

IL S.T.A.R. – 2020 Field Form

For office use:

Points: _____

STARs: _____



"If you can't measure it, you can't improve it." - Peter Drucker

Farmer/Owner Information:

1. Name: _____ Email: _____
 Phone: (____) _____ - _____ Street/City/Zip: _____
 2. Field name: _____ 3. 2020 Crop: _____ 4. Acres: _____
 5. County: _____ 6. Sec/Township/Range: _____
 7. Owner: _____ 8. Is this field tile-drained? Yes No

I understand this field may be randomly selected for verification. To the best of my knowledge, this information is correct.

Signature: _____ Date: _____

IMPORTANT - Before proceeding, please review these instructions. Accurate responses will help ensure your field is awarded the correct point total and S.T.A.R. rating.

- This form documents field activities beginning immediately after harvest in 2019 and concluding with 2020 harvest.
- Read every item under each category. More than one selection is possible, but sometimes no items will be selected.
Example of multiple selections from the Cover Crops section- You planted a cover crop mix of cereal rye and tillage radish. You would select "Winter hardy- single species" and "Winter kill- single species."
- Completely read each statement. Several have more than one qualifier that needs to be met.
Example from the Spring Tillage section- "Any full width operation, limited to a single pass, where no fall tillage was performed."

First, tell us a little bit about the field you have selected.

9. Conservation and Management Practices- (check all that apply on this individual field):

- | | |
|---|--|
| <input type="checkbox"/> Saturated Buffers | <input type="checkbox"/> Conservation Plan that reduces sheet/rill erosion to "T" |
| <input type="checkbox"/> Bioreactor | <input type="checkbox"/> Nitrogen rate study conducted |
| <input type="checkbox"/> Constructed Wetland | <input type="checkbox"/> You attended a soil health or nutrient management meeting or field day within the last year |
| <input type="checkbox"/> Terraces/Contours/WASCOBs | <input type="checkbox"/> Nutrient management plan and/or field is under CCA advisement |
| <input type="checkbox"/> Grass Filter Strip/Riparian Buffer | <input type="checkbox"/> Enrolled in Federal/State/Local Conservation Program |
| <input type="checkbox"/> Grass Waterway | <input type="checkbox"/> Completed S.T.A.R. Form in 2019 for this field |
| <input type="checkbox"/> Pollinator Planting (a 1/2 acre minimum) | |
| <input type="checkbox"/> Windbreak | |

Now let's establish a crop history for this field.

10. Crop Rotation- use an "X" to indicate the 5-year crop history on this field.

Crop	2020	2019	2018	2017	2016
Corn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soybean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small Grain: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Forage: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pasture: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Example: A field has been in corn/soybean rotation for over a decade. In 2020 it was planted to corn. Place an "X" adjacent to corn for the years 2020, 2018, 2016. Soybean would have an "X" for 2019, 2017. If your crop is not listed, i.e. Milo, write your crop on the line and mark "X" in the year(s) planted.

11. Cover Crops (Summer 2019-Spring 2020)- Established with NRCS guidelines (must have some growth):

- Winter hardy- single species
- Winter hardy- 2 or more species
- Winter kill- single species
- Winter kill- 2 or more species
- Cover crop was terminated AFTER spring 2020 cash crop planting

Discussion: Time period varies slightly here. Any cover crops established in 2019 either prior to harvest or after a summer crop was harvested count. Examples: aerial application into standing corn or drilling after wheat harvest.

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12. Soil Sampling- Use the previous 5-year field history:

- Not sampled
- Sampled every 4 years or less
- Spring or Summer sampled
- Fall sampled
- GPS sampled (by grid or zone)

Discussion: Here is a great example of why you should read every item in each category. If a respondent simply marked "Sampled every 4 years or less" they may have missed points if they didn't indicate when the field was sampled or if GPS was used.

Almost done. The next category is tillage practices broken down into Fall 2019 and Spring 2020 categories.

13. Fall Tillage- Starting after harvest of the 2019 crop:

- No tillage or low disturbance fertilizer toolbar
- Strip tillage on field classified as non-HEL
- Shank type fertilizer bar and no other tillage performed
- Any full width operation not exceeding a 3" depth
- Any full width operation exceeding a 3" depth
- Any full width operation on soybean stubble

Discussion: With numerous possibilities for soil preparation, we elected to keep the options fairly simple. No tillage and strip tillage are easily definable. Full-width tillage can be tricky. In the fall, focus on the depth of machine operation and also note if soybean residue was tilled. In the spring, how many passes were made and was fall tillage performed?

14. Spring Tillage- 2020 field operations:

- No tillage or low disturbance fertilizer toolbar
- Strip tillage or Strip freshener on non-HEL field, or shank type fertilizer bar, and no other Spring tillage
- Any full width operation, limited to a single pass, where no fall tillage was performed
- Any full width operation, two or more passes, where no fall tillage was performed
- Any full width operation, one or more passes, where fall tillage was performed

Finally, your nutrient management strategies are a large component of your overall score. Like tillage, we've broken these into two sections defined by specific time periods. A third section reviews activities that may have occurred at any time during the crop year being reviewed.

15. Nutrient Management (Fall 2019 – February 2020):

- No Nitrogen was applied in this time frame other than MAP or DAP
- Wheat topdress
- MAP or DAP was applied before December 1st
- NH₃ was applied when the soil temperature was below 50 degrees, and amounted to no more than 50% of the total Nitrogen program, and included an inhibitor
- Manure/Biosolid injected or applied and incorporated when soil temperature was below 50 degrees.
- Manure applied, not incorporated

16. Nutrient Management (March 1st – Summer 2020):

- No Nitrogen was applied in this time frame AND no prior Fall 2019-February 2020 Nitrogen other than MAP or DAP
- Spring/Summer nitrogen application(s) amounted to 50% - 74% of the total N Program (from all sources)
- Spring/Summer nitrogen application(s) amounted to at least 75% of the total N Program (from all sources)
- In-season N application (top or sidedress) was at least 25% of the total N Program (from all sources)
- Manure/Biosolid injected or applied and incorporated
- Manure applied, not incorporated

17. Additional Nutrient Activities:

- Total Nitrogen applied on corn that followed a different crop was 181 to 200 lbs./acre,
OR corn-on-corn was 201 to 220 lbs./acre
- Total Nitrogen applied on corn that followed a different crop was 180 lbs. or LESS/acre,
OR corn-on-corn was 200 lbs. or LESS/acre
- Phosphorus and/or Potassium application based on removal rates and/or soil samples (may mean zero applied)
- At least 50% of total applied phosphorus was banded subsurface
- Used Triple Super Phosphate (0-45-0)
- Used Variable Rate Technology application
- Any fertilizer source containing Nitrogen or Phosphorous was broadcast on frozen or snow-covered ground

S.T.A.R. Field Form Calculation - 2019

Name: Participant X		Field →	Acres	Field Name	Crop in 2019
			80	Example 1	Corn
9. Cover Crops (established in the Summer or Fall of 2018 using NRCS guidelines (Max of 12 points))					
0	Annual ryegrass *				
0	Crimson clover				
0	Oats				
0	Tillage Radish				
0	Cereal Rye *				
0	Winter wheat (even if intended for harvest) *				
0	Other Species				
0	Winter hardy cover crop terminated after planting = +2 points (winter wheat = yes)				
0	<SUB TOTAL				
10. Soil Sampling - Use previous 5-year history					
0	Not sampled = 0 points				
2	Sampled every 4 years or less = +2 points				
1	Spring or summer sampled = +1 point				
0	Fall sampled = 0 points				
1	GPS sample (grid or zone) = +1 point				
4	<SUB TOTAL				
11. Nutrient Management (Fall 2018 - February 2019)					
4	No Nitrogen was applied in this time frame, other than MAP (11-52-0) or DAP (18-46-0) or February top-dress on wheat fields south of I-70 = +4 points				
0	No more than 50% of the total Nitrogen Program (from all sources) as applied as NH ₃ (82-0-0) with an inhibitor AND when the 4" soil temperature was below 50 degrees. = +1 point				
0	MAP or DAP applied before December 1st (+1 point)				
0	Manure/Biosolid injected or applied and incorporated after October 20th = +1 point				
0	Manure was applied and NOT incorporated = (-) 1 point				
4	<SUB TOTAL				
12. Nutrient Management (March 1st - Summer 2019)					
0	No Nitrogen applied in this time frame (and no prior Fall through February nitrogen other than MAP or DAP) = +4 points				
0	The nitrogen application(s) during this time frame amounted to 50% to 74% of the total Nitrogen Program = +1 point				
2	The nitrogen application(s) during this time frame amounted to at least 75% of the total Nitrogen Program from all sources = +2 points				
0	A side-dress application (after planting) was at least 25% of the total Nitrogen Program = +2 points				
0	Manure/Biosolid injected or applied and incorporated = +2 points				
0	Manure applied and not incorporated = +0 points				
2	<SUB TOTAL				
13. Additional Nutrient Activities:					
0	Actual nitrogen on corn after soybeans: 181 to 200 pounds/acre of actual nitrogen was applied (or 201 to 220 lbs./acre on corn after corn) = +2 points				
4	Actual nitrogen on corn after soybeans: 180 lbs. or LESS/acre of actual nitrogen was applied (200 lbs. or LESS/acre on corn after corn) = +4 points				
0	At least 50% of actual phosphorus used was banded subsurface in fall or spring = +4 points				
0	Used Triple Super (0-45-0) in fall or spring = +2 points				
0	Phosphorus and/or potassium rates applied based on removal rates and/or soil samples (may be NO fertilizer recommended) = +2 points				
0	Used Variable Rate Technology application = +2 points				
0	Any fertilizer source containing containing nitrogen and/or phosphorus was broadcast on frozen or snow covered ground = (-) 6 points				
4	<SUB TOTAL				
Participant X				Example 1	

14. Crop Rotation - accumulate these to a maximum of 12 points			
2	Any rotation that does NOT have more than 2 years in a row of same cash crop = +2 points		
0	3 years or more of continuous corn or soybeans = 0 points		
0	Any rotation with 1 year or more of small grain in last 5 years = +5 points		
0	Any rotation with 1 year or more of a perennial forage in the last 5 years = +5 points (be sure to give credit for a cover crop)		
0	Other? _____ (milo, sunflowers, canola, etc.) Contact the S.T.A.R. Program Coordinator		
2	<SUB TOTAL		
15. Tillage Practices - starting after harvest of the 2017 crop:			
5	Fall: No tillage or low disturbance fertilizer toolbar (+5 points)		
0	Fall: Strip tillage on field classified as non-HEL and/or shank type fertilizer toolbar, <u>and</u> no other Fall tillage performed (+3 points)		
0	Fall: Any full width tillage operation <u>not</u> exceeding a 3" depth (+1 point)		
0	Fall: Any full width tillage operation <u>exceeding</u> a 3" depth (0 points)		
0	Fall: Any full width tillage operation on soybean stubble (-3 points)		
5	Spring: No tillage or low disturbance fertilizer toolbar (+5 points)		
0	Spring: Strip tillage or Strip Freshener on non-HEL field, and/or shank type fertilizer bar, <u>any</u> no other Spring tillage (+3 points)		
0	Spring: Any full width operation, limited to a single pass, where <u>no</u> fall tillage was performed (+1 point)		
0	Spring: Any full width operation, two or more passes where <u>no</u> fall tillage was performed (0 points)		
0	Spring: Any full width operation, one or more passes, where fall tillage <u>was</u> performed (0 points)		
10	<SUB TOTAL		
16. Conservation and Management Practices (check all that apply on this individual field)			
(Maximum of 8 points for this section)			
0	Saturated Buffers (+2 points)		
0	Bioreactors (+2 points)		
0	Constructed Wetland (+2 points)		
0	Terraces/Contours/WASCOBs (+2 points)		
0	Grass Filter Strip/Riparian Buffer (includes woods/forest) (+2 points)		
2	Grass waterway (+2 points)		
0	Pollinator planting (1/2 acre minimum) (+2 points)		
0	Windbreak (+1 point)		
0	Conservation Plan that reduces sheet & rill erosion to "T" (+1 point)		
0	Nitrogen rate study (+1 point)		
0	Attended soil or nutrient management meeting/field day (+1 point)		
1	Have a written nutrient management plan and/or farm is under CCA advisement (+1 point)		
0	Enrolled in Federal, State, or Local Conservation Program (+1 point)		
0	Completed S.T.A.R. in 2018 for this field (+1 point)		
3	<SUB TOTAL		
		Star Rating scale	
		40+ points = 5 Stars	
		32-39 points = 4 Stars	
		23 - 31 points = 3 Stars	
		16 - 22 points = 2 Stars	
		0 - 15 points = 1 Star	
TOTAL POINTS	29	CONFIDENTIAL: This scoresheet is only for the participant. Please do not distribute!	
		March 11, 2021	

