

## FDP Forest Stand Improvement Practice Standards

<b>Southern Yellow Pines (loblolly, longleaf, shortleaf, pond pine)</b>						
FDP Practice / Treatment	Silvicultural Practice	Qualifying Pre-Treatment Stand Condition				Post-Treatment Stand Condition
		Age of stand prior to treatment	Stand Size Class	Pre-Treatment Stand Stocking Trees per acre	Basal Area	
<b>Release of seedlings</b>	Weeding Cleaning Liberation	1 to 5	Seedlings	200+ well-distributed commercial pine seedlings per acre and competing, undesirable hardwoods comprise 40-60% of stand	N/A	200+ well-distributed commercial pine seedlings FTG
<b>Cull Tree Removal</b>	Liberation Sanitation	10 to 40	Poletimber Small Sawtimber	N/A	Avg stand DBH    BA of desirable crop trees 11+                    40 7 - 10                30 4 - 6                   20	Remove 30+ sq. ft BA / acre
<b>Non-Commercial Thinning</b>	Thinning	Species    Max age of stand Longleaf    15 years Shortleaf Pond Loblolly    10 Years	Seedlings Sapling (avg. DBH < 6")	1000+ pine seedlings/saplings per acre	N/A	300 - 500 commercial pines per acre depending on age; 500 tpa @ age 3, down to 300 tpa @ age 10
<b>Crop Tree Crown Release</b>	Crop Tree Crown Release	40 years - longleaf, shortleaf, pond pines and mixed pine-hardwood stands. Not available for loblolly stands.	Sapling Poletimber Small Sawtimber	Fully stocked stands with 50 to 100 crop trees per acre needing released, depending on age.	N/A	50 to 100 crop trees per acre released
<b>Prescribed Burning</b>	Prescribed Burning for silvicultural objectives	C/S is not allowed solely for hazard reduction objectives. Burn plan must specify silvicultural objectives (understory hardwood control, disease control, forest health management). Must have a burning permit and a written prescribed burn plan prepared by a certified burner.				Satisfactorily meet objectives of the approved burn plan
		Species	Burning considerations			
		Longleaf	Burning in grass stage is approved. No burning once height growth has initiated until trees are at least 10-15 feet tall.			
		Loblolly, shortleaf, pond pines	Burn after trees are 15 feet tall			

## FDP Forest Stand Improvement Practice Standards

<b>Southern Yellow Pines (loblolly, longleaf, shortleaf, pond pine)</b>						
FDP Practice / Treatment	Silvicultural Practice	Qualifying Pre-Treatment Stand Condition				Post-Treatment Stand Condition
		Age of stand prior to treatment	Stand Size Class	Pre-Treatment Stand Stocking Trees per acre	Basal Area	
<b>Forest fertilization</b>	Forest fertilization	Loblolly pine plantations only	8 to 35 years	Sapling Poletimber Small Sawtimber, sawtimber	N/A	60 to 130 sq. ft BA per acre of loblolly pine crop trees; and no more than 15 sq. ft BA per acre of hardwoods
<p><b>Additional standards for Loblolly pine fertilization:</b> If stand BA exceeds standards, stand must be thinned before qualifying for fertilization. Average live crown ratio must be greater than one-third. Stands where more than 30% of the trees have fusiform rust do not qualify. Stands in high risk areas for pitch canker and root rot do not qualify. Any scheduled prescribed burning (to reduce hardwood competition and to lower wildfire risk) should be done either six months prior to or one to three years after fertilization. C/S for fertilization is allowed up to two times during the rotation of the stand, and applications must be no sooner than 8 years apart, and at least 8 years prior to recommended harvest date. Follow Forest Nutrition Coop (FNC) "Established Stand Treatment Prescriptions" in Appendix for application rates based on stand conditions and nutrient deficiencies. In most cases, leaf area index (LAI) should be used to determine if fertilization is necessary. If it is determined that foliage sampling is necessary, follow FNC "Pine Foliage Sampling Protocol" in Appendix.</p>						
<b>Understory release</b>	N/A					

### Definitions (source - USFS FIA)

**Seedling:**

Hardwoods: Trees less than 1.0 inch d.b.h. and greater than 1.0 foot tall.

Softwoods (other than Longleaf pine) : Trees less than 1.0 inch d.b.h. and greater than 6 inches tall.

Longleaf pine: Trees less than 1.0 inch d.b.h. and greater than 0.5 inch in diameter at ground level.

Saplings: Live trees 1.0 to 5.0 inches d.b.h.

Poletimber:

Hardwoods: Trees 5.0 to 10.9 inches d.b.h.

Softwoods: Trees 5.0 to 8.9 inches d.b.h.