## S.T.A.R.

## Instructions, definitions and (FAQ) Frequently Asked Questions: 2018 Crop Year



- 1. Should I mark something on <u>each section</u> of the Field Form? Yes, it is very important to mark EACH section to clarify what was done or not done on that **PARTICULAR FIELD!!**
- 2. Why is my contact information needed? Once your field is rated, we need to contact you to let you know the results and to offer a field sign for posting.
- 3. What is the definition of the "Crop Year?" The time frame of the evaluation and rating should begin the day after Fall 2017 harvest through the end of harvest of 2018.
- 4. How will my answers to the form(s) be verified? The county Resource Conservationist will typically have enough knowledge of any farm to know if there are inconsistencies. However, the CCSWCD will use random sampling to conduct a check of up to 10% of the fields each year. Hence the need for the field location information that allows the use of a Plat book to find the field.
- 5. Who will know my S.T.A.R. rating(s)? We will not advertise your rating(s) or inform anyone but you. You will be encouraged to post your optional field sign(s). The information collected on a field will be placed into that field's NRCS folder, which is not FOIA (Freedom of Information Act) able.
- 6. Is a post provided with the sign? No
- 7. Why am I asked to sign the form? This simply reminds the participant to be careful to complete the form as accurately as possible.
- 8. **Section 9**: A cover crop credited for the 2018 Crop Year must have been planted and in the Fall of 2017 and "established," which means it must have had "some" growth before spring planting. It is best to use "winter hardy" species, <u>including</u> Annual Ryegrass, Cereal Rye, and Winter Wheat. "Established" means the cover crop was planted "in a timely matter and when there is adequate moisture to establish a good stand" (based on the NRCS Practice Standard Code 340). Planting dates for the likelihood of "adequate" establishment will vary by the species and the geographical location. A great resource for this topic is the Midwest Cover Crops Council website: <a href="www.mccc.msu.edu">www.mccc.msu.edu</a>
- 9. How do I record my cover crop species? Mark all species of cover crop plants used for this crop year (planted in the fall of 2017). If the cover crop you are utilizing is not listed, write it/them under "Other species." Using more than one species is best.
- 10. **Section 10:** Only mark "Fall" or "Spring" because the form is for only <u>one field</u>. It is better to sample in the spring and it is better to sample more often (implies better management decisions).
- 11. How do I know if my sampling was done with GPS? If your sampling is done by a soil testing or related service firm, it is VERY likely done using GPS. However, a grid or zone sizes should be based on the University of IL Agronomy Handbook: <a href="mailto:extension.cropsciences.illinois.edu/handbook/">extension.cropsciences.illinois.edu/handbook/</a>

## Nutrient applications are intended to have minimal negative effect on water quality with minimal negative effect on yields.

12. **Section 11:** If NH3 (anhydrous ammonium = 82-0-0) is used, it should be applied when the temperature is below 50 degrees and you should use an inhibitor. It is recommended that NH3 will be no more than 50% of the total Nitrogen Program as it is risky to lose some of the N. From an environmental perspective, it is best if NO Nitrogen or Phosphorus are applied at all. However, if Nitrogen is applied, it is best done in the spring and/or summer.

- 13. **Section 11:** It is okay to use MAP (11-52-0) or DAP (18-46-0) in the fall before December 1<sup>st</sup> as it actually is good IF there is also a "winter hardy" cover crop being used. The amount of N in the MAP or DAP is rather insignificant but will help the cover crop become established and grow.
- 14. **Section 11:** Manure applications are used to replace other forms of nutrients. It is much better to apply in the spring when there is less likelihood of any leaching or runoff and management of such applications should be balanced with soil tests and what exactly is being added by the manure. Use of manure counts as adding a somewhat significant level of Nitrogen.
- 15. **Section 12:** As stated earlier, Nitrogen applications are best done in the spring and/or summer. It is a best management practice to side-dress some of the nitrogen on corn.
- 16. **Section 13:** The amount of Nitrogen identified here is based on the maintenance needs for normal yield goals in east central Illinois. The recommendation is to apply less than 200 pounds on a field with a corn and soybean rotation. If those guidelines are followed, there would be limited denitrification and leaching losses. The continuous corn rotation allows more Nitrogen (less than 225 pounds per acre) because soybeans were not used to "credit" some Nitrogen to that field.

It would be even better to follow the guidelines of the "Corn N-Rate Calculator" that is a part of the NRCS 590 Nutrient Management standards and specifications, found at this link to Iowa State University: <a href="http://cnrc.agron.iastate.edu">http://cnrc.agron.iastate.edu</a>. That system uses current corn and nitrogen prices to calculate the MRTN (Maximum Return To Nitrogen).

- 17. **Section 13:** If Phosphorus is applied either in the fall or spring, it is best to be banded subsurface (incorporated). Triple Super is much better than MAP or DAP, but adding NO phosphorus would help meet the "Illinois Nutrient Loss Reduction Strategy."
- 18. **Section 13:** If Nitrogen or Phosphorus (including manure) is broadcast on either frozen ground OR on snow covered ground, that would be **VERY BAD**. Even worse would be application of nutrients on frozen ground that also has snow on it.
- 19. **Section 14:** Crop rotation is better than a continuous crop of any kind, but continuous soybeans is better than continuous corn. Better yet, include a forage, such as alfalfa or clover, or a small grain, such as wheat.
- 20. **Section 15:** A major concern about soil loss, and therefore nutrient loss, is the amount of residue on the soil at any time. The type of tillage used is a simple method to estimate the amount of residue on a field and much easier than trying to ask the operator to measure it or do an estimate. Fewer passes and shallower tillage are best. However, if a cover crop is planted or manure is applied in the fall, a shallow tillage operation to incorporate has some benefit. Ideally, everyone would use no-till or striptill!
- 21. **Section 16:** This section includes many very positive conservation practices. Most of the items on the list are self-explanatory if they are pertinent, but should only be checked if it fits the field being evaluated. The first six items on the list should only be checked if they are <u>still functioning</u> as intended.

"On-site agronomic trial" = Any study done on THAT field that may include variety comparisons, use of N-TRACK, use of N-WATCH, taking tissue and plant samples and having them analyzed, or any other study done to improve your cropping decisions.

"Attended soil or nutrient management meeting" may have been any meeting that includes some discussion or recommendations related to soil, nutrient use, or cover crops, including field days, no matter the length of time. It should have been within the past year at the time of completing the form.