

TENNESSEE AGRI-INDUSTRY BRIEF: TILLAGE PRACTICES FOR SELECTED SOUTHERN STATES

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Based on USDA's most recent Census of Agriculture 2022 data for tillage practices, no-tillage and conservation/reduced tillage acres comprise 65.4% of the tillage practices for selected Southern states (Table 1). For the US, that value is 73.4%. The states with the largest in the US are Tennessee, Maryland, Virginia, and Montana. For the selected Southern states in Table 1, the top five with the largest adoption of no-tillage and conservation/reduced tillage practices compared to all tillage practices in descending order were Tennessee at 93.0%, followed by Maryland (92.1%), Virginia (91.7%), Kentucky (88.8%), and South Carolina (84.8%).

Table 1. Conventional, No-Till, and Conservation/Reduced Tillage Practices for Selected Southern States, 2022.

State	Conventional	No	Conservation/Reduced	Total	%
Tillage Acres					
Alabama	242,757	824,888	479,540	1,547,185	84.3%
Arkansas	2,343,124	1,012,219	2,704,701	6,060,044	61.3%
Florida	781,367	272,577	227,953	1,281,897	39.0%
Georgia	966,655	662,465	1,323,813	2,952,933	67.3%
Kentucky	421,832	2,388,583	942,786	3,753,201	88.8%
Louisiana	1,408,915	422,813	1,448,187	3,279,915	57.0%
Maryland	87,804	786,122	237,763	1,111,689	92.1%
Mississippi	1,682,181	589,339	1,618,657	3,890,177	56.8%
N. Carolina	1,042,457	1,895,816	843,367	3,781,640	72.4%

Table 1. Conventional, No-Till, and Conservation/Reduced Tillage Practices for Selected Southern States, 2022.

State	Conventional	No	Conservation/Reduced	Total	
Tillage Acres					%
Oklahoma	1,876,193	2,158,820	1,677,125	5,712,138	67.2%
S. Carolina	207,426	572,391	553,833	1,333,650	84.4%
Tennessee	214,373	2,319,009	529,270	3,062,652	93.0%
Texas	7,790,360	2,963,037	5,524,091	16,277,488	52.1%
Virginia	114,923	1,015,594	256,613	1,387,130	91.7%
Total	19,180,367	17,883,673	18,367,699	55,431,739	65.4%
US	73,466,543	105,208,515	97,061,179	275,736,237	73.4%

Source: USDA/NASS, Census of Agriculture, 2022

Of interest would be the comparison of Southern state's change in acreage of adoption of these tillage practices on cropland, which are indicated in Table 2 for the years 2012, 2017, and 2022. For the period 2017 to 2022, the top five were Arkansas at (17.6%), followed by Florida (15.3%), Texas (15.1%), Georgia (10.8%), and Alabama (10.7%). The states with the largest average increase in these tillage practices for the three census periods were Florida (29.3%), Mississippi (20.6%), Arkansas (20.2%), Texas (17.1%), and Louisiana (17.1%).

Table 2. Change in Acreage of Cropland Using No-Tillage plus Conservation/Reduced Tillage Practices for Selected Southern States, 2012-2022.

State	2012	2017	2022	Δ 2017-2022	2012-2022 Ave Δ
Alabama	1,021,795	1,178,654	1,304,428	10.7%	13.0%
Arkansas	2,571,849	3,161,160	3,716,920	17.6%	20.2%
Florida	302,830	434,206	500,530	15.3%	29.3%
Georgia	1,604,553	1,793,232	1,986,278	10.8%	11.3%
Kentucky	2,881,346	3,067,982	3,331,369	8.6%	7.5%
Louisiana	1,392,937	1,768,843	1,871,000	5.8%	16.4%
Maryland	962,481	1,019,691	1,023,885	0.4%	3.2%
Mississippi	1,529,195	2,001,537	2,207,996	10.3%	20.6%
N. Carolina	2,514,822	2,629,962	2,739,183	4.2%	4.4%
Oklahoma	3,549,990	3,627,947	3,835,945	5.7%	4.0%
S. Carolina	944,243	1,085,696	1,126,224	3.7%	9.4%
Tennessee	2,483,916	2,727,545	2,848,279	4.4%	7.1%
Texas	6,194,910	7,375,423	8,487,128	15.1%	17.1%
Virginia	1,153,249	1,259,279	1,272,207	1.0%	5.1%

Source: USDA/NASS, Census of Agriculture, 2022

County-level patterns displaying the percentage of cropland in no-tillage and conservation/reduced tillage practices are displayed in Figure 1. The darker the color shade the greater the

percentage of cropland in these tillage practices. Each Southern state's county with the largest adoption rate percentagewise is presented in Table 3.

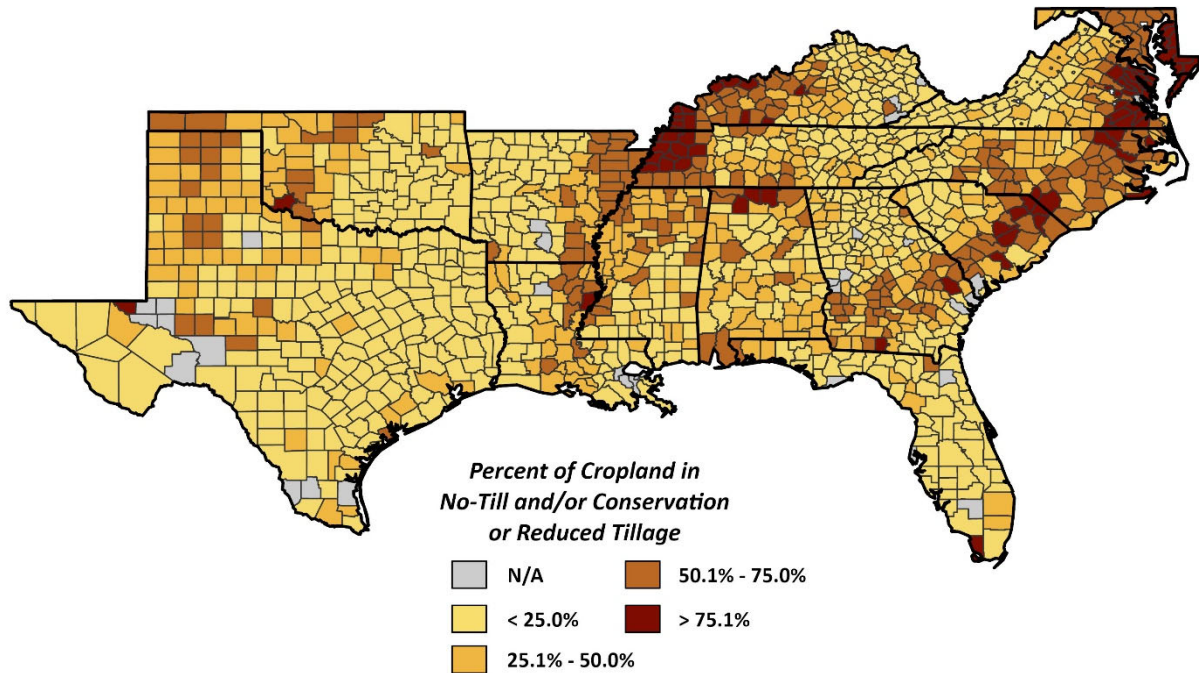


Figure 1. County-level Percentage of Total Cropland in No-Tillage and Conservation/Reduced Tillage, 2022

Source: USDA/NASS Census of Agriculture, 2022

Table 3. Counties in Southern States with Largest Percentage Rate of Adoption of No-Tillage and Conservation/Reduced Tillage on Total Cropland, 2022.

State	County	Total Cropland	Total Tillage*	% Adoption
		Acres		
Alabama	Madison	139,102	106,936	76.9
Arkansas	Craighead	269,905	193,088	71.5
Florida	Escambia	51,343	33,759	65.8
Georgia	Bulloch	115,781	87,188	75.3
Kentucky	Hickman	94,224	85,774	91.0
Louisiana	Tensas	192,143	144,139	75.0
Maryland	Talbot	78,560	71,909	91.5
Mississippi	Coahoma	218,747	161,882	74.0
North Carolina	Northampton	125,219	110,804	88.5
Oklahoma	Jackson	337,532	255,708	75.8
South Carolina	Dillon	87,357	78,591	90.0
Tennessee	Lake	60,676	56,111	92.5

Table 3. Counties in Southern States with Largest Percentage Rate of Adoption of No-Tillage and Conservation/Reduced Tillage on Total Cropland, 2022.

State	County	Total Cropland	Total Tillage*	% Adoption
		Acres		
Texas	Moore	178,721	122,690	68.6
Virginia	Northumberland	41,441	39,687	95.8

*No-till plus conservation/reduced tillage combined
 Source: USDA/NASS, Census of Agriculture, 2022



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