Forestland Productivity

This table can help forestland owners or managers plan the use of soils for wood crops. It shows the potential productivity of the soils for wood crops.

Potential productivity of merchantable or common trees on a soil is expressed as a site index and as a volume number. The site index is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forestland managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Reference:

United States Department of Agriculture, Natural Resources Conservation Service, National Forestry Manual.

Report—Forestland Productivity

Forestland Productivity–Montgomery County, Mississippi						
Map unit symbol and soil name	Potential productivity			Trees to manage		
	Common trees	Site Index	Volume of wood fiber			
			Cu ft/ac/yr			
Gb—Gillsburg silt loam, 0 to 2 percent slopes, occasionally flooded						
Gillsburg	American sycamore	105	143.00	cottonwood, Loblolly pine, Sweetgum, Yellow poplar		
	Cherrybark oak	100	143.00			
	Eastern cottonwood	100	129.00			
	Green ash	90	57.00			
	Loblolly pine	90	129.00			
	Nuttall oak	110	100.00			
	Sweetgum	90	100.00			
	Water oak	100	100.00			
	Yellow poplar	105	114.00			

Forestland Productivity–Montgomery County, Mississippi						
Map unit symbol and soil name	Potential productivity			Trees to manage		
	Common trees	Site Index	Volume of wood fiber			
			Cu ft/ac/yr			
PrB2—Providence silt loam, 2 to 5 percent slopes, moderately eroded						
Providence	Loblolly pine	86	126.10	Loblolly pine, Shumard's oak, Sweetgum, Tuliptree		
	Longleaf pine	73	86.00			
	Shortleaf pine	64	100.00			
	Sweetgum	90	100.00			
PrC—Providence silt loam, 5 to 8 percent slopes						
Providence	Loblolly pine	87	129.00	Sweetgum, Tuliptree		
	Longleaf pine	73	86.00			
	Sweetgum	90	100.00			
SpE—Smithdale-Providence association, 8 to 35 percent slopes						
Smithdale	Loblolly pine	80	114.00	Loblolly pine		
	Shortleaf pine	69	114.00			
Providence	Loblolly pine	84	114.00	Sweetgum, Yellow poplar		
	Shortleaf pine	64	100.00			
	Sweetgum	90	100.00			
SrE3—Smithdale-Providence complex, 8 to 17 percent slopes, severely eroded						
Smithdale	Loblolly pine	80	114.00	Loblolly pine		
	Shortleaf pine	69	114.00			
Providence	Loblolly pine	84	114.00	Loblolly pine, Shumard's oak Sweetgum, Yellow poplar		
	Shortleaf pine	64	100.00			
	Sweetgum	90	100.00			
W—Water						
Water	_	_	_	_		

Data Source Information

Soil Survey Area: Montgomery County, Mississippi Survey Area Data: Version 14, Sep 13, 2019