

Pine Straw

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Pinestraw is primarily used as a mulch in for landscaping.





Benefits of Pine Straw Mulching

- **Conserves soil moisture**
 - Reduces evaporation from the soil
- **Prevents crusting of the soil surface**
 - Improves absorption and percolation to roots
- **Maintains a more uniform soil temperature**
 - Keeps the soil warmer in cold spells
 - Keeps the soil cooler in hot periods
- **Reduces weed problems**
 - Mulch needs to be weed-free
 - When applied deep enough to smother small weeds or new germinants.

Source: *Pine Straw: Mother Nature's Mulch*. Pub 2387 (12.5M)
8/90 Thomas E. Pope, Ph.D., Specialist (Landscape Architecture)
LSU Agricultural Center. LA Coop. Ext. Service.



Nurseries & Landscapers



Big Box Stores

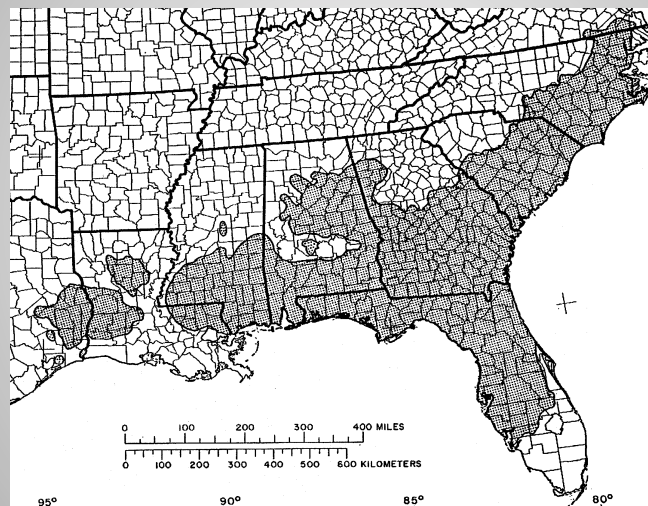
- WalMart**
- Lowe's**
- Home Depot**



Other Consumers

- Golf Courses
- Cities & Towns
- Highway Departments
- Agricultural Industry
- The Public

Pine Straw Production



Loblolly Pinestraw

- Widely available
- Limited endurance
 - fades quickly; reapply every 6 mos.
- Preferred in some agricultural uses
 - strawberries
- Hard to bale
 - short needles

Slash Pinestraw

- Widely available in southern Coastal Plain
- Easy to bale
 - long needles
- Last longer than loblolly
 - reapply every approx 9 mos. to 1 yr

Species Preference

- Longleaf
- Increasingly available
- Easy to bale
 - Long needles
- Longest lasting of all straws
 - increased resin content, allows application approximately every 1 ½ yrs

Of the southern yellow pines, which pine straw is fades to gray sooner?

- A: Slash pine (*Pinus elliottii*)
- B: Longleaf pine (*Pinus palustris*)
- C: Loblolly pine (*Pinus taeda*)



Selecting Stands

- Old Fields
- Ownerships where wildlife is NOT a priority
- Any age (min. 8-10 yrs)+



Raked annually!



Groundcover, Poles, Aesthetics,
Pinestraw near Purvis, MS



Mechanical raking impacts.



Hand raking is less detrimental to groundcover.

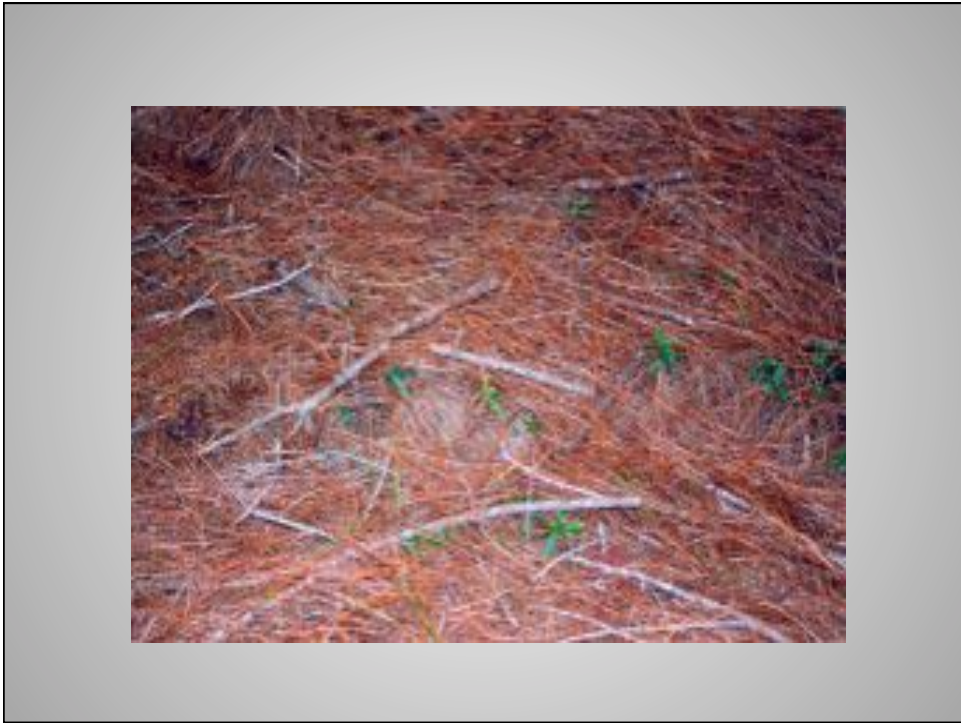


\$135.00 an acre in 2011



Cleaning up the Stand

- Chemical weed control
- Burn
- Mechanically cut and pile remaining debris



Pile sticks away from base of trees.



Imazapyr-damaged longleaf seedling.



Blackberries (*Rubus*) may be controlled w/ Milestone VM.



What herbicide works well on waxy leaf brush, has little or no soil activity, and may be used as a directed spray to control brush and leave most grasses in place?

- A: Arsenal
- B: Velpar
- C: Garlon
- D: Roundup/Accord

Methods of Baling

- Agricultural hay balers
- Mechanical balers designed for straw
- Box or hand baling equipment

Producing Pine Straw- Mechanical







MTE Pine Straw Equipment Madison, GA



Free
Designs on
the Web

TAMU

[http://
essmextension
.tamu.edu/
pinestraw/
baling.html](http://essmextension.tamu.edu/pinestraw/baling.html)





Concerns/Problems With Raking Pine Straw

- Reduces wildlife value
 - Removing the herbaceous layer is detrimental to all game and most non-game species
- Aesthetics
 - More like farming than forestry
- Reducing soil productivity
 - Compaction
 - Removing nutrients

Native groundcover wiped out.

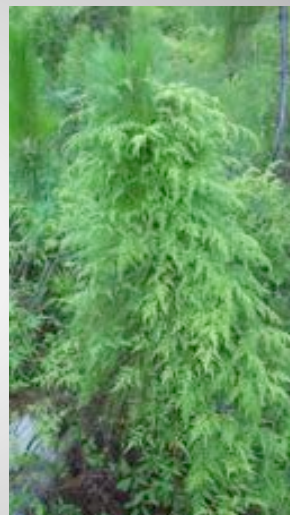


Concerns/Problems

- Intro. of weeds/pest.
- APHIS warns about “fireants in pinestraw”



Cogon
grass &
climbing
fern.



No net loss of habitat if converted to pine straw.



Previous longleaf plantings through CRP?



Dense stands of longleaf on former agricultural sites.



Potential Income- Texas

- Typical “Per Acre” contracts range from \$12.50-\$30.00 for loblolly straw¹

1 Managing Your East Texas Forest for the Production of Pine Straw. TAMU E. Taylor and C. Foster Sept. 2003

Potential Income- Georgia

CASE STUDY #1

- Contractor in Georgia
- Raking for 15 years
- Has 12 crews
- Pays landowners \$.50 a bale for slash
- Pays landowners \$.70 a bale for longleaf
- Landowners averaged 150-200 bales acre/yr

Potential Income- Georgia

CASE STUDY #2

- Private Land near Augusta
- 1st raking at age 10 on former ag site.
- Used own crews
- Raked \$1,350/acre for bales he sold

Recommended Cycles for Straw & Wildlife

- 1 year Rake
- 1 year Fallow
- 1 year Burn
- No herbicides applied to herbaceous plants
- Restrict fertilization to deep sands



Pine straw
income may be
used for
restoration
purposes.

Silvopasture = Multiple Income Streams:
Grazing, Pinestraw, Timber



Additional Information

Thomas Ward – Agroforester with USDA

Minimal Impact Pine Straw Raking –
Technical Note from the NRCS

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Additional Information

NC State:

<http://www.ces.ncsu.edu/forestry/pdf/WON/won30.pdf>

University of Florida: <http://edis.ifas.ufl.edu/fr030>

LSU:

http://www.lsuagcenter.com/en/environment/forestry/forest_products/Production+and+Marketing+of+Louisiana+Pine+Straw.htm

Additional Information

TAMU: <http://essmextension.tamu.edu/pinestraw/>

Miss. State University:

<http://www.naturalresources.msstate.edu/business/pine-straw.html>