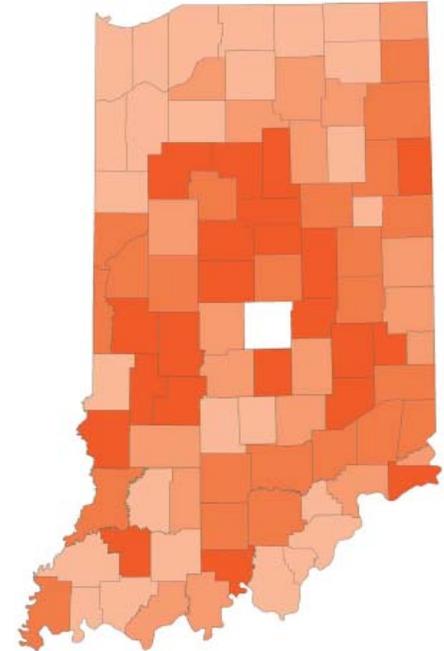
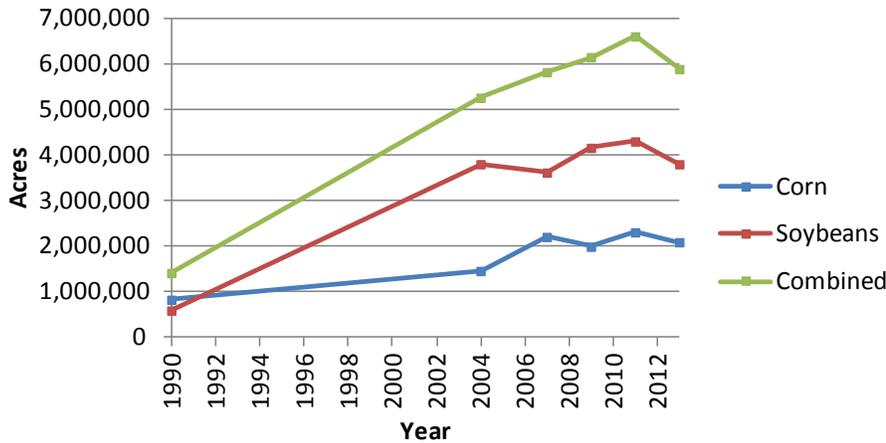


Indiana Conservation Tillage: 1990-2013



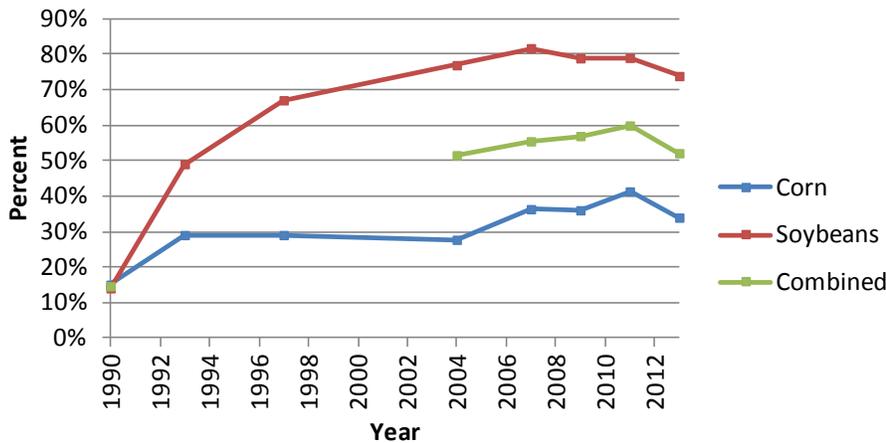
Conservation Tillage: any system that leaves at least 30% residue cover after planting

Conservation Tillage Acreage



*Note: Darker colors had a greater percent increase in total conservation tillage acres (corn and soybeans) from 1990-2013

Conservation Tillage Percentage



Conservation Tillage Percentage Change 1990-2013		
	Percentage Point Change	Percent Change
Corn	19	126%
Soybeans	60	427%
Combined	37	258%

Conservation Tillage Acreage Change 1990-2013		
	Acres	Percent Change
Corn	1,262,700	153%
Soybeans	3,208,441	630%
Combined	4,471,141	317%

* 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 conservation tillage percentages.

Conservation Tillage Implementation								
Acreage	1990	2004	2007	2009	2011	2013		
Corn	824,200	1,455,828	2,202,153	1,988,000	2,304,200	2,086,900		
Soybeans	588,159	3,797,671	3,613,545	4,156,160	4,296,000	3,796,600		
Combined	1,412,359	5,253,499	5,815,697	6,144,160	6,600,200	5,883,500		
Percentage	1990	1993	1997	2004	2007	2009	2011	2013
Corn	15%	29%	29%	28%	36%	36%	41%	34%
Soybeans	14%	49%	67%	77%	82%	79%	79%	74%
Combined	15%	N/A	N/A	52%	55%	57%	60%	52%

Tillage Transect Trend Context

1/8/15

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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