Site Prep and Artificial Regeneration of Longleaf Pine

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Values of the Longleaf Forest are many!

An Overlooked Treasure of the Longleaf Ecosystem –

The Heath Family (*Ericaceae*)

Blueberries = *Vacciniums*

Huckleberries = *Gaylusaccias*

High Bush, *Vaccinium corymbosum*

Low Bush Blueberry & Huckleberries (*Gaylusacchia spp*.)

Perennials used by Wildlife

Hairy Lespedeza

Lespedeza hirta

Fuel

Fuel

Fire Only – 2 Years old

Herbicide Site Prep 3 years old

Site Preparation on Cutover Timberland

Wider window for planting behind imazapyr site prep.

Site preparation burn after brown-out.

Sprayed in summer 2011. Burned in fall. Planted in winter.

Callicarpa americana

Field Trip Site near Nacogdoches, TX

Blackberries (*Rubus*)

Wax Myrtle/ *Myrica cerifera*

Fully address invasive species in the site preparation treatment.

Cogon grass & climbing fern.

Long Term Management Concerns

Site Preparation and Longleaf Establishment in Old Fields & Pastures

Silvopasture Site: planted Dec 2000, picture July 2001

Comparison of Site Preparation Methods and Herbaceous Releases for Longleaf Pine Establishment in an Old Pecan Orchard

Installed 1998

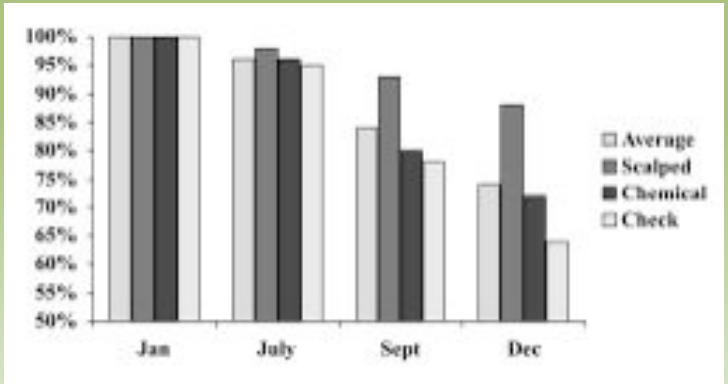
Study Site

- Covington Cy, Alabama
- 70 + y/o old pecan orchard till 1996
- Lower coastal plains soils (sandy loams)
- History of frequent liming and fertilization
- Full compliment of old-field broadleaves and grasses & very little woody competition

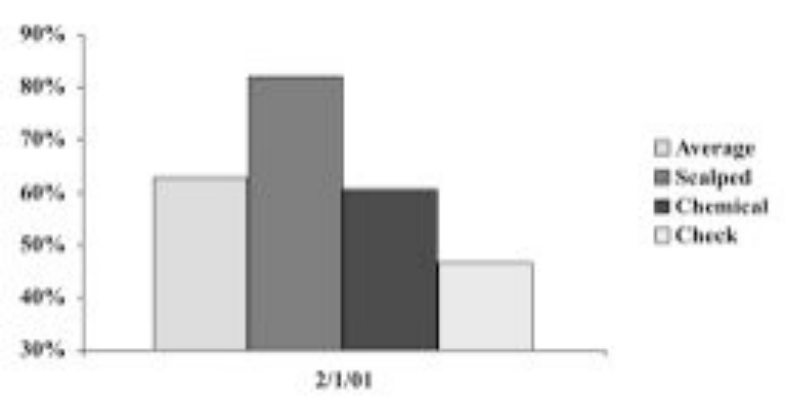
Site Preparation (Main Plot Treatment)

- Scalping & Subsoiling
- Broadcast Chemical & Subsoiling
- Subsoiling Only

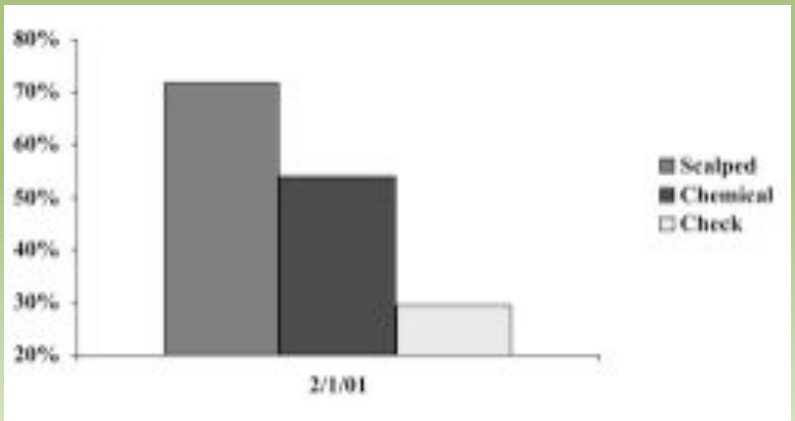
% Surviving by Site Prep (Age 1)



% Surviving by Site Prep (Age 2)



% Starting Hgt. Growth by Site Prep (Age 2)



Check SP, Velpar/Oust Tankmix Release Treatment

1 year post

1 ½ yrs post

Chemical SP, Velpar/Oust Tankmix Release Treatment

1 year post

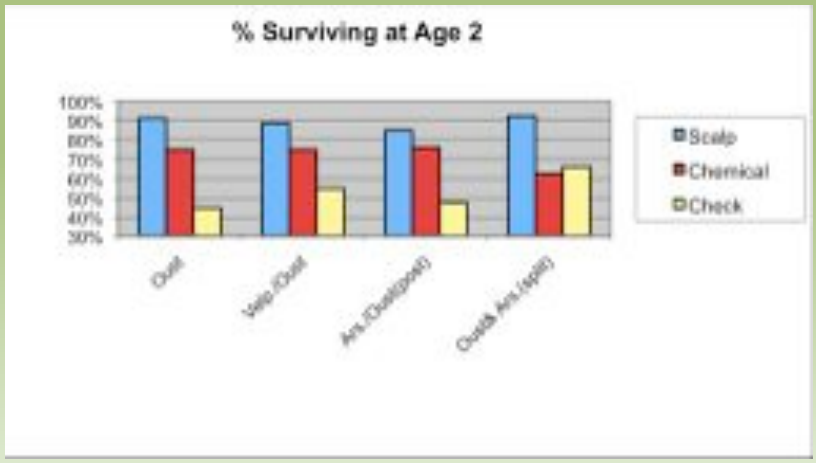
1 ½ yrs post

Scalp SP, Velpar/Oust Tankmix Release Treatment

1 year post

1 ½ yrs post

All herbaceous release treatments performed best following a scalping site preparation.



Watch for white-fringe beetle larvae behind leguminous crops.

Monroeville Demonstration Planting

- Longleaf seedlings do not survive prolonged immersion.

Scalping Recommendations

- Scalp on the contour
- Pick up the scalper on a regular basis
- Don't scalp deep furrows…just beneath sod
  - 4-5" deep on pasture grasses
  - 2-4" deep on cultivated fields
- Scalp in the fall
  - Months ahead of planting for bareroot seedlings
  - No waiting period for container-grown seedlings