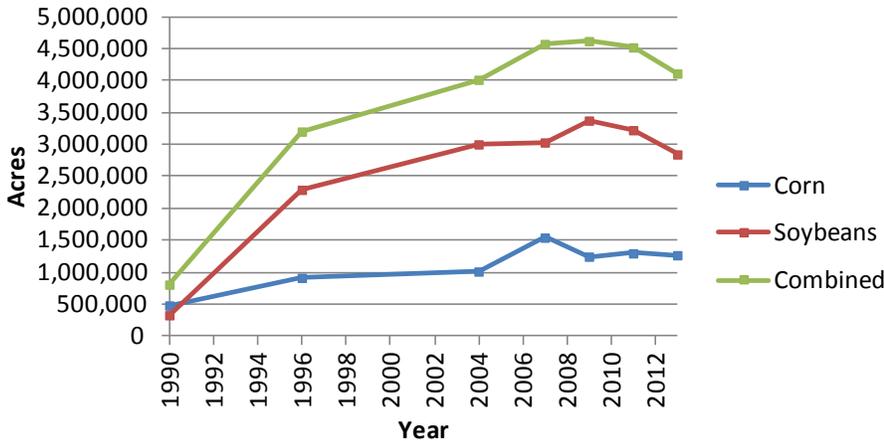


Indiana No Till: 1990-2013

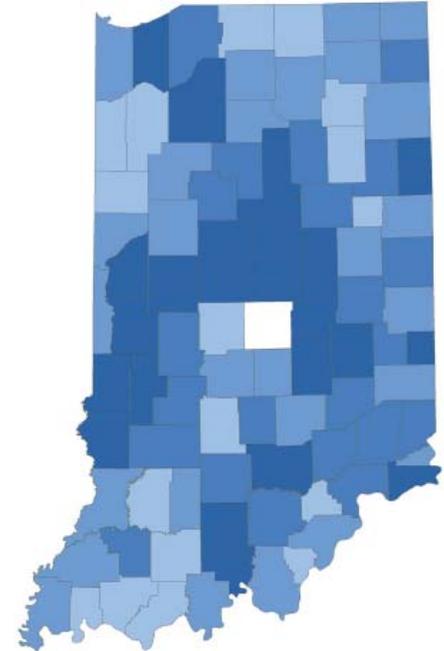
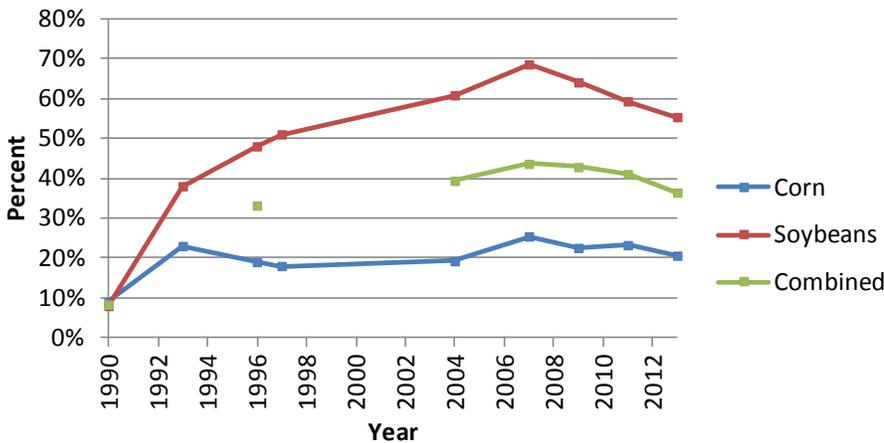


No Till: Any direct seeding system, including site preparation, with minimal soil disturbance (includes strip & ridge till).

No Till Acreage



No Till Percentage



*Note: Darker colors had a greater percent increase in total no till acres (corn and soybeans) from 1990-2013

No Till Percentage Change 1990-2013		
	Percentage Point Change	Percent Change
Corn	12	129%
Soybeans	47	592%
Combined	28	338%

No Till Acreage Change 1990-2013		
	Acres	Percent Change
Corn	787,445	164%
Soybeans	2,518,051	769%
Combined	3,305,496	410%

* Please note that not all counties have data for all years. No tillage data is collected for Marion county.

* Total Acreage Data is not available for 1993 or 1997, thus not allowing a calculation for combined no till percentages.

No Till Implementation							
Acreage	1990	1996	2004	2007	2009	2011	2013
Corn	479,255	912,186	1,011,467	1,542,152	1,244,400	1,296,300	1,266,700
Soybeans	327,249	2,291,014	3,002,974	3,032,493	3,375,300	3,225,400	2,845,300
Combined	806,504	3,203,200	4,014,441	4,574,645	4,619,700	4,521,700	4,112,000

Percentage	1990	1993	1996	1997	2004	2007	2009	2011	2013
Corn	9%	23%	19%	18%	19%	25%	23%	23%	21%
Soybeans	8%	38%	48%	51%	61%	69%	64%	59%	55%
Combined	8%	N/A	33%	N/A	39%	44%	43%	41%	36%

Tillage Transect Trend Context

1/8/15

JSS

Accompanies "Indiana Statewide Tillage: 2004-2013 and 1990-2013" Documents

The following are **some** major contributing factors for falling No-till trends that have occurred from 2003-present:

- 2012 Drought
- Major release and marketing of new 'vertical' tillage tools which was also a time of high farm revenue (buying new equipment is preferred over paying taxes).
- Significant press and presentation coverage suggesting tillage as a way to combat mounting piles of Bt corn stalks (BT is corn trait that some say prolongs residue breakdown)
- Significant press and presentation coverage suggesting tillage as a BMP for reducing Dissolved reactive Phosphorus loss to lake and streams (Western Lake Erie Basin)
- Significant press and presentation coverage suggesting tillage as a BMP for control of herbicide resistant weeds (think Glyphosphate/Roundup resistance weeds like Palmer Amaranth and Mairstale in Indiana)
- Significant press and presentation coverage suggesting with higher seed costs, lower soybean seeding rates are more economic- and, there is still a (unfounded) perception that a little tillage will get you a better SB emergence, especially when planting into those piles of Bt corn stalks
- More corn after corn acres resulted in more tillage
- Wet springs caused more weeds in some fields- tillage was used to take care of those weeds
- The record prices of corn caused some growers to till the ground trying to get the best stand possible to maximize yield or to pay for very high cash rent
- Due to high commodity prices – new land coming into production

Source(s):

Barry Fisher, Indiana State Soil Health Specialist /Agronomist, US Dept. of Ag Natural Resources Conservation Service and Putnam County Farmer

Dan Towery, President, Ag Conservation Solutions based in West Lafayette, Former USDA official, Consultant to Midwest farmers

Dr. Hans Kok, Coordinator, Indiana Conservation Cropping Systems Initiative