

# Forest Industry Hunt-lease Programs in the Southern United States: 1999

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*Abstract:* We evaluated selected characteristics of forest industry hunt-lease programs for the 1999 calendar year in the southern United States. Sixty questionnaires were mailed to wildlife biologists and hunt-lease administrators of various forest industries within these states. Thirty-four completed questionnaires were returned, yielding an overall response rate of 56.7%. Respondents owned 6,006,050 ha; they leased 4,600,611 ha (76.6%) to the private sector and 424,784 ha (7.1%) to the public sector. The average annual lease fee for the private sector was \$9.69 per hectare, and the average annual lease fee for the public sector was \$3.39 per hectare. Results from this survey were compared to those of a similar survey from 1994 to determine changes and trends in industry hunt-lease programs.

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Leasing hunting rights on industry owned timberlands is becoming more prevalent in the United States as opportunities for quality hunting experiences decrease, and benefits of such programs become apparent to hunters and landowners (Marsinko et al, 1992). Hunt-leases provide consistent annual revenues not found through timber harvest, improve access control, and create public relations opportunities with sportsmen.

This study, which is the fourth in a series of similar surveys of forest industry hunt-lease programs, describes leasing for the 1999 calendar year. The previous 3 studies gathered data for 1984, 1989, and 1994 (Busch and Guynn 1987, Stuckey et al. 1992, Marsinko et al. 1998b, respectively). This study evaluates selected characteristics of forest industry hunt-lease programs in the southern United States and assesses changes and trends over a 5-year time period (1994–1999). It also reveals changes resulting from mergers and acquisitions are occurring frequently in the forest products industry, especially in the South (Diamond et al. 1999).

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## Methods

We used a modified version of a mail questionnaire that was previously developed for similar surveys by Busch and Guynn (1987), Stuckey et al. (1992), and Marsinko et al. (1998b). Like those used in previous surveys, our questionnaire was designed to assess a variety of topics associated with hunt-lease programs on forest industry timberlands in the southern United States. These topics included average lease fees, total land base for leasing, different types of lands, problems created from leasing, values derived from leasing, and general trends in lease programs over 5 years (1994–1999).

We used an updated mailing list from the previous surveys. In March 2000, we made phone contacts to southern forest industry firms not included on previous mailing lists. This effort to include more industrial timberlands garnered limited success. In April 2000, the mailing list was revised and updated. Phone contacts to firms previously surveyed showed that several firms no longer owned timberlands. This revision process also revealed the continuing trend within the forest industry that many firms had gone out of business or had consolidated (Marsinko et al. 1992). In June 2000, we mailed 60 questionnaires to wildlife biologists and hunt-lease administrators from 37 forest industry firms located in 11 states. These states included Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia. If fewer than 3 firms provided data for a state, that state was placed in a category labeled “other.” The “other” category also includes data for combinations of states (some firms do not consider state boundaries in their operational areas and therefore provide data for combinations of usually 2 states). In August 2000, we mailed a reminder letter to non-respondents. Data gathered through questionnaires were compared to the most recent survey (Marsinko et al. 1998). Calculations dealing with area such as average lease fees were weighted by area rather than by respondent.

## Results and Discussion

We mailed 60 questionnaires to 37 forest industry firms located in the southern United States. Thirty-eight of these questionnaires were returned, yielding an overall response rate of 63.3%. Four of these returned questionnaires contained no data. One reported that the questionnaire was too lengthy to fill out, 1 did not wish to divulge the necessary information, 1 did not lease its timberlands, and the other was unable to provide data due to a company merger during the time of the survey period. Thus, we based calculations of the resulting data on the responses from 34 firms (56.7%).

### Mergers and Acquisitions

This study experienced several problems due to mergers and acquisitions that have occurred among forest industries over the time period (1994–1999). Mergers and acquisitions had restructured the industry (Diamond et al. 1999) and effects of this restructuring surfaced during this study. For example, 1 firm was not able to

complete its questionnaire because of a company merger. Another firm was sold during the mailing process. Mergers and acquisitions reduced the response rate below that of similar surveys by Stuckey et al. (1992) and Marsinko et al. (1998b).

Mergers and acquisitions have occurred in the forest industry for several reasons. Today, the forest industry remains one of the most fragmented industries in the world (Smith 1999). This fragmentation has created increased competition between firms within the industry, not only for revenues and market share, but also for timber and land. Mergers and acquisitions are tools to achieve the goal of self-owned timber, particularly in the southern forests in the United States (Diamond et al. 1999). Increased competition, environmental regulations, new technology, and forest production practices are driving new economies of scale and scope resulting in mergers and acquisitions (Diamond et al. 1999). These mergers and acquisitions may continue to point towards a changing forest industry comprised of fewer firms containing larger shares of revenues and timberland holdings. They may also point toward changing forest industry hunt-lease programs. Consolidation in the industry means the policies of each firm affect more land. Consolidation also gives each firm a larger share of the hunting lease market, thereby reducing diversity and competition in the market.

#### Lease Fees and Land Ownership

Respondents owned 6,006,050 ha of land consisting of pine plantations (51.9%), mixed natural stands (29.1%—these stands contain a mixture of species types and are not plantations), and hardwood stands (17.6%; unweighted). The percentage of land leased to hunt clubs and individuals was 76.6%. This represented a large increase from the 64.5% previously reported by Marsinko et al. (1998b). The percentage of land leased to state wildlife management areas (WMA) was 7.1%, a slight decrease from the 9.4% reported by Marsinko et al. (1998b). Both of these changes indicate a likely transfer of leased lands from the public sector towards the private sector. A reallocation of lands towards hunt clubs and individuals may be due to the higher annual lease fees, higher total revenues, and increased control of lands that are found in the private sector.

Responding forest industry firms leased 4,600,611 ha to both hunt clubs and individuals (Table 1). The average annual lease fee of these private sector lease programs was \$9.69 per hectare, a 42% increase over the \$6.82 fee previously reported by Marsinko et al. (1998b). Per hectare lease fees ranged from \$6.45 in Arkansas to \$12.08 in South Carolina. The percentage of land leased ranged from 43.7% in Tennessee to 95.1% in Mississippi. In 1999, respondents collected nearly \$45 million in revenues generated from private sector leasing programs. When grouped together, Alabama, Florida, Georgia, Mississippi, and South Carolina accounted for almost 3/4 of these revenues. Hunt clubs occupied 91.1% of the leased land from these private sector leasing programs, while individuals occupied only 8.9%.

Respondents also leased 424,784 ha to states for wildlife management areas (Table 2). The average annual lease fee of these public sector programs was \$3.39 per hectare, more than double the \$1.63 fee previously reported by Marsinko et al.

**Table 1.** Summary of forest industry lands leased to the private sector (hunt clubs and individuals) in the southern United States (1999).

State	Average fee (\$/ha)	Hectares owned	Hectares leased	Total lease revenue (\$)	% leased
AL	11.59	941,469	787,932	9,131,336.20	83.7
AR	6.45	571,152	449,864	2,901,315.15	78.8
FL	8.65	1,176,454	954,560	8,255,513.00	81.0
GA	11.05	583,779	485,771	5,365,515.33	83.2
LA	9.02	433,890	357,203	3,221,668.85	82.3
MS	12.01	488,722	464,839	5,582,273.76	95.1
NC	7.91	324,160	308,474	2,439,168.00	95.0
SC	12.08	375,268	349,520	4,223,312.07	93.1
TN	7.51	126,458	55,277	415,230.56	43.7
TX	7.04	291,674	242,938	1,710,855.00	83.0
Other	8.72	692,998	144,233	1,285,092.00	21.0
Total	9.69	6,006,050	4,600,611	44,531,279.92	76.6

**Table 2.** Summary of forest industry lands leased to the public sector (state wildlife management areas and game management areas) in the southern United States (1999).

State	Average fee (\$/ha)	Hectares owned	Hectares leased	Total lease revenue (\$)	% leased
AL	4.05	941,496	23,744	96,222.08	2.5
AR	1.51	571,152	71,141	107,231.90	12.5
FL	4.72	1,176,454	194,658	918,710.00	17.0
GA	7.14	583,779	70,593	504,117.15	12.1
LA	0.00	433,890	21,052	0.00	4.9
MS	0.00	488,722	4,174	0.00	0.9
Other	4.72	1,810,557	39,422	186,056.92	2.0
Total	4.27	6,006,050	424,784	1,812,338.05	7.1

(1998a). Per hectare lease fees ranged from zero (provided free) in both Louisiana and Mississippi to \$7.14 in Georgia. The percentage of land leased ranged from 0.85% in Mississippi to 17% in Florida. Total revenues generated from leasing to the public sector in 1999 were nearly \$2 million.

More than half of respondents (58.8%) made available new lands for leasing that were not leased in 1994. Firms indicated that these lands were not previously leased because (by rank from most to least important) of poor access control, small areas, undesirable habitats, absence of target wildlife species, first time offerings, and high prices. Respondents preferred annual, all game (65%) and/or multi-year, all game (32%) leasing arrangements (2 respondents preferred more than 1 arrangement).

**Table 3.** Summary of forest industry lease fee determination in the southern United States (1999).

Method	Frequency ( <i>N</i> respondents)	% responding
Lease prices on other lands	23	68
Tax rates on forest lands	8	23
Corporate policy	11	32
Lease to the highest bidder	8	23
Other	8	23

Lease fees for both the public and private sectors were determined by a variety of factors. Twenty-three respondents used lease fees on other lands, and 11 took corporate policy into consideration (Table 3). Many firms used more than 1 method for lease fee determination. Ninety-one percent of respondents considered income from hunting leases in economic analysis and investment decisions.

**Benefits of Leasing**

The main benefit derived from hunt-lease programs was the income that lease fees provide to landowners. Many of these industry landowners (88%) actively managed their lands to enhance wildlife. Firms managing for wildlife used a variety of techniques, including clearcut size limits of 40 to 121 ha (76.7%), streamside management zones (83.3%), wildlife openings (73.3%), prescribed burning (66.7%), forest stands with age class diversity (76.7%), and retention of mast trees (70%). More than half (56.7%) of these firms employed a professional wildlife manager.

Hunt-lease programs often provided benefits other than revenues from lease fees. These benefits arose primarily from public relations and protection values. Protection benefits occur when hunt clubs and individuals act as an unpaid police force to limit trespassing on industrial lands and reduce property damage. Respondents were asked to use a representative fraction (e.g., 1/2 times the lease value) to estimate the value of these benefits relative to income received from leases. Respondents leasing to hunt clubs and individuals placed a value of \$4.60 per hectare on public relations benefits and \$8.23 per hectare on protection benefits. Both of these values represented increases from Marsinko et al. (1998b) previously reported values of \$4.40 per hectare for public relations and \$5.81 per hectare for protection. The average annual lease fee for hunt clubs and individuals, including public relations and protection values, was \$22.51 per hectare. The total benefit obtained from leases to hunt clubs and individuals, including public relations and protection values, was \$103,563,473. Most respondents expected protection values to increase in the future.

One common approach to enhance benefits such as protection and public relations involves leasing lands to local residents. Nearly 88% of all respondents indicated that they consider the residence of lessees in awarding hunting leases (Table 4). Over half (56%) these firms preferred to lease to local groups or individuals as op-

**Table 4.** Summary of forest industry consideration of residence lessees in the southern United States (1999).

Consider residence of lessees in awarding leases	Frequency (N respondents)	% responding
Always	2	6
Usually	12	36
Sometimes	15	46
Never	4	12

**Table 5.** Summary of cited changes during 1994–1999 in use of forest industry lands leased to hunt clubs and individuals in the southern United States.

Activity	% citing each type of change		
	Increase	No change	Decrease
Nonhunting activity by hunt clubs	39	61	0
Amount of year land is utilized by hunt club	36	64	0
Nonhunters as members of hunt clubs	17	83	0

posed to nonresidents. Respondents targeted lessees through advertising and marketing methods that included word of mouth (88%) and local newspapers (21%).

Other benefits from leasing were captured through nonhunting activities and from nonhunters. In an effort to examine these particular benefits, we asked respondents to identify changes that occurred in the use of areas leased to hunt clubs during the time period (1994–1999) (Table 5). Thirty-nine percent of firms observed an increase in nonhunting activities by hunt clubs, whereas 61% observed no changes in this category. Similarly, 36% of firms observed an increase in the amount of the year in which land was used, whereas 64% saw no changes in this category. No firms reported a decline in either of these categories. These increases were considerably less than increases in nonhunting activities (44%) and amount of year in which land was used (59%) reported by Marsinko et al. (1998*b*). These differences between the current responses and those reported by Marsinko et al. (1998*b*) may indicate a leveling off effect of the rise in land use changes on leased lands. Seventeen percent of the respondents reported an increase in nonhunters as members of hunt clubs. This is similar to the 16% reported by Marsinko et al. (1998*b*) and it may indicate a change in the makeup of hunt clubs.

#### Problems Associated With Leasing

Although hunt-lease programs provided benefits to landowners, they often created problems. One potential problem for landowners involved hunting-related accidents on leased lands. Fifty-three percent of the respondents reported no hunting ac-

idents on leased lands over the time period (1994–1999) whereas 47% reported 1 or more accidents over the same time period. Three accidents eventually resulted in lawsuits, but no damages or settlements were awarded. Although hunting-related accidents and resulting lawsuits did not appear to be a major problem in leasing programs, many landowners carried different types of insurance for their protection. Half (50%) of the respondents carried additional liability insurance associated with fee hunting, and 74% required lessees to carry liability insurance.

Hunt-lease programs created other problems in addition to liability. On lands opened to the public, respondents reported problems (from greatest to least, respectively) of trash dumping, road damage, fire, illegal hunting, legal over-harvest of game (taking the maximum amount of game they can legally take, likely affecting game quality and availability the following year), unauthorized timber cutting, and livestock grazing. On lands leased to hunt clubs and individuals, respondents reported problems (from greatest to least respectively) of road damage, trash dumping, illegal hunting, legal over-harvest of game, fire, unauthorized timber cutting, and livestock grazing.

To address lease-related problems, most landowners monitored leasing programs and some controlled hunter densities. Ninety-one percent of respondents attempted to monitor lessees to prevent wildlife law violations and abuses of land or game populations. The most common types of actions against violators were reports to state wildlife authorities (74%), lease revocations (74%), and verbal or written reprimands (59%). Conversely, only 24% of the respondents attempted to control membership or hunter density on leased lands.

## **Conclusions**

Hunt-lease programs in the South are important to forest industries. Responding forest industry firms dedicated 83.7% of their total land base to some form of leasing program. Most of this land was leased to the private sector (hunt clubs and individuals), so firms may realize higher lease fees and revenues. Annual lease fees have increased since 1994, and landowners expect this trend to continue in the future. As lease fees increase, revenue provided to landowners will increase as well. Many firms currently implement intensive wildlife management techniques on leased lands. In addition to revenue, hunt-leases provide protection and public relations values important to landowners. These values increased over the time period (1994–1999), and are expected to increase in the future. Mergers and acquisitions over the time period had a substantial impact on forest industry. These mergers and acquisitions revealed an industry trend towards fewer firms controlling more of the timberlands. These firms also will control more of the hunt-leases as well.

## **Literature Cited**

Busch, F. A. and D. C. Guynn, Jr. 1987. Forest industry hunt-lease programs in the southern United States. *Proc. Annu. Southeast. Assoc. Fish and Wildlife Agencies* 41:266–277.

- Diamond, J., D. E. Chappelle, and J. D. Edwards. 1999. Mergers and acquisitions in the forest products industry. *For. Prod. J.* 49(4): 24–36.
- Marsinko, A. P., D. C. Guynn, and D. F. Roach, II. 1998*a*. Forest industry hunt-lease programs in the South: implications for managers. *Proc. 1997 Northeastern Rec. Res. Symp. Gen. Tech. Rep. NE-241* U.S. Dep. Agric., For. Serv. Pages 141–143.
- , ———, and ———. 1998*b*. Forest industry hunt-lease programs in the South: economic implications. *Proc. Annu. Conf. Southeast Assoc. Fish and Wildl. Agencies* 52:403–409.
- , W. M. Smathers, Jr., D. C. Guynn, Jr., and G. L. Stuckey, Jr. 1992. The potential economic effect of lease hunting on forest management in the Southeast. *South. J. Appl. For.* 16: 200–203.
- Smith, D. 1999. The business of mergers. *For. Chronicles* 75: 261–263.
- Stuckey, G. L., Jr., D. C. Guynn, Jr., A. P. Marsinko, and W. M. Smathers. 1992. Forest industry hunt-lease programs in the southern United States: 1989. *Proc. Annu. Conf. Southeast Assoc. Fish and Wildl. Agencies* 46: 104–109.