

No Tillage Use for Crop Production in Kentucky Counties in 1996

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Two years ago, we reported the status of no-tillage adoption in Kentucky counties in the year 1994. Now, CTIC[†] has published the results for

reached 51%. The results for both 1994 and 1996 are shown in Table 1. It is evident that Kentucky has both maintained first place and has also

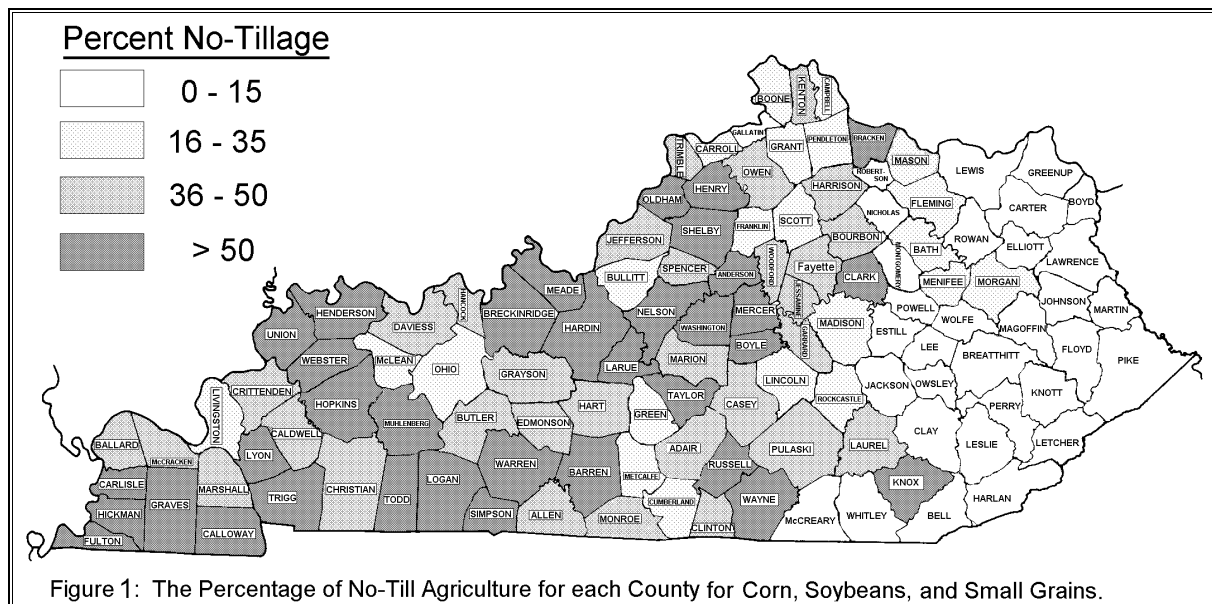
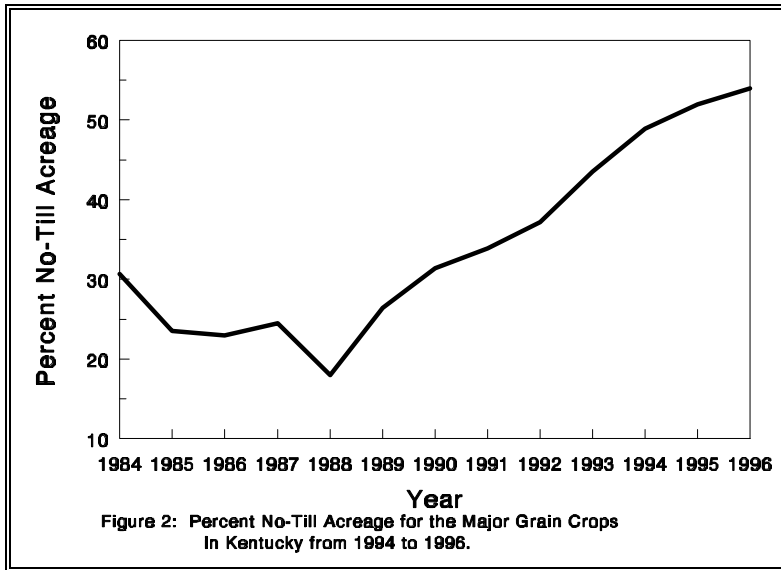


Figure 1: The Percentage of No-Till Agriculture for each County for Corn, Soybeans, and Small Grains.

1996. As before, Kentucky leads the nation in percent of crops produced under no tillage, but the percentage has increased significantly. In 1994, 44% of crops were produced under no tillage in Kentucky, whereas in 1996, that figure had

increased its lead over the other states. The percentage of crops grown under no tillage in each county is shown in Figure 1. Results by crop and average values for each county and for the state are shown in Table 2.

Figure 2 shows the long-term trends for Kentucky on a state-wide basis.



Among crops, double-cropped soybeans have stayed almost the same, 93% in 1994 vs 94% in 1996. This is probably the maximum achievable level. In the case of full-season soybeans, the 1996 percentage under no-till was 49% vs 43% in 1994. With corn, the increase was from 49% in 1994 to 55% in 1996. Small grains, which are mostly planted under minimum tillage, have also increased significantly, from 22% no-till in 1994 to 27% in 1996.

In all three of the major grain-producing regions in Kentucky, there was a significant increase in the use of no tillage in 1996. For example, in the Purchase, the percentage under no-tillage increased from 52 to 64%, with notable increases in Fulton, Hickman, Carlisle, Marshall, and McCracken counties. In the Western Coalfield, which contains many soils which are not ideal for no tillage, the percentage under no tillage increased from 40 to 48%, with Hopkins, Ohio, and Webster counties showing the largest increases. Finally, in the Pennyrile region, where no-tillage had its start in Kentucky, the percentage increased from 57 to 63%, with impressive

increases in Simpson, Todd, Trigg, and Warren counties.

The leading 10 counties in Kentucky, in terms of no-tillage adoption, are listed in Table 3. As can be seen, these counties average well above 70% under no tillage production, which is a very impressive figure.

† 1996 National Crop Residue Management Survey. Conservation Tillage Information Center, West Lafayette, IN.

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Table 1: Leading States in Percent of Cropland Acres Planted to No-Till in 1996 and 1994.

State	% No Tillage	
	1996	1994
Kentucky	51	44
Maryland	46	41
Tennessee	44	42
West Virginia	39	37
Delaware	38	37
Ohio	37	35

Table 2: No-Till Planting of Corn, Soybeans, and Small Grains in Kentucky - 1996.

	Acreage of corn, soybeans, and small grains			% No-Till Planted			Small Grains
	Total	NT	%	Corn	Soybeans		
	Acres	Acres	NT	Full Season	Full Season	Double Crop	
Adair	11,600	5,800	50	61	50	50	34
Allen	4,880	2,000	41	27	45	70	60
Anderson	2,850	2,050	72	73	67	0	0
Ballard	76,500	31,000	41	41	39	90	13
Barren	56,000	34,600	62	72	50	90	42
Bath	15,000	4,800	32	32	32	100	0
Bell	810	50	6	17	0	0	0
Boone	3,097	615	20	17	22	50	18
Bourbon	28,650	13,350	47	49	83	100	18
Boyd	508	0	0	0	0	0	0
Boyle	17,850	9,990	56	63	63	100	45
Bracken	1,525	1,050	69	70	0	0	0
Breathitt	514	0	0	0	0	0	0
Breckinridge	65,500	43,300	66	65	50	92	55
Bullitt	12,000	4,000	33	38	25	75	0
Butler	49,000	19,700	40	40	42	70	0
Caldwell	38,300	18,000	47	39	28	93	43
Calloway	115,050	63,340	55	55	40	98	20
Campbell	687	225	33	23	48	100	0
Carlisle	61,750	41,500	67	67	60	97	59
Carroll	3,150	1,100	35	36	38	0	0
Carter	1,675	50	3	3	0	0	0
Casey	21,200	7,700	36	39	39	50	27
Christian	169,000	80,000	47	49	25	94	2
Clark	9,390	4,840	52	72	59	100	7
Clay	2,000	0	0	0	0	0	0
Clinton	5,900	2,600	44	37	50	83	71
Crittenden	26,000	11,250	43	46	36	100	38
Cumberland	5,080	1,350	27	38	20	67	9
Daviess	195,500	83,000	42	50	27	90	9
Edmonson	8,700	4,200	48	43	51	100	40
Elliott	725	85	12	12	0	0	0
Estill	4,825	330	7	5	13	0	0
Fayette	10,400	4,200	40	58	29	0	0
Fleming	9,480	1,507	16	18	20	20	0
Floyd	560	0	0	0	0	0	0
Franklin	4,550	1,050	23	48	31	100	5
Fulton	98,081	68,332	70	65	60	95	60

	Acreage of corn, soybeans, and small grains			% No-Till Planted			
	Total	NT	%	Corn	Soybeans		Small
	Acres	Acres	NT	Full Season	Full Season	Double Crop	Grains
Gallatin	3,600	250	7	16	0	0	0
Garrard	5,575	2,200	39	48	63	100	20
Grant	753	226	30	41	14	100	16
Graves	163,000	112,100	69	83	74	92	10
Grayson	33,400	15,000	45	43	43	100	37
Green	6,157	1,828	30	25	40	90	25
Greenup	3,230	0	0	0	0	0	0
Hancock	22,227	9,856	44	50	34	100	22
Hardin	76,500	50,000	65	66	60	96	50
Harlan	550	0	0	0	0	0	0
Harrison	15,000	6,000	40	54	60	100	0
Hart	7,370	3,450	47	50	0	100	54
Henderson	166,000	87,000	52	52	47	94	33
Henry	17,700	8,700	49	63	0	100	10
Hickman	104,000	86,790	83	85	99	99	50
Hopkins	66,500	42,500	64	60	70	100	8
Jackson	2,400	260	11	11	0	0	0
Jefferson	3,720	1,685	45	35	57	80	26
Jessamine	2,137	785	37	32	40	100	19
Johnson	760	0	0	0	0	0	0
Kenton	285	115	40	40	50	0	0
Knott	625	0	0	0	0	0	0
Knox	4,450	2,050	46	43	50	67	67
Larue	27,700	21,310	77	80	77	100	50
Laurel	4,925	2,305	47	59	73	100	0
Lawrence	1,215	65	5	5	0	0	0
Lee	850	45	5	6	0	0	0
Leslie	350	0	0	0	0	0	0
Letcher	100	0	0	0	0	0	0
Lewis	15,000	1,200	8	15	0	0	0
Lincoln	8,000	2,500	31	38	25	50	0
Livingston	18,600	5,450	29	28	19	69	33
Logan	149,000	94,500	63	80	30	98	15
Lyon	10,200	7,300	72	65	80	91	67
McCracken	38,100	18,800	49	52	44	100	0
McCreary	423	0	0	0	0	0	0
McLean	93,000	30,000	32	38	26	95	2
Madison	8,266	1,400	17	34	0	0	0
Magoffin	2,000	0	0	0	0	0	0
Marion	31,990	15,795	49	47	54	50	46
Marshall	31,200	14,200	46	59	23	100	13
Martin	75	0	0	0	0	0	0
Mason	13,700	3,725	27	37	67	50	9
Meade	25,130	16,996	68	70	40	100	50
Menifee	1,175	375	32	20	100	0	0

	Acreage of corn, soybeans, and small grains			% No-Till Planted			
	Total	NT	%	Corn	Soybeans		Small
	Acres	Acres	NT	Full Season	Full Season	Double Crop	Grains
Mercer	15,800	12,100	77	76	80	100	73
Metcalf	9,700	2,150	22	16	33	37	20
Monroe	14,100	5,400	38	43	29	50	33
Montgomery	8,050	1,235	15	25	15	0	0
Morgan	1,600	520	33	33	0	0	0
Muhlenberg	37,500	24,500	65	67	67	100	20
Nelson	15,500	12,000	77	71	67	100	75
Nicholas	2,650	350	13	23	0	0	0
Ohio	70,800	22,200	31	34	23	100	45
Oldham	9,450	6,425	68	60	71	82	72
Owen	1,042	357	34	41	0	0	15
Owsley	1,490	0	0	0	0	0	0
Pendleton	6,250	1,550	25	48	50	57	0
Perry	75	0	0	0	0	0	0
Pike	210	0	0	0	0	0	0
Powell	1,839	0	0	0	0	0	0
Pulaski	21,800	10,280	47	38	67	85	41
Robertson	1,675	50	3	17	0	0	0
Rockcastle	4,291	1,045	24	18	60	66	42
Rowan	2,130	200	9	13	0	0	0
Russell	9,750	6,150	63	68	100	100	0
Scott	4,300	1,289	30	30	30	0	30
Shelby	39,900	24,600	62	66	49	86	55
Simpson	76,000	45,100	59	55	75	98	20
Spencer	10,220	4,100	40	40	30	84	40
Taylor	22,700	12,800	56	60	56	67	30
Todd	109,880	75,570	69	70	74	97	36
Trigg	32,800	24,300	74	76	75	100	43
Trimble	7,350	2,800	38	40	38	80	24
Union	136,000	73,500	54	53	47	88	50
Warren	73,000	49,500	68	63	75	94	46
Washington	6,100	3,100	51	50	43	57	57
Wayne	25,680	14,125	55	59	60	40	10
Webster	102,300	59,400	58	60	59	95	6
Whitley	3,300	450	14	20	0	0	0
Wolfe	2,034	90	4	8	0	0	0
Woodford	4,980	1,800	36	38	17	100	15
State Total	3,217,471	1,732,761	54	55	49	94	27

Table 3: Ten Leading Counties in Percentage of Crop Produced Under No Tillage in 1996.

County	% No Till
Hickman	83
Larue	77
Mercer	77
Nelson	77
Trigg	74
Anderson	72
Lyon	72
Fulton	70
Graves	69
Todd	69
