Forest Industry Hunt-lease Programs in the Southern United States

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Abstract: Selected characteristics of forest industry hunt-lease programs were determined for 11 southern states. Mail surveys were obtained from 77 of 109 (71%) delivered questionnaires that were completed and returned. Respondents reported owning a total of more than 9.4 million ha within the study area in 1984. Most (83%) charged hunters for access to corporate lands. A majority of respondents indicated that non-monetary benefits were gained from hunt-lease programs. Annual lease fees ranged from \$2.47 to \$26.88/ha and varied by state, timber type and location. Administration was the highest corporate cost of hunt-lease programs. Local tradition of free public hunting was the most frequent reason for not leasing hunting rights on forest industry lands.

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People are willing to pay for the right to hunt and fish (Noonan and Zagota 1982). While information has been gathered on landowner and hunter attitudes towards wildlife and hunting, little work has been done on attitudes relative to leasing of hunting rights. Most studies concerning lease hunting have concentrated on the value of lease fees. Pope et al. (1984) concluded that the value of wildlife is at least partially reflected in hunt leases. They determined that wildlife may contribute as much as \$123.55/ha to the mean value of rangeland in Texas. Lassiter (1985) found that mean annual hunt-lease fees in 4 southeastern states ranged from \$3.06 to \$6.45/ha on forest land depending on location and type of forest landowner. In certain areas of the southern United States, wildlife has become an economically valuable resource.

Improving corporate profit potential by managing for wildlife is receiving attention from forest industry for 4 reasons (Yoho 1981, Guynn 1983): 1) wildlife production is compatible with timber production; 2) hunting is a major recreational

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use of private forest lands, 3) economic incentives exist to provide high quality hunting experiences, and 4) the general public is concerned about the welfare of wildlife on private lands.

Industrial forest landowners seem to be leading the trend toward economic use of and intensive management for wildlife resources on private forest land in the southern United States. The objective of this study was to determine the characteristics of forest industry hunt-lease programs in selected southern states.

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Methods

Wildlife biologists and hunt-lease administrators employed by forest products industries in Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia were interviewed by mail-survey questionnaire in January 1985. These 11 states comprised the study area. The questionnaire was designed to determine current lease prices, types of forest stands leased, size of land parcels leased, wildlife management practices employed, and non-monetary benefits or costs of leasing. Dillman's (1978) methods for increasing rates of response to mail surveys were used and the questionnaire was pretested in September 1984.

Results and Discussion

Of 109 land-holding timber companies contacted, 77 (71%) completed and returned the questionnaire. These companies reported owning 9.5 million ha of forest land within the study area during 1984 (Table 1). A majority (83%) of the respondents indicated that they leased hunting rights on their lands. Reasons (by rank) given for not leasing hunting rights on company-owned lands were:

- 1. Local tradition of free public hunting;
- 2. Company policy of free public hunting;
- 3. Public relations;
- 4(tie). All company lands in state public-access wildlife management area (WMA) program;
 - 4(tie). Safety considerations;
 - 5(tie). Hunting privileges reserved for clients and employees; and
 - 5(tie). Fear of retaliatory damage.

Most timber company leases occurred in the Coastal Plain Region. These tracts were most often either pine plantations or mixed natural stands. A majority of companies (65%) indicated that 12% (mean) of leased lands were leased to state WMA programs. About half (56%) of respondents reported the area leased to WMA programs has remained stable and a majority (76%) reported that the lease fees for WMA programs have remained stable for the 1979–84 period. Most (87%) expect

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Table 1. Timber-company response to hunt-lease survey and land holdings in the southern United States (1984).

| | | Questionnaires | | |
|-----------------------|-----------------|----------------|-----------|------------|
| State | Area owned (ha) | Mailed | Delivered | Returned |
| Alabama | 1,701,359 | 22 | 19 | 14 |
| Arkansas | 1,572,260 | 17 | 17 | 10 |
| Florida | 825,993 | 5 | 5 | 3 |
| Georgia | 959,948 | 7 | 6 | 4 |
| Kentucky ^a | 19,426 | 4 | 3 | 2 |
| Louisiana | 1,395,406 | 17 | 14 | 8 |
| Mississippi | 1,005,680 | 8 | 7 | 6 |
| North Carolina | 866,867 | 19 | 17 | 13 |
| South Carolina | 287,337 | 9 | 8 | 7 |
| Tennessee | 409,961 | 6 | 5 | 2 |
| Virginia | 381,632 | 8 | 8 | 8 |
| Total | 9,425,869 | 122 | 109 | 7 7 |

^aNo further information was received from timber companies in Kentucky.

that corporate leases to WMA will either remain stable or increase from 1984 through 1989 and only 3% expect the associated payments to decrease.

The number and size of leases and the number of hunters per lease determined the amount of hunting recreation provided by timber company hunt-lease programs. Timber companies reported a mean lease size of 436 ha and a mean of 23 hunters per lease. Most (94%) reported that the average size of hunt leases on corporate property has remained stable or decreased by 24%, while 98% indicated that hunter numbers on individual leases have remained stable or increased by 33% during the 1979–84 period. About 40% of responding companies expect the number of hunters per lease to increase 14% by 1989.

Most companies (60%) marketed their hunting rights exclusively through leasing arrangements to WMA programs or private clubs. Some (40%) also sold hunting rights to individual hunters by daily, seasonal, or annual permits. Within the study area, access for hunting on about 1.6 million ha of respondent-owned lands was marketed through permits costing an average of \$12.60/day, \$61.71/season and \$37.31/year. Lease fees averaged \$3.31/ha per year and varied by state, geographic

Table 2. Timber company mean lease fees by state (1984).

| State | Mean lease fees (\$/ha/year) | State | Mean lease fees (\$/ha/year) |
|-----------|---------------------------------|----------------|---------------------------------|
| Alabama | 3.63 | Mississippi | 3.85 |
| Arkansas | 3.43 | North Carolina | 3.21 |
| Florida | 3.46 | South Carolina | 3.31 |
| Georgia | 4.69 | Tennessee | 3.53 |
| Louisiana | 3.58 | Virginia | 2.67 |

| Geographic location | Mean lease fees by timber type (\$/ha/year) | | | | |
|---------------------|---|------------------------|----------|----------|--|
| | Pine plantation | Mixed pine-hardwood | Hardwood | Wetlands | |
| Coastal plain | 5.23 | 6.57 | 8.43 | 26.88 | |
| Piedmont | 5.88 | 6.23 | 7.34 | | |
| Mountains | 5.56 | 8.65 | 6.60 | | |
| Delta | | 4.94 | 9.27 | 2.47 | |

Table 3. Timber company mean lease fees by geographic location, and timber type (1984).

region, and timber type (Tables 2, 3). A majority (60%) of timber companies preferred annual, all-game leases, while 23% preferred multi-year lease agreements.

The highest costs of forest industry hunt-lease programs were associated with administration (Table 4). A majority (59%) of respondents reported that these costs increased 49% (mean) during the 1979–84 period and 69% of respondents indicated that such costs are expected to rise 30% (mean) by 1989. Benefits gained by forest industries as a result of these investments included considerations other than income (Table 5). Most (90%) reported that the expected value of these benefits relative to income will increase by 1989.

A majority (62%) of respondents indicated that they actively managed corporate timber lands to enhance game animal abundance (Table 6). Among respondents, the reported mean clearcut size limit was 100 ha, mean streamside management zone width was 59 m, and mean age difference in adjacent forest stand age class was 9.2 years.

Throughout the study area, 58% of responding timber companies made some lands available for leasing that were not leased in 1984 (Table 7). Reasons given for unsuccessful marketing efforts were (by rank): liability insurance problems, lessee backed out of agreement, and the company was unprepared to properly market a newly acquired tract of land.

Despite the fact that hunt-lease fees provide substantial revenues to many forest industry companies in the southern United States, only 25% of the respondents reported considering such incomes in financial analysis and investment decisions.

Table 4. Average costs associated with timber company hunt-lease programs in the southern United States (1984).

| | Cost (\$/ha/year) | | | |
|----------------------------|-------------------|------|------|--|
| Item | Low | Mean | High | |
| Administration | 1.01 | 1.06 | 2.50 | |
| Liability protection | 0.12 | 0.10 | 0.22 | |
| Land management assistance | 0.25 | 0.72 | 1.90 | |
| Maintenance | | 0.15 | | |

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Table 5. Non-monetary benefits associated with timber company hunt-lease programs in the southern United States (1984).

| | Rating (% of companies responding) | | | Value (% companies responding, compared to lease income) | | |
|-------------------------|------------------------------------|-----------|-------------------|--|------------------|----------------|
| Benefit | Not important | Important | Very important | Less important | Equal importance | More important |
| Public relations | 7.0 | 50.9 | 42.1 | 38.5 | 28.8 | 32.7 |
| Access control | 5.4 | 39.3 | 55.3 | 46.2 | 26.9 | 26.9 |
| Reduced property damage | 5.2 | 40.4 | 54.4 | 39.6 | 30.2 | 30.2 |

Where such considerations were made, respondents reported application of a 10.5% (mean) discount rate to hunt-lease incomes.

Most (69%) respondents reported making some attempt to monitor the activities of lessees in order to prevent game law violations. Of these, 79% reported violations to state wildlife authorities, and 92% were prepared to revoke the lease of violators. A majority (79%) claimed to lease to "local" groups or individuals only.

Most (63%) respondents reported that they did not provide free public access to corporate lands. Reasons for not providing free public given were (by rank):

- 1. Company needs revenues;
- 2. Access control:
- 4. Liability;
- 5. Prefer participating in WMA programs;
- 6. Local tradition of leasing;
- 7. Charge for recognition of corporate ownership;
- 8. Corporate tracts too small and scattered; and
- 9. Adequate public facilities nearby.

Table 6. Use of wildlife management practices by timber companies in the southern United States (1984).

| Practice | % respondents using practice |
|----------------------------------|------------------------------|
| Prescribed burning | 57.9 |
| Gates | 56.1 |
| Posting | 54.4 |
| Stream-side management | |
| zones | 54.4 |
| Food plots | 45.6 |
| Clear cut size limit | 40.4 |
| Den/mast tree retention | 40.4 |
| Forest stand age class diversity | 33.3 |
| Wildlife travel corridors | 24.6 |
| Game manager employment | 21.1 |
| Old house site protection | 19.3 |

| | | | Indicated reasons (% responding companies) | | | | | |
|-------|--------------------|-------------------|--|-----------------|-------------------|------------------------|-------|--|
| | Total area (ha) | Price too high | No game | Poor habitat | Area too small | Poor access control | Other | |
| Ala. | 138,407 | 30.0 | 40.0 | 50.0 | 50.0 | 30.0 | 20.0 | |
| Ark. | 324 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Ga. | 247,097 | 11.1 | 33.3 | 66.7 | 33.3 | 33.3 | 0.0 | |
| La. | 1,012 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 | 0.0 | |
| Miss. | 27,924 | 25.0 | 25.0 | 50.0 | 50.0 | 25.0 | 0.0 | |
| N.C. | 19,790 | 25.0 | 50.0 | 37.5 | 37.5 | 37.5 | 0.0 | |
| S.C. | 2,408 | 0.0 | 16.7 | 25.0 | 8.3 | 25.0 | 8.3 | |
| Va. | 7,285 | 25.0 | 25.0 | 25.0 | 25.0 | 0.0 | 0.0 | |

Table 7. Timber company lands offered but not leased in the southern United States (1984).

These results indicate that substantial areas of forest industry lands were leased to state WMA programs and private hunt clubs for recreational hunting purposes. Local tradition of free access to forested lands was most commonly cited as the reason for not leasing. Respondents reported that these traditions were changing rapidly and that timber company hunt-lease programs were being considered where they did not exist.

Forest industry-owned lands leased to WMA programs and the associated lease fees changed little from 1979 to 1984. We anticipated that respondents would largely indicate plans to withdraw from WMA programs, considering the potential for higher revenues from private club leases; however, most respondents indicated they expect WMA participation to remain constant through 1989.

Lassiter (1985) determined average hunt-lease fees paid to forest industries in Alabama, Florida, Georgia, and Tennessee in 1983. Differences in the average fees reported in 1983 and 1984 may be due to differences in study design or population, but suggest that hunt-lease fees in the southern United States may be increasing at rates above the rate of economic inflation (Table 8).

Most forest industry companies leasing hunting rights consider the public relations benefit to the company as important or more important than income. These

Average hunt-lease fees and percent change in Alahama

| Florida, Georgia, and Tennessee, 1983–1984. | | | | |
|---|-------|-----------------------------|------|--|
| | | Average lease fees (\$/ha/y | еаг) | |
| State | 10834 | 1984 | % ch | |

| State | | year) | |
|-----------|-------|-------|----------|
| | 1983a | 1984 | % change |
| Alabama | 3.98 | 3.63 | -9 |
| Florida | 2.27 | 3.46 | + 52 |
| Georgia | 2.89 | 4.69 | +63 |
| Tennessee | 2.94 | 3.53 | + 20 |

aLassiter (1985).

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viewpoints may change as the overall costs of participation in hunt-lease programs rise. In 1984, reported costs for administrative exceeded all other hunt-lease programs costs combined; however, the increasing cost of liability protection may soon surpass administrative costs and have significant effects on the proportion of lands leased to WMA or private clubs, lease fees, and efforts to monitor and control hunter density and activities on corporate lands. Since the primary goal of forest industry is profit, the reliable annual cash flow provided by hunt-lease fees could become increasingly important during times of depressed timber markets. In order to provide continued financial success in sales of hunt leases, forest industry managers may begin to view wildlife as an integral part of intensive forest management. Viewing wildlife in this manner should provide incentives for enhancement of habitats, management of populations, and creation of quality recreation opportunities on forest industry lands.

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