

Pine Straw: Marketing the Product



Although North Carolina, Florida, and Georgia continue to dominate the pine straw industry, there is interest in pine straw harvesting in Mississippi. Pine straw is a popular landscape mulching material because of its insulating qualities, aesthetic appeal, and soil improvement properties.

This publication deals with marketing and financial considerations such as prices, contracts, and sales potential. You might consider the marketing aspects of pine straw the most important; after all, a market should be determined well before you start producing straw. As with all forest management activities, a written plan outlining objectives, stand characteristics, and other information should be completed before harvesting pine straw.

Management Plan

Pine straw harvesting must fit with your overall forest management plan. It should not interfere with treatments for wildlife, timber, or any other objective. Typically, pine straw management is compatible with timber management and less compatible with managing for wildlife. Wildlife require a relatively low basal area and native plants for forage on the forest floor. Pine straw harvesting, particularly with machine balers, requires ground cleaned of debris, weeds, and grasses. Pine straw management works best in a more intensively managed plantation scenario. Such a silvicultural regime incorporates a high basal area and regular thinnings, which complement pine straw production.

A forest management plan is a written document that includes overall guidelines, recommendations, and practices for current and future management to meet the owner's long- and short-term objectives. A management plan helps you identify what really want, provides guidance, and helps save time and money and avoid mistakes. A plan is crucial to taking full advantage of tax considerations and for enrollment in certification programs.

These are the components of a management plan:

1. Written objectives
2. A legal description as found in property tax records
3. Inventory data relevant to forest management objectives, including stand and soil types, acreage, stand age, trees per acre, average diameters and heights, timber volume, and stand condition/health
4. Maps showing stands, roads, streams, and sensitive areas

5. Management recommendations based on the inventory, maps, and objectives
6. A schedule of recommended management activities

Management plans are written for 5- to 10-year periods, and should be periodically reevaluated for changing landscape, economic, and personal circumstances. Landowners can contact their county Extension office or a Mississippi Forestry Commission area forester for more information about management plans. A consulting forester can conduct an inventory and write the management plan. (See MSU Extension Publication 2718 *Choosing a Consulting Forester*.) Several other resources are available, including the American Forest Foundation's My Land Plan (mylandplan.org) and the University of Georgia's Forest-A-Syst (www.forestasyst.org).

General Consumer Preferences, Types of Bales, and Prices

As of 2019, there is no statewide analysis of the pine straw market; therefore, the following information on consumer preferences and pine straw prices should be considered a rule of thumb. As with timber prices, Mississippi pine straw markets tend to be localized and vary across the state based on supply and demand. In general, market price ranges from \$3 to \$8 per 20-pound bale.

It is important to remember that the harvesting location improves over time, and particularly after the initial process of cleaning and pruning. Thus, prices will vary depending on the site condition and may increase/decrease thereafter. Prices can also vary depending on whether or not the landowner or the contractor prepares the site for harvest.

Pine straw suppliers and retailers prefer longleaf pine because the long needles (up to 18 inches) make baling easier. Although deterioration rates are similar to loblolly pine, longleaf needles retain their color longer and lock together better than those of other species. These characteristics allow longleaf needles to command a premium price on the market. Dyer and Barlow (2012) cite a University of Georgia study finding loblolly pine straw prices paid to landowners ranged from \$0.25 to \$0.30 per bale while longleaf pine straw ranged from \$0.40 to \$1 per bale.

Despite the price difference, loblolly needles lay flatter and tend not to settle as much over time as longleaf. In addition, loblolly pine straw is more available than longleaf in many areas of Mississippi, which means transportation costs are lower. Three of the southern yellow pines (loblolly, longleaf, and slash) are comparable in terms of conserving water for planting and adding organic matter and nutrients to the soil.

Bale sizes range from 3 to 6 cubic feet. In general, retailers that distribute to large landscaping companies prefer 40- to 50-pound round bales (typically measuring around 18 inches in diameter and 26 inches long), while bales sold to individual homeowners are lighter 20- to 25-pound square bales (measuring 14 by 14 by 16 inches).

Buyers' most important preference is a clean bale. They do not want to pay for debris and weeds, which lower product quality. Peak demand is usually in the spring—several months after straw has been harvested in the fall—when gardening and landscaping begin for the season. Pine straw mulch should be applied up to 4 inches deep, which settles to 1.5 to 2 inches, or half a pound per square foot. Never place mulch next to the base of a tree.

Leasing and Contracts

Some landowners rake, bale, and market pine straw themselves. However, the more common method for landowners marketing pine straw is to contract with an operator. Often, pine straw harvesting arrangements are developed informally. However, it is to your advantage to formalize the process so that you are legally and financially protected.

The first step in contracting with a harvesting operation is to make a list of potential buyers. The list can be compiled by talking with members of your local County Forestry Association, Mississippi Forestry Commission, Mississippi State University Extension, or professional forestry consultant.

A landowner without knowledge of the local market and pine straw harvesting process is at a distinct disadvantage when negotiating prices. Ideally, the seller will create a bid invitation, which is a letter describing sale conditions and pine straw being sold. It is always a good idea to have a qualified professional review the bid prospectus and harvesting agreement. Because prices vary over time based on site conditions and the consumer market, the seller should obtain competitive bids for each year of sale.

The following are items suggested for inclusion in the bid invitation:

1. **Identification of seller or seller's agent:**

Includes contact information of the seller or the seller's forestry consultant, lawyer, or other representative.

2. **Bid opening details:** Includes time, date, and place where bids will be opened. Allow several weeks between the invitation and bid opening so potential buyers can evaluate the sale and draw up their bids. Bids will be sealed and opened together at the specified time and date.
3. **Location and size of sale area:** A map may be appended to the prospectus to provide more detail on access roads, stands, and other important details. A similar map should already be included in the forest management plan.
4. **Request for references:** Never enter into an agreement with a harvester until you have confidence in his or her background qualifications.
5. **Type of sale:** The seller should state how the product would be sold. There are two generally accepted sale methods: per-bale and per-acre. Occasionally, pine straw is purchased on a per-cubic foot basis.
 - a. In the **per-bale** method, the seller is responsible for monitoring the bale count. This puts the seller at a disadvantage, which is one reason sellers tend to prefer the alternative method. Buyers, on the other hand, favor the per-bale method because it gives them more flexibility per bale.
 - b. In the **per-acre** method, landowners are paid on a set amount per acre per year regardless of the number of bales harvested. This method is most common because the former method requires a considerable investment in equipment and labor. In addition, the per-bale basis of payment may not be the best way to maximize returns if there is not enough production to offset costs.
6. **Duration of the sale agreement:** This section states when payment will be made (usually before harvest).
7. **Harvest restrictions and conditions:** The prospectus notes that Best Management Practices will be followed. Access roads and sensitive areas, including streamside management zones, should be marked on a map and specified in the contract. There should be a statement addressing damages to trees during the pine straw harvest. Unlike timber harvesting, performance bonds are not typically included in a pine straw harvesting contract.
8. **Conditions for bid acceptance:** This section includes bid format, how to address the bid, terms for a bid, requirements for receiving the bids (mailed or hand delivered), a statement noting that the seller retains the right to refuse all bids, and a time limit for interested parties to agree to a contract and closing.

9. **Payment method and time of payment:** Payment method may be cash, check, or money order in the form of one lump sum or installments with interest. Lump sum sales by either sale method require an accurate estimate of straw yield.
10. **A copy of the bid form:** The bid form makes it easier to compare bids and for the buyer to submit bids.

Obtain two to three competitive sealed bids. Bidding can occur on a per-acre or per-bale basis. More bidders result in greater price competition, which generates higher offers. Always check references of potential harvesters or talk to others who have worked with them.

Once you choose a harvester, a contract is essential. The contract should restate most of the critical information from the bid invitation, including type of sale and price. Visit the site during harvesting to make sure contractual obligations are fulfilled.

Conducting a Market Analysis

Many market factors affect profitability in pine straw harvesting. A market analysis helps answer questions like these:

- What trends are occurring in the pine straw industry?
- Who are my competitors and are they successful?
- What are the strengths and weaknesses of my location?
- What is the demand?
- What prices and price adjustments should I realistically achieve?
- What sales volume can I expect?

The market analysis provides you with essential information required by a business plan or feasibility study, including investment risks and financial projections. Studying regional trends in pine straw helps identify opportunities and threats that can affect profitability. Inquire about trends by contacting the Mississippi Forestry Commission, MSU Extension, major nurseries in the area of operation, and county forestry associations.

Once you have identified information sources, you can research trends and changes in customer preferences. For example, there may be changes in consumers' willingness to substitute loblolly pine needles for longleaf pine needles, or consumer preference may change from round bales to square bales. Determine if demand has been increasing or decreasing, taking into consideration new distributors or those that have gone out of business. Contact your local chamber of commerce to identify new distributors.

Location is critical because hauling distance to market impacts the profit margin. For small operations in particular, the closest viable markets should be determined by studying population size of communities, household income, and home prices.

Identify major clients such as universities or factories. Determine hauling distance using a mileage calculator. Access to major roads is also an advantage.

One of the most important parts of a pine straw market analysis is examining current and proposed competition. If possible, interview other operators in the area. In addition to knowing your competitors, learn about their business volume and customer origin. You can obtain supplemental information through a search of pine straw suppliers listed at the Mississippi secretary of state's website: <http://www.sos.ms.gov/Pages/default.aspx>. When possible, it is a good idea to look at comparable operations for data on past performance.

Sales Potential

After you have completed the data collection for your market analysis, you must estimate sales potential. Assess the operation's competitive strengths and weaknesses using a five-point Likert Scale. Strengths and weaknesses of each operation will vary; however, some considerations are listed below for operators attempting to capture a share of an existing market.

	Competitive Weakness		↔	Competitive Strength	
Production volume	1	2	3	4	5
Hauling costs	1	2	3	4	5
Labor costs	1	2	3	4	5
Management skills	1	2	3	4	5
Hauling distance to market	1	2	3	4	5
Interstate access	1	2	3	4	5
Urban markets	1	2	3	4	5
Housing growth in market	1	2	3	4	5
Number of potential nursery buyers	1	2	3	4	5
Number of potential bulk purchase clients (e.g., factories, schools)	1	2	3	4	5

Project sales by estimating how many bales could be sold on an annual basis. Do this by analyzing seasonality of customer purchases. Code each month as peak season (P), middle season (M), or off season (O). You can project monthly sales based on demand, competition, and your strengths and weaknesses relative to the competition.

Rate increases or decreases impact your ability to attract customers while still retaining your desired profit level. Price setting must account for rates and quality levels of competitors, price sensitivity of customers, and your costs. Consider your projected expenses and profit goals, and set your rates according to the break-even price.

Conclusion

Market analysis and sales projections can help you project your income and cash flow. These projections can serve as a financial plan or determine the feasibility of entering into the pine straw business. Update your marketing research as needed or, at minimum, every 5 years, and integrate it into your forest management plan. Key factors to consider include determining the number of buyers, understanding buyers' preferences and seasonality, and identifying competitors.

References

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Example Monthly Sales Projection Worksheet*

Species: Loblolly Pine
Total Acres: 50

Seasonality (Peak, Middle, Off)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
O	O	O	P	P	P	M	M	M	M	O	O

Harvest Projection (no. of acres × no. of 20-pound bales)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Acres							10	10	10	10	10		50
Bales							200	200	200	200	200		1,000

Sales Projection (percent sold × bales)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
% sold	5	5	5	20	20	15	10	10	10				100
Bales sold	50	50	50	200	200	150	100	100	100				1,000

*This example is based on Ryan and Chrisler (2003).

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Revised by **Brady Self**, PhD, Associate Extension Professor, Forestry, from an earlier edition by **Jason S. Gordon**, PhD, former Associate Extension Professor.



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