

ACH17-24/November 2020

The 2017 Census of Agriculture asked producers whether they used certain practices to conserve farmland or improve the productivity of their land. Such practices reduce water and wind erosion, improve water quality, provide wildlife habitat, and reduce producers' operating costs by limiting the number of trips over fields.

In the five years between 2012, the year of the previous census, and 2017, the number of farms and acres using reduced tillage and no till methods increased, while the number of farms and acreage using intensive tillage decreased.

## Land Use

From 2012 to 2017, the number of the farms practicing intensive tillage methods declined by 35%. Acres under intensive tillage methods declined by 24%. Farms practicing reduced tillage increased 11%, and acres under reduced tillage methods increased 28%. Farms practicing no till increased slightly, while no till acreage increased 8%.

From 2012 to 2017, the number of farms that drained acres by tile slightly increased, while acreage drained by tile increased 14%. The number of farms that artificially drained acres by ditches decreased 2%, and acreage artificially drained increased 4%. The number of farms with acres under conservation easement decreased 29%, while acres under conservation easement decreased 1%.

### Reduced Tillage

Includes some tillage but leaves a minimum of 30% of the soil surface covered by the previous crop's residue following spring planting.

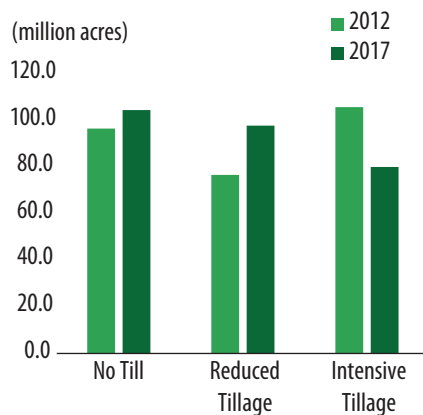
### No Till

Crops are planted directly into the vegetative cover or crop residue of the previous crop.

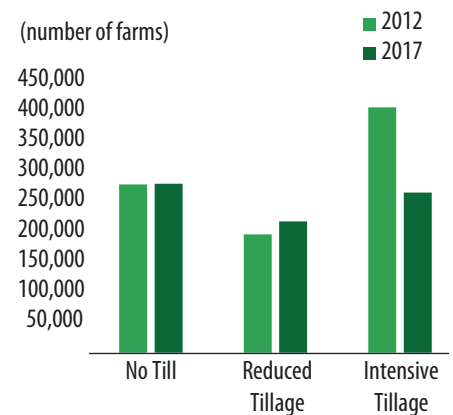
### Top States: Reduced Tillage and No Till

	Reduced Tillage			No Till	
	Million Acres	% Change Since 2012		Million Acres	% Change Since 2012
Iowa	10.1	16	Kansas	11.2	8
Illinois	9.5	23	Nebraska	10.3	10
North Dakota	9.1	47	Iowa	8.2	18
Minnesota	8.2	34	Montana	8.1	17
Kansas	7.7	28	North Dakota	7.8	-1
Nebraska	6.0	21	South Dakota	7.7	7
Texas	5.0	37	Illinois	6.5	7
South Dakota	4.3	24	Indiana	4.9	-1
Indiana	4.1	33	Missouri	4.6	16
Missouri	3.5	29	Ohio	4.3	0

### Tillage Methods by Acres

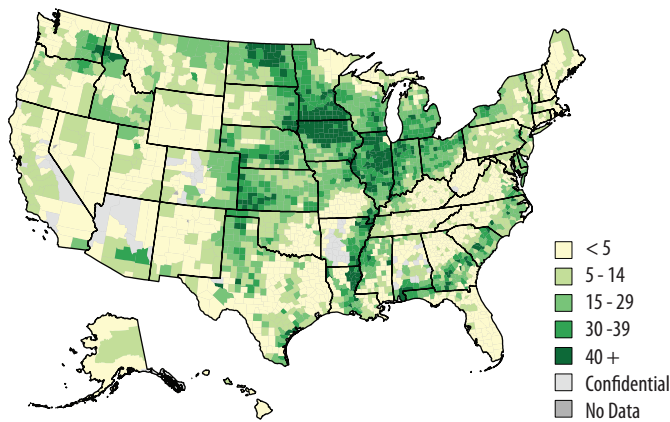


### Tillage Methods by Number of Farms

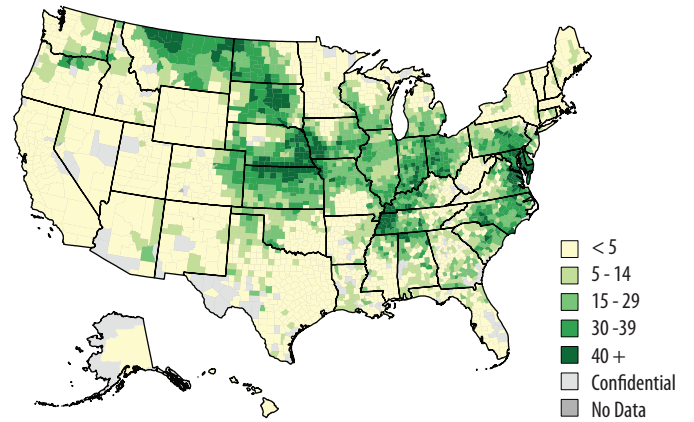


Not all farmland is eligible to be included in tillage practices. Examples include land in orchards and hay. Farms may also use multiple tillage practices.

Reduced Tillage Acres as Percent of Total Cropland Acres, by County, 2017



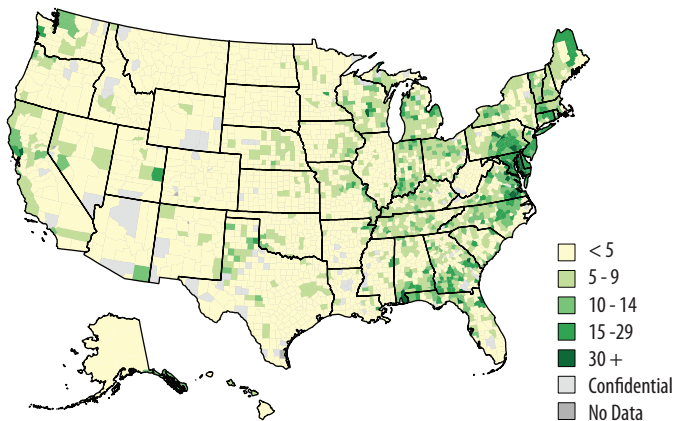
No Till Acres as Percent of Total Cropland Acres, by County, 2017



## Benefits of a Cover Crop

Planting a cover crop increases soil fertility, improves soil quality, reduces erosion, controls pests, and protects wildlife habitat. In 2017, 153,402 farms planted cover crops, compared to 133,124 farms in 2012, a 15% increase. Acres of cover crop increased by 50%, climbing to 15,390,674 in 2017 from 10,280,793 in 2012. This count does not include land in USDA's Conservation Reserve Program. Cover crops in the Eastern United States were planted at a higher percent of total cropland.

Cover Crop Acres as % of Total Cropland Acres, by County, 2017



### Top States: Cover Crops

	Million Acres	% Change Since 2012
Texas	1.0	11
Iowa	1.0	156
Indiana	0.9	57
Missouri	0.8	116
Nebraska	0.7	109
Ohio	0.7	101
Illinois	0.7	122
Michigan	0.7	54
Wisconsin	0.6	11
Pennsylvania	0.6	33

**15 million**

Acres of cover crops planted in 2017.

## About the Survey

The Census of Agriculture, conducted once every five years, is a complete count of U.S. farms and ranches and the people who operate them. Results from the 2017 and earlier censuses are available at national, state, and county levels.

See the searchable database Quick Stats, the new Census Data Query Tool, downloadable PDF reports, maps, and a variety of topic-specific products, including profiles by race, ethnicity, and sex.

[www.nass.usda.gov/AgCensus](http://www.nass.usda.gov/AgCensus)

### Tillage Methods by Farm Size, 2017

Practice Applied to	No Till		Reduced Tillage		Intensive Tillage	
	Acres (millions)	No. of Farms	Acres (millions)	No. of Farms	Acres (millions)	No. of Farms
< 500 acres	23.6	226,609	20.6	163,649	20.2	224,555
500 - 999 acres	17.7	25,477	18.3	26,013	13.7	19,688
1,000 - 1,999 acres	22.4	16,288	23.8	17,260	17.3	12,572
2,000+ acres	40.8	10,996	35.1	10,147	28.8	8,078
<b>Total</b>	<b>104.5</b>	<b>279,370</b>	<b>97.8</b>	<b>217,069</b>	<b>80.0</b>	<b>264,893</b>

In 2017, farms with 1,000 acres or more accounted for 60% of no till acres but only 10% of total farms practicing no till. Farms with 1,000 acres or more also accounted for 60% of reduced tillage acres but only 13% of total farms practicing reduced tillage. In addition, farms with 1,000 acres or more accounted for 58% of intensive tillage acres but only 8% of farms practicing intensive tillage. Sixty-two percent of the farms using no-till practices were less than 500 acres in size; 55% of the farms using reduced tillage methods were less than 500 acres in size.