Forest Inventory and Analysis Fact Sheet
Kentucky 2010

Forestland Area

Kentucky's forests cover an estimated 12.4 million acres or 48 percent of the State, which has remained the same since the previous forest inventory in 2009. Ninety-eight percent of the forestland is considered available for timber production. The remaining forestland area is unproductive forestland and reserved forestland where timber removals are prohibited by law.

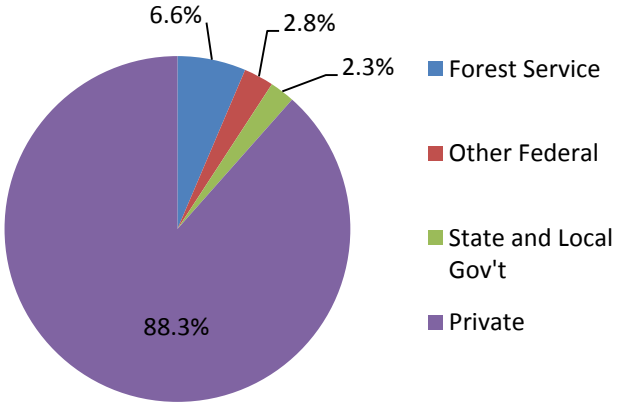
Area by Land Class (million acres)

Land class	1988	2004	2008	2009	2010
Timberland	12.3	11.6	12.1	12.2	12.2
Other/reserved	0.4	0.3	0.3	0.2	0.2
Total forestland	12.7	12	12.4	12.4	12.4
Nonforestland	12.7	13.5	13.2	13.1	13.1
Total land area	25.4	25.4	25.5	25.5*	25.5*
% Forested	50%	47%	48%	48%	48%

*Totals may not sum due to rounding. Total land area estimates changed slightly due to statistical variances and improvements in measurement techniques.

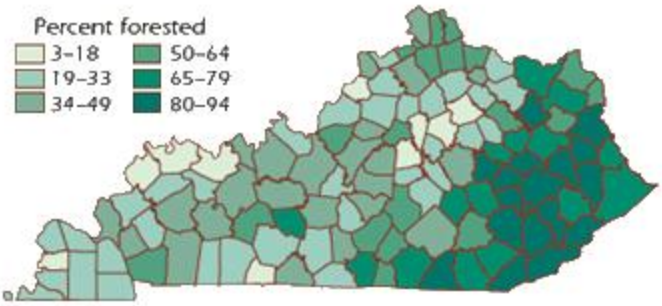
Ownership of the Forest

Over the last several years, there has been relatively no change in ownership patterns in forestland. Private individuals own 88.3 percent of the forested land. The U.S. Forest Service manages 6.6 percent and other federal, state and local ownerships manage the remaining 5.1 percent.



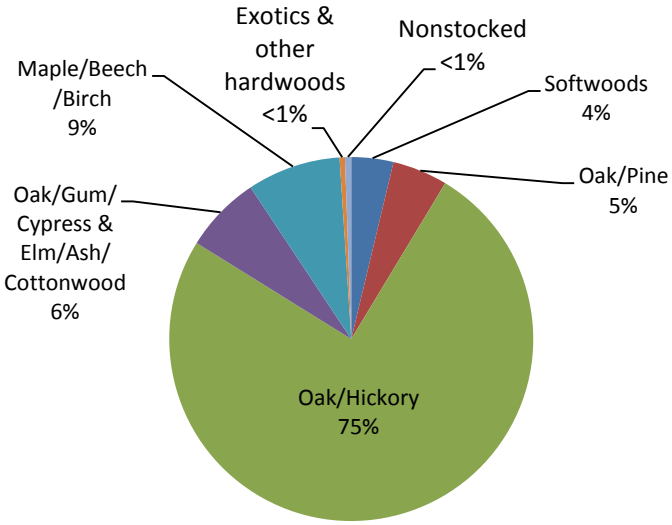
Forest Distribution

The Cumberland Plateau and the Appalachians in the eastern portion of the State are the most heavily forested, with several eastern counties covered > 80 percent by forests. The central and western portions of the State, although less densely forested, account for 50 percent of the total forestland area.



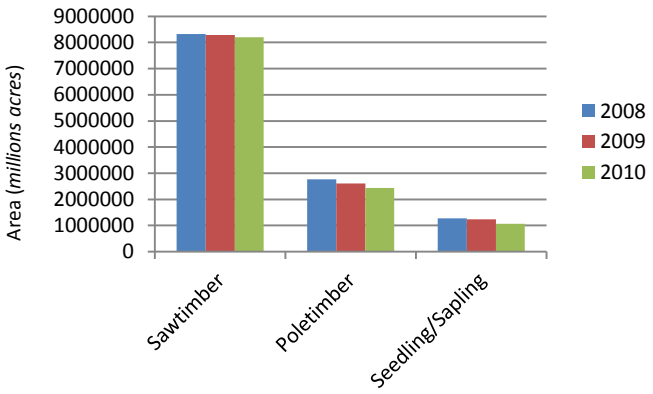
Forest-Type Composition

Oak-hickory is the predominant forest type in the State, covering nearly 9.3 million acres (75 percent of the forestland). Red maple is the most numerous tree species found in Kentucky's forests with an estimated population of 852 million live trees. Red maple is more numerous than all oak species (whose population is estimated at 691 million trees) sampled in Kentucky.



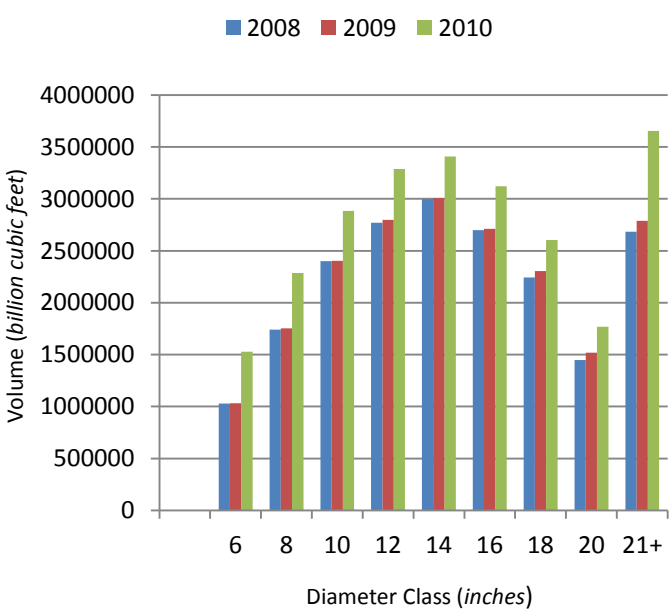
Stand-Size Distribution

Over the last few years, there has been no significant change in the distribution of forestland area among stand-size classes. Sawtimber-size stands makeup more than 8.2 million acres (70 percent of the forestland), pole-size stands compose more than 2.4 million acres (21 percent of the forestland) and sapling-size stands makeup more than 1.0 million acres (9 percent of the forestland).



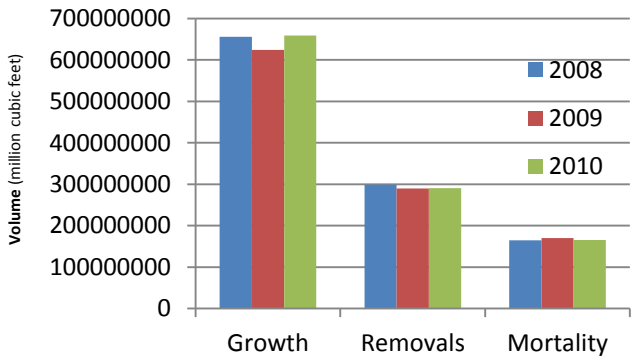
Tree Volume

Over the last several years, the number of trees has increased, as have standing volume, standing biomass rates and annual timber land growth. Growing-stock volume increased from 20.7 billion cubic feet in 2009 to 21.0 in 20109. The overall increase in volume is due to an increase in the volume of trees 14-inches and greater in diameter.



Annual Growth, Removals & Mortality

From 2009 to 2010, the net growth of growing-stock volume averaged 659 million cubic feet annually. Mortality averaged 165.3 million cubic feet. Timber removals averaged 290.2 million cubic feet, which is < 2 percent of the current inventory. This results in a growth to removal ratio of **2.2 to 1**.



Definition of Terms

Growing-Stock Trees. Live trees that contain at least one 12-foot or two 8-foot logs in the sawlog portion, either currently or potentially if too small to qualify as a sawlog. Trees must have one-third of the gross board foot volume in sound wood, either currently or potentially.

Growth to Removal Ratio. Comparison of the amount of growth volume to the amount of volume removed by human activity, including harvesting, land clearing or changes in land-use during the survey period.

Other Forestland. Forestland that is incapable of producing 20 cubic feet of wood volume per acre annually due to natural conditions (e.g. steepness, poor drainage, rockiness, etc.).

Other Private. Land owned by individuals and corporations.

Poletimber. Softwood species 5.0 – 8.9 inches and hardwoods 5.0 – 10.9 inches at dbh.

Reserved Forestland. Public forestland withdrawn from timber utilization through statute or administrative regulation.

Sawtimber. Softwood species 9.0 inches or larger and hardwoods 11.0 inches or larger at dbh.

Timberland. Forestland capable of producing 20 cubic feet of wood volume per acre annually and not reserved.