



The University of Georgia

Center for Agribusiness and Economic Development

College of Agricultural and Environmental Sciences

Pine Straw Market Analysis for Southwest Georgia

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Introduction

Georgia's total land area is 37,068,000 acres, of which 65 percent is forested; more forest acres than any other state. Of that 37 million forested acres, 47% or 22.1 million acres are in pine trees. (Source: The University of Georgia - Warnell School of Forest Resources). Falling timber prices are impacting farmers ability to generate needed revenue from their timber land. As a result, many farmers are looking for ways to generate additional revenue from their timber and land to compensate for the sluggish timber market.

One potential revenue-generating market is the pine straw market for landscaping purposes. The pine straw market continues to expand throughout Georgia and the southeastern United States as homeowners and landscapers use the material for decoration and weed control. Continued population growth, a strong housing market, and economic vitality are all contributing to the demand for pine straw. More specifically, as disposable income rises, so does the demand for pine straw as a landscaping material in urban areas. (“Baling and Marketing Pine Straw”, Georgia Forestry Commission).

Methodology

The Center for Agribusiness and Economic Development (CAED) conducted a number of in-depth telephone interviews with businesses across Georgia involved in the pine straw market. The survey was designed to collect specific information on the pine straw market including sales volume, prices, baling preferences, pine needle preferences, and distribution and marketing channel information. Retailers, lawn maintenance specialists, and pine straw producers within a 60 mile radius of Eufaula, Alabama were interviewed for this project. These firms were randomly selected for participation in the survey. Due to strict time restrictions, the number of completed interviews was not as large as desired but does provide insight into the market.

Caution

The results of this study reflect a very small and regional sample and should be used with caution.

Pine Straw Use

Nine retailers, nineteen lawn maintenance companies, and one landscape contractor were interviewed in the market area and supplied information regarding their role in the pine straw market. Eight of the nine (89%) retailers bought and sold pine straw. Eleven of the nineteen (58%) lawn maintenance firms interviewed used pine straw mulching in their business. Only one landscape contractor developer was identified in the market area but their information is included in Table 1 below to provide insight into the volume of pine straw bales the company used annually.

The eight retailers that sell pine straw sold a total of 37,600 bales annually or about 2,850 bales per week. Lawn maintenance specialists used 9,745 bales annually and purchased an average of 1,421 bales on a regular basis.

Table 1.

Summary of Type of Pine Straw Users and Annual Volume			
	Retailers	Lawn Specialists	Contractors
Surveyed	9	19	1
Used Straw	8	11	1
Percent	89%	58%	1
Annual Bales Used	37,600	9,745	1,250
Periodic Purchase	2,850	1,421	1,250

Desirable Characteristics

Respondents were asked to select from six pine straw quality characteristics which are presented in, Table 2. Ninety percent of the respondents indicated they want their pine straw free of sticks and cones while an additional seventy five percent indicated they do not want leaves in their pine straw. With regard to baling preferences, sixty-five percent of those surveyed preferred twine-bound bales over wire-baled products. Twelve of the respondents, or 60%, mentioned quality characteristic other than those suggested by the questionnaire and included clean straw, meaning no trash, briars, or garbage. Other suggestions included good color, dry, red color, long needles, fresh, and without weeds.

Table 2.

Pine Straw Characteristic Preferences		
	Number	Percent
Characteristics	Selected	
No Sticks or Cones	18	90%
No Leaves	15	75%
Tightly Baled	4	20%
Wire Baled	1	5%
Twine Baled	13	65%
Other	12	60%

Baling Preferences

In Table 3, respondents were asked about their preference for machine-baled product versus hand baled. Over half (55%) of the buyers responded with indifference to either method of baling. Those indicating preference were virtually split 50/50. Twenty percent of the respondents reported they preferred the machine-baled product while 25% of the respondents prefer the hand-baled pine straw. Those who preferred the machine method indicated that the machine-baled pine straw stacks better and is better for transporting and storing as they do not fall apart as easily as hand-baled pine straw.

The respondents that prefer the hand-baled pine straw do so because of its ease of application in the field, i.e., easy to break the bale. The lawn maintenance respondents indicated that the machine-baled pine straw hinders the application process because the bales are packed too tightly and it is harder to remove the wire. It appears that ease of application is more important than a tightly-packed bale, which is better for trucking and delivery. The respondents also pointed out that machine balers sometimes cut the pine straw which negatively impacts its quality.

Table 3.

Baling Preference by User			
Buyers			Producers
Machine	Hand Baled	Does Not Matter	Hand Baled
4	5	11	7
20%	25%	55%	100%

Pine Straw Prices

Table 4 illustrates the average price, as well as the price range, paid by retailers and lawn maintenance operators. The wholesale pine straw market consists of legitimate large producers with a reliable, quality supply of straw and itinerant producers that frequently enter and leave the market. The data below shows the lawn businesses averaged paying just under 5% more than the average retailer. This slightly higher price could be expected since the lawn maintenance industry would purchase supplies at retail wholesale.

The following table illustrates the average prices and range of prices paid by retailers and lawn maintenance operators. The range of prices may be attributed to the wholesale pine straw market structure which consists of legitimate large producers with a reliable, quality supply of straw and itinerant producers that frequently enter and leave the market impacting pine straw prices. Of the nine retailers contacted, only one did not stock pine straw. Over half of the nineteen lawn maintenance firms contacted (58%) offer pine straw to their customers. The data below reveals that area landscaping businesses cost of purchasing pine straw is approximately 5% higher than what the average retailer pays for their pine straw. This slightly higher price might be attributed to landscapers purchasing their pine straw from area retailers as opposed to wholesalers.

Table 4.

Average Prices Paid at Retail Stores and by Lawn Maintenance		
	Retailer	Lawn Maintenance
Number Called	9	19
Percent	89%	58%
Avg. Price	\$2.29	\$2.41
Range/bale	\$2.25 to \$3.00	\$1.25 to \$2.25

Volume Discounts

Both pine straw producers and buyers were asked if they offered volume discounts to their customers. A quarter of the buyers indicated that they offer a volume discount while a significantly larger number of producers (57%) offer volume discounts. The average producer volume price discount is 33 cents per bale and ranged from a low of 25 cents to a high of 50 cents per bale.

All of the respondents provided volume information regarding their production and use of pine straw. Table 5 shows the producers were giving volume discounts averaging at about 1,133 bales, ranging from 1,000 to 1,200 bales. Approximately 1,000 to 1,200 bales is needed to maximize a semi-trailer load depending on the length of the trailer. Producers that delivered their own product may have been discounting transport cost in their answer. Table 5 shows the buyers' price/volume discount which ranges from \$0.15 to \$0.35 per bale, averaging \$0.26 per bale. The discounts are implemented with orders as small as 10 bales but on average, they are realized with orders of 100 or more bales.

Table 5.

Volume Discount Purchase Levels and Corresponding Discount		
	Buyers	Producers
Offer Discount	25%	57%
Purchase Minimum to receive Discount		
<i>Range (bales)</i>	10 - 1,250 bales	1,000 - 1,200 bales
<i>Average (bales)</i>	180 bales	1,133 bales
Discount Amount		
<i>Range (\$/bale)</i>	\$0.15- \$0.35	\$0.25- \$0.50
<i>Average (\$/bale)</i>	\$0.26	\$0.33

Delivery and Harvest Distances

To gauge market size, harvest requirements, and delivery characteristics, pine straw producers were asked a series of questions pertaining to the distance they were willing to travel to harvest pine straw as well as the distances they are willing to travel to deliver pine straw. Table 6 presents total annual pine straw production, in bales, for the six firms responding to the survey. These responding firms, located in Georgia, Alabama, and Florida, produce an estimated 8.5 million bales of pine annually, an average of 1.4 million bales per year per producer. Production volume of the six firms ranged from a high of 3 million bales per year to smaller operations of 30,000 bales annually.

The respondents were asked how far they are willing to travel to harvest pine straw and if they had a minimum acreage and/or minimum bale per acre requirement. It is important to remember that these responses only reflect the results of six businesses and should be used with caution. It is noted, in Table 6, however, that smaller firms reported traveling fewer miles to harvest and deliver pine straw than larger producers. The largest producer is willing to travel greater distances to harvest pine straw but requires a minimum of 100 acres of pine straw and a yield of 300 bales. On average, the producers are willing to travel 178 miles to harvest 63 acres of straw with a minimum yield of 213 bales per acre.

The larger producers reported they were willing to deliver pine straw anywhere from 500 miles to nationwide depending on the size of the order. The larger producers have minimum delivery requirements ranging from 1,000 to 1,200 bales, or a semi-trailer load.

Table 6.

Minimum Pine Straw Harvest and Delivery Requirements					
Harvest Sources Minimums				Delivery Minimums	
Bales Produced	Distance Miles	Minimum Acreage	Minimum Yield/Acre	Delivery Distance/Miles	Minimum Bale/Load
3,000,000	350	100	300	Nation wide	1200
30,000	40	30	150	200	600
1,300,000	-	-	-	400	
200,000	100	-	-	1,000	1,000
2,500,000	200	20	200	500	1,100
1,500,000	200	100	200	1200	1000
Average	178	62.5	213	660	980

Seasonality

The respondents were then asked if the pine straw market experienced seasonality. The information in table 7 suggests that summer is the busiest season for pine straw according to 62% of the buyers and 71% of the producers. The percentages may exceed 100% as respondents were able to choose multiple answers. Interestingly, pine straw buyers were more likely to indicate that fall is a busy time, where as producers report spring as being busy.

Table 7.

Pine Straw Seasonality					
	Summer	Spring	Fall	Winter	All Seasons
Buyer	18	2	7	2	2
	62%	14%	24%	7%	7%
Producers	5	3	1	2	0
	71%	43%	14%	29%	0

Table 8.

Producer Sales by Type of Customers					
Volume	Retail	Developers	Wholesalers	Other producers	Home owners
30,000	-	90%	-	-	10%
200,000	50%	50%	-	-	-
300,000	-	-	-	-	-
1,300,000	23%	-	-	77%	-
1,500,000	5%	90%	5%	-	-
2,500,000	75%	25%	-	-	-
3,000,000	20%	20%	45%	-	5%

Most of the pine straw production was sold into the landscape development and contractors industry. Two of the producers sold 90% of production; another, 50%. Two other producers sold 50% and 75% to retailers. One firm baled and sold 23% of its straw and sold the remainder of the unbaled bulk straw to other producers. Very little was sold directly to home owners and other direct users. Meaning Wal- Marts, local garden centers, nurseries and hardware stores.

Conclusion

The information contained in this report suggests that the pine straw market in southwest Georgia is thriving. The prices received by producers and their willingness to travel significant distances to access markets implies that there is room for other producers to enter the market. The local market may be saturated but if a producer is willing to travel to larger urban areas, there are market opportunities. The data suggest that it is important to produce a clean product, free of waste and foreign material. Producers should expect to provide volume discounts and need to take this into consideration when determining their pricing schedule.

The Center for Agribusiness and Economic Development



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- ▶ To provide feasibility and other short term studies for current or potential Georgia agribusiness firms and/or emerging food and fiber industries.
- ▶ To provide agricultural, natural resource, and demographic data for private and public decision makers.

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