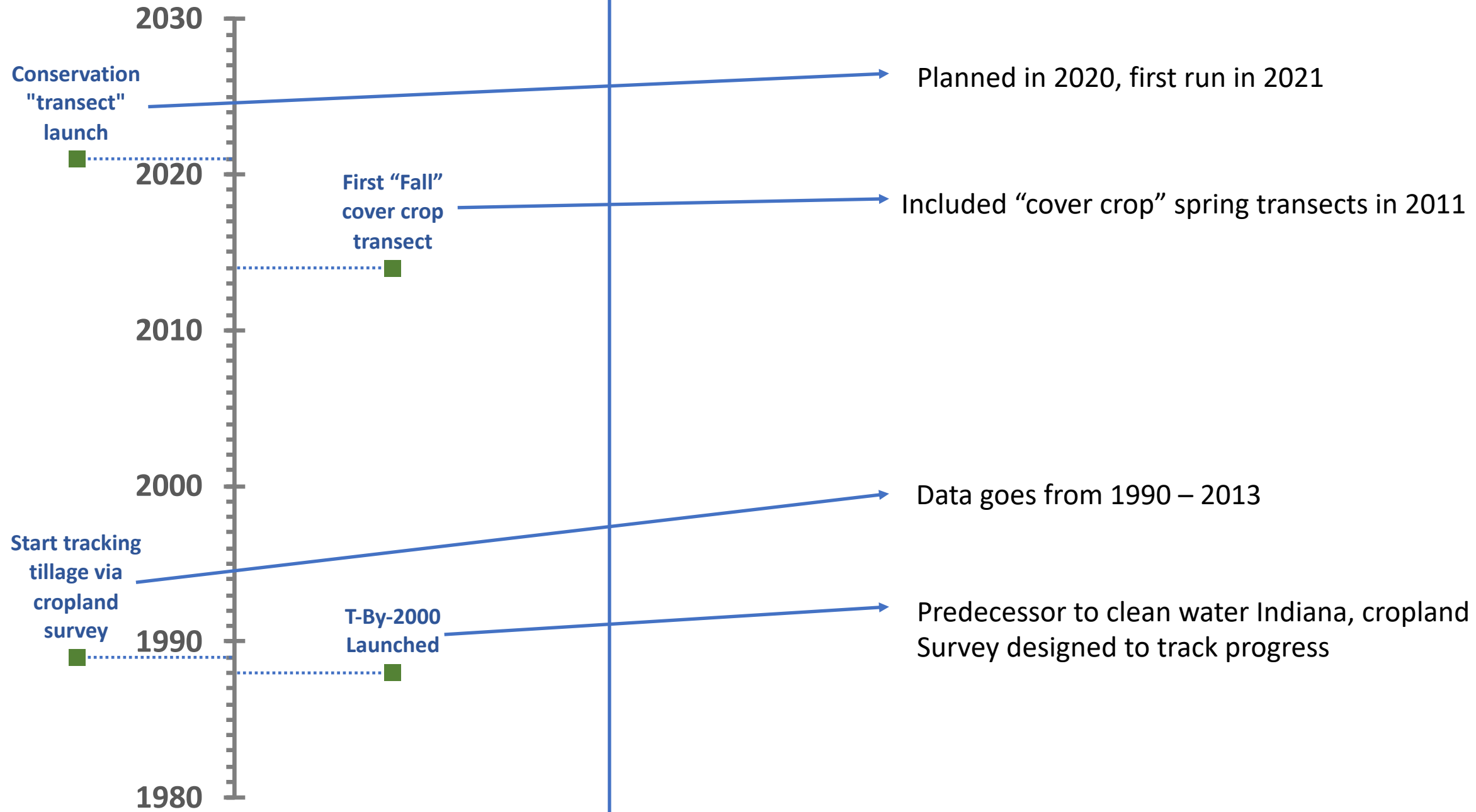


Cropland Surveys in Indiana



- Over 36,000 observations from across state per transect survey with 91 counties providing data
- Data entries needs to be standardized so all counties enter data in the same way this accomplishes:
 - Allows easier processing of data
 - Allows data to be used better in other areal units than counties (watershed, whole state, ect.)
 - Does not interfere with assumption of multinomial populations



V. Symbols to use for entering data into the spreadsheet

Previous crop (2019 harvested cash crop).

C	Corn	<u>Not</u> including seed corn (put seed corn under "X" for Specialty Crop)
B	Soybeans	All soybeans regardless of Wide, Narrow, or Drilled
G	Small Grains	If not WHEAT = Enter crop name in <i>Notes</i> (i.e. - oats, milo, barley, etc.).
H	Hay/Pasture	Including rotational and permanent pasture
F	Fallow	Use if you can determine no crop was planted the previous year but the point will likely remain in agricultural use (i.e. - not developed, houses, etc.). If likely <u>not</u> to remain in ag use, <u>delete the entire row</u>
X	Specialty Crops	Use for seed corn, potatoes, tomatoes, tobacco, etc. <u>and enter crop name in Notes</u>
Z	CRP	Includes all whole-field CRP plantings, <u>including trees</u> , or other conservation plantings/wetlands.
U		Use if you cannot determine what the previous crop was due to intensive tillage

NOTE: "?" and "/" symbols are no longer an option for previous crop. You can use "U" for unknown if you can't determine what the previous crop was when observing the point but don't use "/" for not applicable. Instead use one of the previous crop symbols listed above. If the transect point is not in agricultural use and not likely to return to an agricultural use (i.e. point is a new road, developed, house, mature woods, etc.) delete the entire row

Tillage System

N	Not-Tilled	Should have > 30% residue; enter "vertical tillage" in the Notes, if applicable.
S	Strip-Tilled	Should have > 30% residue but not > 75% residue.
R	Ridge-Tilled	Should have > 30% residue but not > 75% residue.
M	Mulch-Tilled	Must have > 30% residue but not > 75% residue; enter "vertical tillage" in the Notes, if applicable
E	Reduced-Tilled	Must have 16-30% residue.
C	Conventional Tilled	Must have 0 - 15% residue. If Moldboard Plowed enter " <u>Plow</u> " in Notes.
U	Unknown, N/A	Use this with established hay, CRP, and other non-annual crop land uses. Also use for fall-seeded small grain if tillage is not known. NOTE: If "U" is entered this point will not be calculated into the percent tillage or soil loss in the county/state reports.

NOTE: "X" for Other, "/" for Not Applicable and "?" for Unknown are no longer symbol options for tillage system used. You must enter one of the entries above for each transect point. If the transect point is no longer in an agricultural use and most likely will not return to one (i.e. point is a new road, developed, house, mature woods, etc.) delete the entire row

Residue cover

1	0 - 15%	
2	16 - 30%	
3	31 - 50%	
4	51 - 75%	
5	76 - 100%	
U	Unknown, N/A	Use "U" under residue cover if point is established hay, CRP, or other non-annual crop land use. Also use for fall-seeded small grain if tillage and residue level is not known. NOTE: If "U" is entered this point will not be calculated into the percent tillage or soil loss in the county/state reports.

NOTE: "/" for Not Applicable and "?" for Unknown are no longer symbol options under crop residue level. You must enter one of the entries above for each transect point. If the transect point is not in an agricultural use and very likely will not return to one (i.e. point is a new road, developed, house, mature woods, etc.) delete the entire row

Cover Crop (enter as many as applicable)

A	Annual Ryegrass
B	Brassica (radish, turnip, rape)
C	Cereal Rye
G	Winter Grains (cereal rye, wheat, barley): enter this <u>only</u> if you cannot identify the grain.
L	Legume
O	Spring Oats
W	Wheat
Y	Barley
S	Summer (dead) mix (i.e. sudan, millet, etc. after 2014 wheat)
P	"Plus" - Add to complicated mixes with other species not capable of being identified
N	None

NOTE: "X" for Other, "/" for Not Applicable and "?" for Unknown are no longer symbol options for tillage system used. You must enter one of the entries above for each transect point. If the transect point is no longer in an agricultural use and most likely will not return to one (i.e. point is a new road, developed, house, mature woods, etc.) delete the entire row

2021 CHANGES:

- **CROP TYPE:**
 - "Z" (CRP and other perennial cover) no longer used = "H"
- **TILLAGE:**
 - "N" (Not-Tilled) = No full width tillage has occurred
Incl. Strip Till
 - "R" (Reduced-Tilled) = Full width tillage has occurred
Leaving at least 30% residue, incl. VT
 - "C" (Conventional-Tilled) = Full width tillage has occurred
Leaving less than 30% residue
 - "S" and "M" no longer used separately
- **RESIDUE:**
 - Residue estimates no longer tracked
- **COVER CROPS:**
 - Only YES/NO
 - Cover Crop Species and Quality no longer tracked

Previous crop (2020 harvested cash crop).

C	Corn	<u>Not</u> including seed corn (put seed corn under "X" for Specialty Crop)
B	Soybeans	All soybeans regardless of Wide, Narrow, or Drilled
G	Small Grains	If not WHEAT = Enter crop name in <i>Notes</i> (i.e. – oats, milo, barley, etc.).
H	Hay/Pasture	Including rotational and permanent pasture and all whole-field CRP plantings, <i>including trees</i> , or other conservation plantings/wetlands
F	Fallow	Use if you can determine no crop was planted the previous year but the point will likely remain in agricultural use (i.e. – not developed, houses, etc.). If likely <u>not</u> remain in ag use, <i>delete the entire row</i>
X	Specialty Crops	Use for seed corn, potatoes, tomatoes, tobacco, etc. <i>and enter crop name in Notes</i>
U		Use if you cannot determine what the previous crop was due to intensive tillage

NOTE: You must enter one of the entries above for each transect point. If the transect point is not in agricultural use and not likely to return to an agricultural use (i.e. point is a new road, developed, house, mature woods, etc.) *delete the entire row*

FALL/WINTER Tillage System

N	Not-Tilled	<u>No full-width tillage</u> has occurred; enter "strip tillage" in the Notes, if applicable.
R	Reduced-Tilled	Full width tillage with > 30% residue has occurred; enter "vertical tillage" in the Notes, if applicable
C	Conventional Tilled	Full width tillage with < 30% residue has occurred. If Moldboard Plowed enter " <i>Plow</i> " in Notes.
U	Unknown, N/A	Use this with established hay, CRP, and other non-annual crop land uses. Also use for fall-seeded small grain if tillage is not known. NOTE: If "U" is entered this point will not be calculated into the percent tillage or soil loss in the county/state reports.

NOTE: If the transect point is no longer in an agricultural use and most likely will not return to one (i.e. point is a new road, developed, house, mature woods, etc.) *delete the entire row*

Cover Crop

Y	Yes – cover crops were planted
N	No – cover crops were <u>not</u> planted

NOTE: if wheat or other small grains were planted, mark cover crop as "Y" – planted wheat acres from National Agriculture Statistics Service data will be subtracted from the county's cover crop estimate.

View Report View Chart

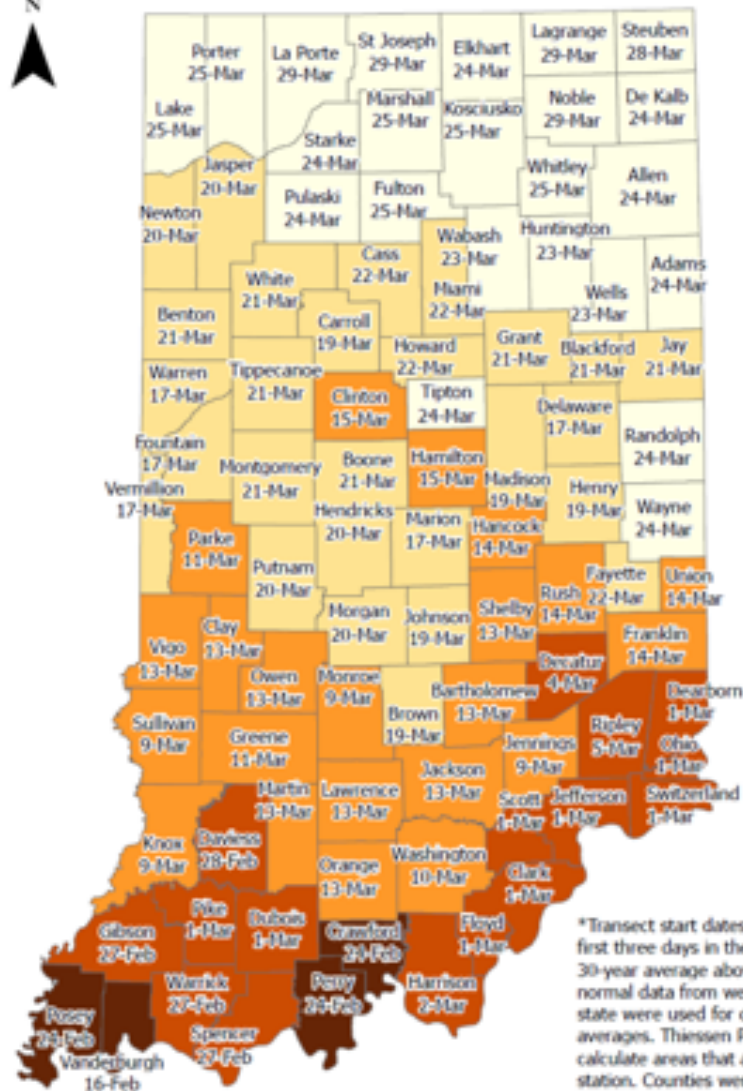
ST JOSEPH COUNTY 2020 FALL TILLAGE TRANSECT

Field No	Prev Crop	Fall Tillage	Residue	Cover Crop	CC Quality	CC Method	Notes	Slope %	P Factor	T Level	K Factor	SlopeLn	Wind Str	HUC	county	LS	R	C, B BASELINE CONVENTIONAL (RtLS°C)	C, B BASELINE REDUCED (RtLS°C)
11	-	-	-	N	N	N		1	1	a	a	a	e	05120300 090	ST JOSEPH	0.184	140		
18	-	-	-	N	N	N		1	1	a	c	b	e	05120300 090	ST JOSEPH	0.118	140		
21	-	-	-	N	N	N		1	1	a	c	b	e	05120300 090	ST JOSEPH	0.214	140		
28	-	-	-	N	N	N		1	1	a	d	b	e	05120300 090	ST JOSEPH	0.118	140		
31	-	-	-	N	N	N		1	1	a	c	a	e	05120300 090	ST JOSEPH	0.118	140		
41	-	-	-	N	N	N		1	1	a	c	a	e	05120300 090	ST JOSEPH	0.184	140		
48	-	-	-	N	N	N		1	1	a	c	a	e	05120300 090	ST JOSEPH	0.184	140		
51	-	-	-	N	N	N		1	1	a	c	a	e	05120300 090	ST JOSEPH	0.118	140		
58	-	-	-	N	N	N		1	1	a	c	a	e	05120300 090	ST JOSEPH	0.118	140		
61	-	-	-	N	N	N		1	1	a	e	b	e	05120300 090	ST JOSEPH	0.436	140		
78	-	-	-	N	N	N		1	1	a	c	a	e	05120300 090	ST JOSEPH	0.118	140		
81	-	-	-	N	N	N		1	1	a	d	b	e	05120300 090	ST JOSEPH	0.214	140		
88	-	-	-	N	N	N		1	1	a	c	a	e	05120300 090	ST JOSEPH	0.118	140		
98	-	-	-	N	N	N		1	1	a	d	b	e	05120300 090	ST JOSEPH	0.118	140		
108	-	-	-	N	N	N		1	1	a	c	b	e	05120300 090	ST JOSEPH	0.214	140		
121	-	-	-	N	N	N		1	1	a	c	a	e	05120300 090	ST JOSEPH	0.118	140		
128	-	-	-	N	N	N		1	1	a	c	a	e	05120300 090	ST JOSEPH	0.118	140		
131	-	-	-	N	N	N		1	1	a	d	b	e	05120300 090	ST JOSEPH	0.214	140		
138	-	-	-	N	N	N		1	1	a	d	b	e	05120300 090	ST JOSEPH	0.214	140		

*From Tillage Transect Methodology

First Projected Three Consecutive Days Above 40°F by County

Prospective Transect Start dates are no sooner than 10 days after



*Transect start dates are calculated based the first three days in the calendar year that had a 30-year average above 40°F. NOAA climate normal data from weather stations around the state were used for daily 30 year temperature averages. Thiessen Polygons were created to calculate areas that are closest to a given station. Counties were assigned the latest date of any of the Thiessen polygons that they fall on.

*Transect start dates are calculated based the first three days in the calendar year that had a 30-year average above 40°F. NOAA climate normal data from weather stations around the state were used for daily 30 year temperature averages. Thiessen Polygons were created to calculate areas that are closest to a given station. Counties were assigned the latest date of any of the Thiessen polygons that they fall on.

*The Dates are projected only, based on average daily temperatures. This may not coincide with the current year daily temperature or the actual possible start date for transects.

Living Cover Results

- State Total: 1,587,472 acres of living cover
- Corn Total: 615,439 acres of living cover
- Soybeans: 915,907 acres of living cover

