



**FOREST MANAGEMENT PRACTICES OF PRIVATE TIMBERLAND INVESTORS  
AND MANAGERS IN THE U.S. SOUTH**

Surveys/Studies: *landowner*

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[www.forestresources.org/members/serpub/12-R-26.html](http://www.forestresources.org/members/serpub/12-R-26.html)

**INTRODUCTION:** In summer 2012, Forisk conducted a survey regarding current trends and common silviculture practices employed by the largest private timberland owners and managers in the U.S. South. Questions focused on forest management activities completed in 2011 (from January through December 2011). The survey addressed issues such as site preparation and regeneration; competition control; fertilization; thinning and final harvests; decision support and software; and other forest-related products and services.



*Fig. 1: Map of Survey regions.*

The survey divided the South into three “regions” to distinguish potential differences in forest management practices across physiographic and geographic areas.

	<i>US South</i>	<i>Region 1</i>	<i>Region 2</i>	<i>Region 3</i>
<b>Responses</b>	23	8	10	5
<b>Ave TPA</b>	592	592	595	587
<b>TPA High-Low</b>	726-518	679-518	726-530	620-544
<b>Ave Survival Rate</b>	88.5%	88.6%	87.2%	91.1%
<b>Survival High-Low</b>	98-77%	98-77%	95-80%	98-87%
<b>Seedling (note: several participants use multiple types)</b>				
<b>1st gen</b>	3	1	2	0
<b>2nd gen</b>	16	6	7	3
<b>MCP</b>	7	2	4	1
<b>Other (2nd+ gen)</b>	12	3	7	2

*Table 1: Current Regeneration and Survival Rates*

We contacted 23 firms that own or manage over 15 million acres of timberlands on behalf of investors or shareholders in the U.S. South.<sup>1</sup> In total, 12 firms, accounting for 8.2 million timberland acres in the U.S. South, participated. Of these 12 firms, six provided multi-regional responses, which

generated a total of 23 discrete observations from all participants. Participating firms include publicly-traded timber REITs, privately owned companies, and TIMOs.

**RESULTS:** With respect to site preparation treatments by geographic region, **100% of all responses across all regions report using chemical treatments for site preparation.** For the samples captured, Regions 1 and 2 reported more intensive levels of overall site preparation

<sup>1</sup> Data source: 2012 Forisk Timberland Owners List

across treatments, including the use of single and double bedding (when needed) and ripping (when needed).

**Table 1** summarizes current regeneration approaches associated with trees per acre (TPA) and seedling types, as well as average survival rates. **South-wide, firms average 592 trees per acre with an 88.5% survival rates.** Second-generation seedlings remain the most commonly and widely used across firms and acres, as reported across regions. **Of the 23 responses, 12 reported planting 50% or more (up to 100%) of their acres in second-generation seedlings.** In addition, 12 managers reported using “Other” seedling types, primarily advanced (second+) generation seedlings. Use of advanced seedlings ranged from 12% to 100% of acres planted in 2011.

	US South	Region 1	Region 2	Region 3
<b>Responses</b>	23	8	10	5
<b>Herbaceous</b>	20	7	9	4
<b>% planted acres (ave)</b>	93.3%	91.7%	95.7%	92.5%
<b>Woody Brush</b>	18	6	9	3
<b>% total acres (ave)</b>	2.2%	1.8%	2.7%	2.0%

*Table 2: Competition Control*

**Table 2** summarizes responses related to the use of herbaceous weed control at planting and the use of woody brush control at any time during the rotation. **Overall, the 20 managers using herbaceous weed control reported applications on 93.3% of plantable acres.** The 18 managers using woody brush control reported efforts on 2.2% of total acres under management during the year. Five managers reported multiple woody brush control efforts during a given rotation.

**Table 3** summarizes responses related to thinning practices and final harvest criteria. Across firms and regions, **100% of the responding managers conduct first thinnings on their properties, and 78% also conduct second thinnings.** The average duration between first and second thinnings is 7.3 years. Final harvests occur on average at 28.6 years.

	US South	Region 1	Region 2	Region 3
<b>Responses</b>	23	8	10	5
<b>1st Thinning</b>	23	8	10	5
<b>% of firms</b>	100%	100%	100%	100%
<b>Average Age</b>	13.9	13.6	13.7	14.9
<b>Max-Min Age</b>	19-10	16-10	19-10	19-12
<b>2nd Thinning</b>	18	7	8	3
<b>% of firms</b>	78%	88%	80%	60%
<b>Average Age</b>	21.2	20.6	20.4	22.7
<b>Max-Min Age</b>	28-16	25-16	28-16	26-18
<b>Final Harvest</b>				
<b>Average age</b>	28.6	31.0	26.7	28.6
<b>Max-Min Age</b>	43-20	43-24	30-20	30-25

*Table 3: Thinning and Final Harvest Practices and Criteria*

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