



Kansas' Forest Resources, 2012

This publication provides an overview of forest resource attributes for Kansas based on an annual inventory conducted by the Forest Inventory and Analysis (FIA) program at the Northern Research Station of the U.S. Forest Service. These estimates, along with web-posted core tables, will be updated annually. For more information please refer to page 4 of this report. More comprehensive reports with key findings and definitions are reported every 5 years (Moser et al. 2008, in press).

Table 1. – Annual estimates, uncertainty, and change

	2012 estimate	Sampling error (%)	Change since 2007 (%)
Forest Land Estimates			
Area of forest land (thousand acres)	2,582.5	2.9	20.7
Number of all live trees on forestland (million trees)	854.1	4.6	17.0
All live tree and sapling aboveground biomass on forest land oven-dry (thousand tons)	87,043.4	3.9	13.3
Volume of all live on forest land (million ft ³)	3,270.1	4.6	13.6
Annual net growth of all live on forest land (thousand ft ³ per year)	105,065.8	7.7	100.7
Annual mortality of all live on forest land (thousand ft ³ per year)	40,317.6	9.9	-18.8
Annual harvest removals of all live on forest land (thousand ft ³ per year)	21,404.6	26.4	59.9
Annual other removals of all live on forest land (thousand ft ³ per year)	3,216.9	46.1	29.8
Timberland Estimates			
Area of timberland (thousand acres)	2,470.2	3.0	19.9
Number of all live trees on timberland (million trees)	811.5	4.7	17.7
All live tree and sapling aboveground biomass on timberland oven-dry (thousand tons)	84,254.9	4.1	12.9
Volume of all live on timberland (million ft ³)	3,178.7	4.7	13.0
Volume of growing-stock on timberland (million ft ³)	1,427.9	7.0	-2.6
Annual net growth of growing-stock on timberland (thousand ft ³ per year)	41,456.0	10.4	44.7
Annual mortality of growing-stock on timberland (thousand ft ³ per year)	13,652.5	16.5	-10.1
Annual harvest removals of growing-stock on timberland (thousand ft ³ per year)	9,572.9	35.0	93.0
Annual other removals of growing-stock on timberland (thousand ft ³ per year)	3,018.0	67.2	7.4

Research Note NRS-yyy

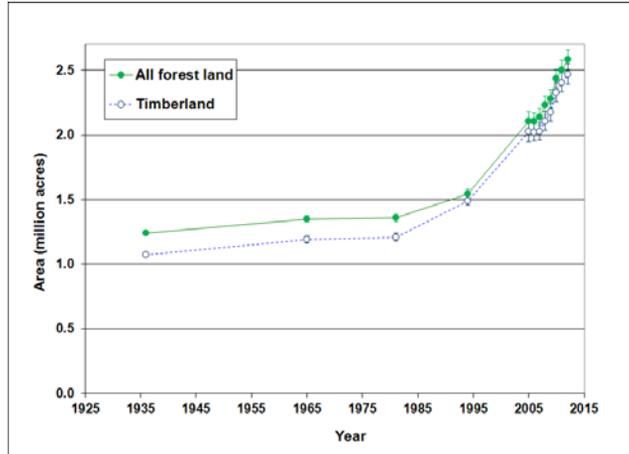


Figure 1. – Area of timberland and forest land.

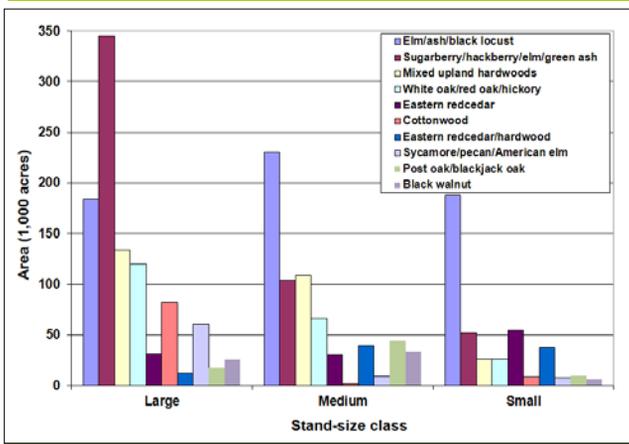


Figure 2. – Area of timberland by top ten forest types and stand-size class, 2012.

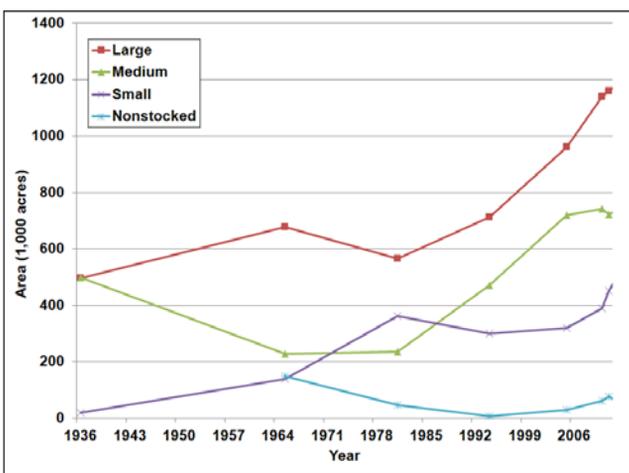


Figure 3. – Area of timberland by stand-size class and year, 1936–2012.

Note: When available, sampling errors/bars provided in figures and tables represent 68 percent confidence intervals.



Table 2. – Top 10 tree species by statewide volume estimates, Kansas, 2012

Rank	Species	Volume of live trees on forest land (million cubic feet)	Sampling error (%)	Change since 2007 (%)	Net volume of sawtimber trees on timberland (million board feet)	Sampling error (%)	Change since 2007 (%)
1	Hackberry	451.5	10.3	22.2	947.8	15.2	22.8
2	Cottonwood	402.2	22.7	18.7	1,129.0	26.4	0.5
3	American elm	258.6	9.1	16.3	207.2	23.3	17.2
4	Green ash	246.3	11.4	6.0	411.0	18.8	7.3
5	Osage-orange	236.2	10.7	22.7	0.0	0.0	0.0
6	Black walnut	209.7	9.7	20.2	429.7	13.5	5.8
7	Red mulberry	163.0	14.4	25.3	37.2	46.5	-39.3
8	Bur oak	151.0	18.6	-4.1	331.1	25.0	-5.5
9	Honeylocust	138.0	14.7	35.3	59.7	41.9	-3.9
10	Eastern redcedar	110.9	12.9	40.2	59.1	43.2	-42.6
Other softwood species		7.9	58.1	-39.7	9.5	74.3	-63.9
Other hardwood species		894.8	7.9	3.1	1,820.1	14.1	-8.0
All species		3,270.1	4.6	13.6	5,441.5	8.5	0.0

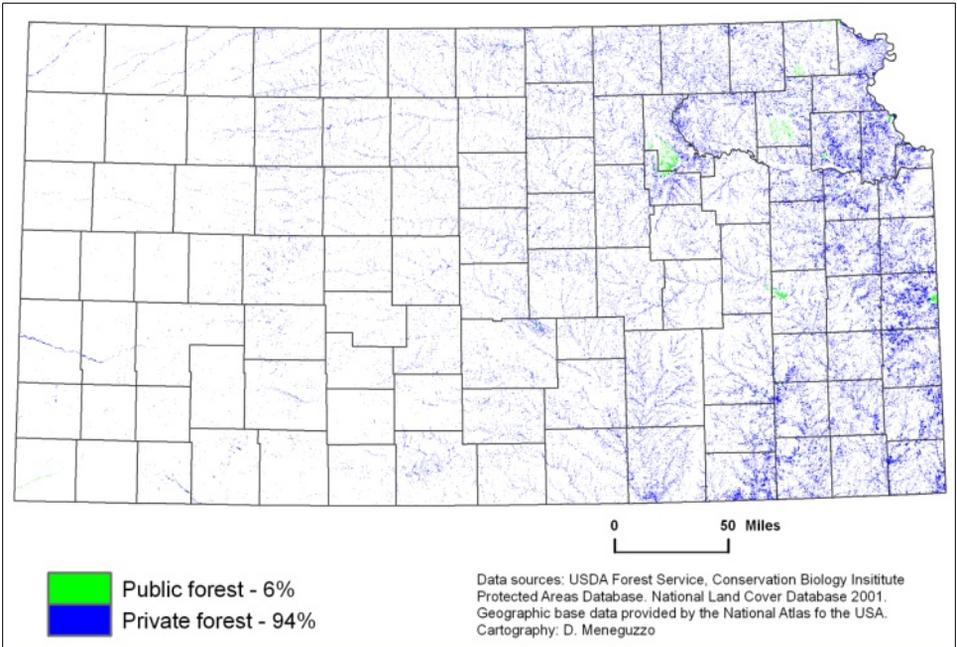


Figure 4. – Area of forest land by public and private ownership. White area represents nonforest.



Kansas's Land Use Change, 2006-2011

Land use categories are a dynamic label in Kansas, as land use transitions in and out of forest land, and its subcomponents of timberland and other forest land, due to urbanization, other conversion, and reforestation. An unused pasture or rangeland could be occupied by regenerating forests, for example eastern redcedar, enough to force a change in how we categorize the land. At the other end of the spectrum, forest land may be converted to agricultural uses or developed for housing or business activities. The NRS-FIA database can detect these changes as they impact FIA plots, although the precision with which we can estimate the effects decreases as the number of plots affected decrease. Thus our ability to accurately estimate land use change is better at the total state level and decreases for areas with limited treed resource, such as the counties in the western part of the State. Based on remeasured plots, over the period from 2006 through 2011, an estimated 520,000 acres of nonforest land reverted to forest land while over the same period an estimated 123,000 acres of forest land diverted to nonforest land.

The figures below show some of the trends we observed between 2006 and 2011. There was a dramatic increase in timberland in 2011 due to reversion from nonforest land (Fig. 5). The large increase likely occurred over a period of several years, but showed up in the inventory when FIA crews went to plots they had not visited before. The forest-type groups that gained the most acreage due to reversion from nonforest land were oak/hickory and elm/ash/cottonwood (Fig. 6).

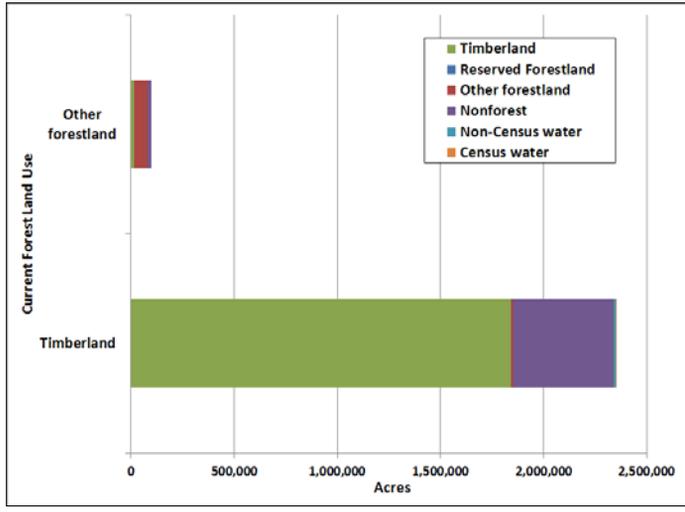
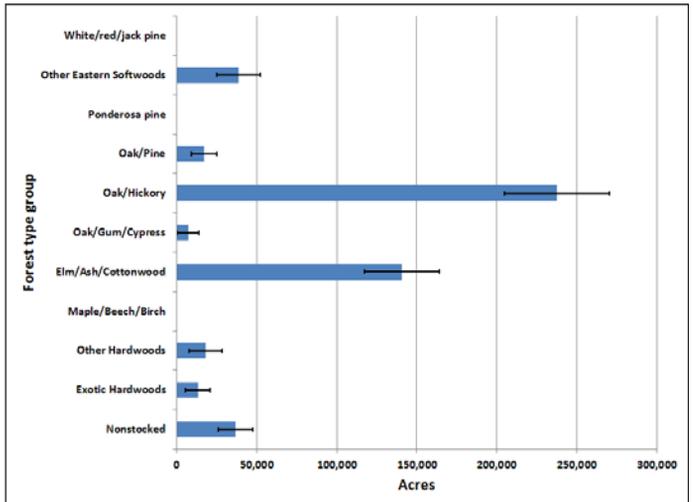


Figure 5. – Current (2011) forest land in Kansas as a function of previous land use category in 2007.

Figure 6. – Forest-type group of current forest land that was considered nonforest in the previous inventory period.





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Additional Kansas Inventory Information

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Estimates, tabular data, and maps from this report may be generated at: <http://www.fia.fs.fed.us/tools-data/>

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