

2014 TILLAGE SYSTEMS

Farmers are the original environmentalists and conservationists. In order to maintain a paying farm, they have long recognized soil and water as the foundation of a successful crop. To address the problem of highly erodible soil, many farmers have adopted no-till and other conservation practices as a major part of their farming operation. In response to a need for information regarding these conservation practices in the state, the Tennessee Field Office of USDA's National Agricultural Statistics Service began making estimates of these tillage systems in 1983 for soybeans, corn, and sorghum. Estimates of major tillage systems used on cotton were added in 1992 and on wheat in 1995. Sorghum estimates were discontinued in 2009.

Potential advantages for no-till or other conservation tillage practices are reduced labor costs, reduced soil compaction and erosion, and increased water infiltration.

No-till usage for the major crops in 2014 was down slightly from 2013. Overall, no-till practices were used on 2.34 million acres and 70.7 percent of the acreage devoted to the major crops. Soybeans led the way with 76.5 percent of acreage dedicated to no-till. Cotton and corn followed respectively with 76.0 and 70.5 percent. Wheat no-till percent increased slightly to 51.8. Other conservation tillage practices accounted for 21.9 percent of the acreage seeded to the state's major crops. Double-cropped acreage for these crops totaled 15.4 percent for 2014 compared with 15.3 and 11.3 percent in 2013 and 2012, respectively.

The Tennessee Field Office of the Eastern Mountain Region is a cooperative endeavor of the U. S. and Tennessee Departments of Agriculture, who have combined resources to provide a single source of official estimates for Tennessee agriculture. USDA is an equal opportunity provider and employer.



2014 Tennessee Tillage Systems

Soybeans
Corn
Cotton
Winter Wheat



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TILLAGE PRACTICES: BY CROP, TENNESSEE, 2009-2014¹

Crop	Year	Total Acres Planted	No-Till ²		Other Conservation Tillage ³		Conventional Till ⁴		Double-Cropped ⁵	
			Acres	% of Total ⁵	Acres	% of Total ⁵	Acres	% of Total ⁶	Acres	% of Total
Soybeans	2009	1,570,000	1,250,000	79.6	230,000	14.6	90,000	5.7	370,000	23.6
	2010	1,450,000	940,000	64.8	330,000	22.8	180,000	12.4	200,000	13.8
	2011	1,290,000	990,000	76.7	200,000	15.5	100,000	7.8	310,000	24.0
	2012	1,260,000	990,000	78.6	190,000	15.1	80,000	6.3	320,000	25.4
	2013	1,560,000	1,270,000	81.4	230,000	14.7	60,000	3.8	480,000	30.8
	2014	1,620,000	1,240,000	76.5	270,000	16.7	110,000	6.8	480,000	29.6
Corn	2009	670,000	470,000	70.1	140,000	20.9	60,000	9.0	25,000	3.7
	2010	710,000	470,000	66.2	180,000	25.4	60,000	8.5	20,000	2.8
	2011	790,000	610,000	77.2	120,000	15.2	60,000	7.6	20,000	2.5
	2012	1,040,000	840,000	80.8	130,000	12.5	70,000	6.7	30,000	2.9
	2013	890,000	650,000	73.0	190,000	21.3	50,000	5.6	25,000	2.8
	2014	880,000	620,000	70.5	210,000	23.9	50,000	5.7	30,000	3.4
Cotton	2009	300,000	200,000	66.7	70,000	23.3	30,000	10.0	0	0.0
	2010	390,000	280,000	71.8	80,000	20.5	30,000	7.7	0	0.0
	2011	495,000	370,000	74.7	85,000	17.2	40,000	8.1	0	0.0
	2012	380,000	300,000	78.9	50,000	13.2	30,000	7.9	0	0.0
	2013	250,000	170,000	68.0	60,000	24.0	20,000	8.0	0	0.0
	2014	250,000	190,000	76.0	55,000	22.0	5,000	2.0	0	0.0
Wheat ⁷	2009	430,000	210,000	48.8	100,000	23.3	120,000	27.9	-----	----
	2010	260,000	130,000	50.0	60,000	23.1	70,000	26.9	-----	----
	2011	420,000	210,000	50.0	80,000	19.0	130,000	31.0	-----	----
	2012	420,000	210,000	50.0	80,000	19.0	130,000	31.0	-----	----
	2013	610,000	310,000	50.8	170,000	27.9	130,000	21.3	-----	----
	2014	560,000	290,000	51.8	190,000	33.9	80,000	14.3	-----	----
Total	2009	2,970,000	2,130,000	71.7	540,000	18.2	300,000	10.1	395,000	13.3
	2010	2,810,000	1,820,000	64.8	650,000	23.1	340,000	12.1	220,000	7.8
	2011	2,995,000	2,180,000	72.8	485,000	16.2	330,000	11.0	330,000	11.0
	2012	3,100,000	2,340,000	75.5	450,000	14.5	310,000	10.0	350,000	11.3
	2013	3,310,000	2,400,000	72.5	650,000	19.6	260,000	7.9	505,000	15.3
	2014	3,310,000	2,340,000	70.7	725,000	21.9	245,000	7.4	510,000	15.4

¹2014 is a preliminary estimate.

²No-Till - A procedure whereby a crop is planted directly into a seedbed not tilled since harvest of a previous crop, or the planting of a crop into sod, previous crop stubble, or a cover where only the intermediate seed zone is disturbed.

³Other Conservation Tillage - Tillage practices prior to planting which result in a minimum of 30 percent ground cover or residue being retained on the surface following planting. Grass and weed control is accomplished primarily with herbicides; Includes ridge till, strip till, and mulch till.

⁴Conventional Till - Systems where 100 percent of the surface layer is mixed or inverted by plowing, power tilling, or multiple disking.

⁵Double-Cropped - Two crops harvested from the same field during one year. Example: small grain harvest spring 2014, followed by soybeans, corn or sorghum harvest in the fall of 2014.

⁶Sum of no-till, other conservation tillage and conventional till percents of total may not add to 100 percent due to rounding.

⁷Wheat seeded the previous fall for all intended purposes including grain, cover, silage, hay, or any other utilization.