these figures are calculated only when respondents supply both the fees and area leased by state. Total areas owned and leased are recorded in this table whether or not fee data are supplied.

Results and Discussion

Forty-four (74.6%) of the 59 questionnaires were returned. One respondent reported that the questionnaire was at a level of detail that he was not able to provide. Therefore, most of the results of the survey were based on 43 responses (72.9% of the total mailing list). All respondents leased land in 1994. Stuckey et al. (1992), reported 10 firms that did not lease. The survey instrument and methodology were modeled closely after those used in the 1989 study. Therefore, the 2 studies were comparable in most instances. The earliest (1984) study differed from the others in several ways which limits comparisons among all 3. Thus, findings from this study were compared mostly to Stuckey et al.'s (1992) findings to determine changes from 1989 to 1994.

Ownership, Fees, and Revenues

Respondents owned 9,198,217 ha and leased 5,935,935 ha (64.5%) to hunt clubs and individuals (Table 1). These figures are based on 42 respondents because 1 respondent refused to provide acreage data. The average lease fee reported by respondents was \$6.82 per hectare per year in 1994. This is a 28% increase from 1989 (Stuckey et al. 1992). The average lease fee ranged from \$4.18 per hectare per year in Mississippi to \$8.10 per hectare per year in South Carolina. In total, respondents received about \$40 million from lease fees in 1994 with almost \$9 million occurring in Georgia. Over half (55%) of the total lease revenue was generated in 3 states: Georgia, Florida, and Alabama. Eighty percent of the total lease revenue came from these 3 states plus the Carolinas and Texas. The average annual cost associated with the leasing program was \$1.68 per hectare per year.

Mississippi had the lowest lease fee and was the only state in which the lease fee decreased since the 1989 survey. This could be due to a lack of lease fee data for Mississippi, where fees were reported for less than half of the area leased. If the reported average fee for Mississippi is lower than actual fees for the state, the total lease revenue reported in the table for Mississippi is an underestimate. Underreporting of lease fees occurred only in Mississippi.

Forest industry leased 94% of these lands to hunt clubs and 6% to individuals in 1994. Combined, forest industry leased 64.5% of their land to clubs and individuals which is slightly less than the 68% reported by Stuckey et al. (1992). The amount leased to public (WMA) programs was 9.4% (5,265,049 ha) which means that 73.9% of the land owned by responding firms is allocated to some type of program. Even though almost three-fourths of the owned land is leased, over half (58.1%) of the respondents made available for leasing additional land that was not ultimately leased in 1994. These areas were not leased because of (from most to least important) poor access control, undesirable habitat, area too small, first time offered, target species absent, and price. It is possible that these firms are approaching a practical limit on the percentage of owned land that can be leased. If this is the

Table 1. Summary of reported acreage and revenues for forest industry land leased to hunt clubs and individuals in the southern United States (1994).

State	Average fee (\$/ha)	Hectares owned	Hectares leased	Total leased revenue (\$)	% leased
AL	7.68	1,110,768	737,920	5,670,774	66.4
AR	5.31	646,543	505,637	2,686,272	78.2
FL	7.68	1,613,632	981,525	7,542,835	60.8
GA	7.44	1,562,851	1,209,562	8,996,372	77.4
LA	6.82	462,703	269,451	1,837,647	58.2
MS	4.18	446,412	338,378	1,413,061	75.8
NC	5.66	626,758	560,626	3,172,355	89.4
SC	8.10	583,539	386,187	3,129,999	66.2
TN	5.02	355,127	64,732	324,707	18.2
TX	6.10	1,120,599	632,907	3,862,863	56.5
VA	4.97	143,384	92,878	461,299	64.8
Other	4.69	525,900	156,131	733,020	29.7
Total	6.82	9,198,217	5,935,935	40,482,838	64.5

Table 2. Forest industry lease fees by physiographic region in 1994.

Region	Lease fees (\$/ha)		
	Low	Average	High
Coastal plain	3.71	6.10	13.02
Piedmont	5.02	8.13	16.80
Mountain	2.74	4.67	9.64
Delta	6.20	9.07	19.55

case, future gains from leasing on these lands are likely to come from more intensive management of currently leased lands and possibly the reallocation of land from public to private lease programs.

The percentage of land leased to public programs (9.4%) was close to the 7.1% reported by Stuckey et al. (1992) for land leased and donated to these programs. Participants were also asked about their expectations regarding their public leasing programs over the next 5 years. About half expected fees for these programs to increase with expected increases ranging from 1% to 75%. Most (59%) expected the area made available to these programs to remain the same. However, 26% expected the area made available to decrease with decreases ranging from 5% to 50%.

Most of the land leased was in the coastal plain physiographic region but lease fees were greatest in the delta (Table 2). Cover types of lease areas were 55% pine plantation, 27% mixed natural stands, and 23% hardwood stands (unweighted). More than three-fourths (78.6%) of the respondents preferred annual all-game leases, while 24% preferred multi-year all-game.

Lease Fee Determination and Priorities

Ninety-one percent of the respondents reported that they considered income from leases in their economic analyses and investment decisions, an increase from 1989. This increase indicates an increased awareness of the economic value of leasing. In light of this, respondents might be expected to emphasize maximizing their lease revenue. In an attempt to gain some insight into this, we asked respondents how they determine their lease fees. Most respondents use the market as their guide, although some set fees based on cost. Most (72%) of the respondents based their lease fees on lease prices of surrounding lands (Table 3), compared to 64% in 1989. Some leased to the highest bidder. Some used tax rates as a cost basis to determine fees and

Table 3. Summary of lease fee determination in 1994.

Method	Frequency (<i>N</i> respondents)	% responding
Lease prices on other lands	31	72
Tax rates on other lands	15	35
Corporate policy	10	23
Lease to the highest bidder	7	16
Habitat/species evaluation	4	9
Other	3	7

Table 4. Summary of consideration of residence of lessees in 1994.

Consider residence of lessees in awarding leases	Frequency (<i>N</i> respondents)	% responding
Always	12	29
Usually	19	45
Sometimes	6	14
Never	5	12

some cited corporate policy. Most (43 respondents) cited at least one method for determining their fees while about half (22) cited 2 methods and 7 respondents cited 3 methods. One respondent used the previous year's fee and the inflation rate as an aid in adjusting the fee.

Some firms constrain their leasing market by favoring local hunters. One respondent set lease fees by selecting the highest bid among local hunters. Only 12 percent of the respondents do not consider residence of lessees in awarding hunting leases (Table 4). Of those who do consider residence, over 90% give local groups preference over nonresidents. In constraining the market, firms also likely constrain their leasing income. Their willingness to do so implies that they place a value on leasing to local residents.

Other Values Associated with Leasing

In an attempt to quantify such values as discussed above, we asked respondents to provide us with their best estimates of the monetary benefits accruing from public relations and protection. Protection consists mainly of access control and reduction of property damage (Stuckey et al. 1992). Respondents were asked to express these estimates as multiples of the lease fee. In order to prevent them from thinking only in terms of integers, the example " $\frac{1}{2}$ times lease value" was given on the questionnaire. Public relations was valued at \$4.40 per hectare and protection was valued at \$5.81 per hectare. The public relations value fell within the range of \$3.58 to \$5.31 given for the 1989 study while the protection value fell slightly below the range of \$6.08 to \$7.68 given for the 1989 study (Marsinko et al. 1992). Respondents, however, felt these values had increased considerably over this time period. Respondents also expected these values to increase over the next 5 years (1994–1999).

Problems Associated with Leasing

With an activity such as hunting, lessors are usually concerned with the possibility of hunting-related accidents and the potential cost of resulting lawsuits. The survey addressed this problem and the use of liability insurance.

The majority of respondents (64%) reported no accidents. Fourteen percent reported 1 accident and 22% reported 2 or more. Of the accidents that did occur, 4 resulted in lawsuits. No awards of damage were reported although 1 lawsuit was pending when the survey was conducted. However, not all respondents answered the questions pertaining to lawsuits and damages. Over half (55%) of the respondents

Table 5. Changes over the last 5 years in use of lands leased to hunt clubs and individuals.

Activity	% citing each type of change		
	Increase	No change	Decrease
Nonhunting activity by hunt clubs	44	56	0
Nonhunting activity by individual lessees	38	62	0
Amount of year land utilized by hunt clubs	59	41	0
Amount of year land utilized by individual lessees	46	54	0
Nonhunters as members of hunt clubs	16	81	3

carry additional liability insurance associated with fee hunting. Almost two-thirds (65%) required lessees to carry liability insurance at an average cost of \$0.47 per hectare per year.

The major problems occurring on company owned lands open to the public were (from greatest to least) trash dumping, road damage, illegal hunting, fire, legal over-harvest of game, unauthorized timber cutting, and livestock grazing. Problems on land leased to hunt clubs and individuals were (from greatest to least) road damage, trash dumping, illegal hunting, legal over-harvest of game, fire, unauthorized timber cutting, and livestock grazing. No attempts were made to estimate the intensity or frequency of the problems.

Eighty-eight percent of the respondents monitor lessees to prevent abuse of laws and resources. The major actions taken against violators were lease revocation (79%), violations reported to state wildlife authorities (71%), and verbal or written reprimand (58%).

Changes in the Use of Leased Land

Respondents were asked about nonhunting activities on leased lands and about the utilization of the land over the last 5 years. Forty-four percent of the respondents cited an increase in non-hunting activities by hunt clubs, and 38% cited an increase by individual lessees (Table 5). The land also was being utilized for a greater part of the year. Fifty-eight percent of the respondents cited this type of increase for hunt clubs, while 46% of the respondents have seen this increase for individual lessees. Sixteen percent of the respondents have seen an increase of non hunters utilizing the land. These responses indicate a potential expansion of the activities on the land along with an increase in utilization of the land.

Conclusions

Hunt leases generate considerable income for the forest industry. Lease fees and lease-generated revenue have increased since the 1989 study and are expected to continue increasing. All of the responding firms had some form of recreational leasing program, with 74% of the total land base being leased (hunt clubs, individuals, and WMA). Forest industry landowners receive 3 major benefits from their recreational leasing programs: protection (access control), public relations, and annual revenue. Although the values of protection and public relations do not appear to have

increased, their impact is still felt. Lease fees generated approximately \$40 million for respondents in this study. Including the reported values for public relations and protection increases the value of leasing to the respondents to \$17.03 per hectare or about \$100 million in total.

Currently, most of the land suitable for leasing has been leased, indicating that future gains will likely occur through more intensive utilization of currently leased land, or possibly at the expense of public (WMA) programs, or even through the acquisition of new lands. Data collected in this study indicated an increase in the intensity of use of leased lands by lessees, which will probably increase the occurrence of the problems associated with use of the land, but might also create additional opportunities for forest landowners to profit.

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