Illinois STAR FAQ

Instructions, definitions, and frequently asked questions for 2024 Crop Year

General STAR

1. *What is the definition of STAR's Crop Year?*
   STAR is focused on improving in-field management and sets our Crop Year to capture all field preparation activities starting after harvest and including any pre-plant and in-season activities up to harvest. The STAR program year runs from June 1, 2024, when the new field form is released, through November 1, 2024.

2. *Why is my contact information needed?*
   Once your field is rated, you may be selected for verification. We will also contact you with your results and offer a field sign for you to display your rating.

3. *How do I order a field sign?*
   Contact your local STAR Rep using the "Contact" page on our website or email admin@IllinoisSTAR.org. You can also request a field sign through the STAR Web Tool. A post is not provided with the STAR sign.

4. *Who will know my STAR rating(s)?*
   While we strongly encourage participants to post field signs to display STAR ratings, your ratings are confidential and will not be shared with anyone but you. Field-level practice data will be aggregated for use in tracking STAR participation and program outcomes on a state/county basis once personal identifiable and specific location data have been removed. Please see our Terms of Use and Privacy Policy on our website for more information.

5. *How will my answers be verified?*
   The STAR Coordinator will use random sampling to identify for verification up to 10% of the fields submitted. A verification representative will contact the randomly selected participants to confirm the use of the practices identified on their Field Form. The verification process will occur in November 2024. Potential items and information that may be requested from participants are noted on our website https://starfreetool.com/get-started.

STAR Web Tool

6. *How do I log in?*
   Go to http://www.startool.ag and navigate to the STAR Web Tool link to launch the tool in your browser. If you don't have an account, click "Register." If you do have an account, click "Sign In" and log in using your email and password.

7. *What happens if I forget my password?*
   Click the "Sign In" button on the STAR Web Tool log in page, and select "Forgot password?" to walk through the steps to reset your password.

8. *I need to change my email/contact information. What do I do?*
   Contact admin@IllinoisSTAR.org. In your message, please let us know all details of your request.

9. *Who do I contact for assistance?*
   For STAR Web Tool support, contact admin@IllinoisSTAR.org. If you'd like local conservation assistance, check our website's contact page for a list of STAR County Contacts and send your local representative an email or give them a call! If your county is not a licensed STAR County, contact admin@IllinoisSTAR.org for support.

10. *Why should I use the STAR Web Tool instead of filling out a PDF field evaluation form?*
    Creating an account in the STAR Web Tool is a fast, simple way to enter your field information. It will save in your account for proceeding years, so you can copy answers to other fields each year you participate. The STAR Web Tool provides instant STAR rating results, walks you through steps to increase your STAR rating, provides resources for improvement, and allows you to share your results on social media!

Fillable PDF/Hard Copy Field Evaluation Form

11. *Should I mark something in each section of the field evaluation form?*
    Yes, it is very important to mark all applicable activities in each section. Separate forms should be completed for each field you would like rated.

12. *Why am I asked to sign and date the Field Form?*
    Your signature acknowledges that you have completed the form as accurately as possible and that you understand your field may be randomly selected for verification.

13. *Field Evaluation Form Questions*

    Section 9 – Crop Rotation: Rotating crops helps to improve above-ground and below-ground diversity. Ideally, a field would never have more than two continuous years of a crop (one exception would be continuous forage or hay). Incorporation of a winter hardy crop, such as wheat, or perennial crop into a corn/soy rotation offers several benefits including, but not limited to, improved soil structure, increased organic matter, greater diversity of soil biology, and reduced nutrient loss. The "other" crop could be milo, sunflowers, canola, etc.

    Section 10 – Conservation and Management Practices: This section includes several recommended practices to reduce nutrient and soil loss in addition to the in-field management practices that STAR prioritizes. Items should be checked only if applicable to the individual field being evaluated. The first eight items on the list should only be checked if they are still functioning as intended.

    - Having a "Conservation Plan" is good, but checking this item assumes it is being implemented in such a way that reduces sheet and rill erosion to "T." The soil loss tolerance rate (T) is the maximum rate of annual soil loss that will permit crop productivity to be sustained economically and indefinitely on a given soil. Erosion is considered greater than T if either water (sheet and rill) erosion or wind erosion rate exceeds the T.

    - "Attended soil or nutrient management meeting/field day" may have been any meeting that included some discussion or recommendations related to soil, nutrient use, tillage, or cover crops, including field days, no matter the length of time. The meeting/field day should have occurred within the past year at the time of completing the form and counts for every field evaluated during the current crop year.

- "A written nutrient management plan" is often completed with the help of a retailer or private consultant and does not have to be an NRCS 590 plan. STAR recognizes it is best if the person helping with any advice is a Certified Crop Advisor.
- "Enrolled in a Federal, State, or Local Conservation Program" includes NRCS programs such as CSP and EQIP, state programs such as PFC, and local programs such as Precision Conservation Management (PCM).
- "Completed 2023 STAR Form" is to be checked only if it was completed for this specific field.

Section 11 – Cover Crops: A cover crop credited for the 2024 Crop Year must have been planted and established in the late summer or fall of 2023, which means it must have had some growth before spring planting. According to NRCS Practice Standard Code 340, "established" means the cover crop was planted "in a timely matter and when there is adequate moisture to establish a good stand." Planting dates for the likelihood of "adequate establishment" will vary by the species and geographic location. It is best to use winter hardy species, including annual ryegrass, cereal rye, etc., as these species provide more soil protection and nutrient capture over the winter months and into early spring than winter kill species. Cover Crop Resources:
www.mccc.msu.edu/statesprovince/illinoishttp://www.mccc.msu.edu/statesprovince/illinois

Section 11 – Cover Crops: *How do I record my cover crop species?* Check the category that applies to your cover crops. If you planted cereal rye, mark "Winter hardy single species." If you planted cereal rye and clover, mark "Winter hardy – 2 or more species." If you planted cereal rye and radish, mark "Winter hardy – single species" and "winter kill single species." It should be noted that planting more than one species will encourage additional above and below ground biodiversity that may offer distinct soil health benefits when compared to single species.

Section 11 – Cover Crops: The longer a winter hardy species is actively growing, the more environmental benefits it provides, so we encourage termination of a winter hardy cover crop after spring planting (thus the participant "planted green"). It is important to note that termination timing is a very important aspect of successful cover crop management and we recommend utilizing the previously mentioned cover crop resources and/or reaching out to your local SWCD or NRCS office for technical assistance on cover crop mixes, seeding rates, planting guidelines, and termination strategies appropriate for your operation.

Section 12 – Soil Sampling: Soil samples should be collected for each field every four years or less. To reduce the uncertainty associated with in-field soil variability and to inform accurate nutrient management decisions, samples should always be taken from the same locations identified via GPS. We encourage spring or summer sampling to provide ample time to incorporate soil analyses into nutrient recommendations for the upcoming crop year. *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 likely done using GPS. The grid or zone sizes should be based on the University of IL Agronomy Handbook:
https://extension.illinois.edu/global/agronomy-handbook.

Section 13 & 14 – Fall and Spring Tillage: Minimal soil disturbance is recommended. No-till systems keep the soil covered and minimize soil loss due to wind and water erosion. We acknowledge that fertilizer tool bars are likely to be low disturbance (unless it is a shank-type) and we consider these applications (with the shank type exception) equivalent to no tillage. Strip-till systems also limit soil disturbance compared to

full-width tillage systems, but should never be used on Highly Erodible Land, as the strips become a pathway for gullies to form. Any full width tillage on soybean stubble should be avoided when possible. If a cover crop is planted or manure is applied in the fall, a shallow tillage operation to incorporate has some benefit, but is still considered one tillage pass. Use of a strip freshener in the spring is considered the same as strip tillage, again with the assumption it is not Highly Erodible Land. Tillage done in small areas of a field, such as rut repair, is not considered part of a routine tillage system and is outside the scope of STAR.

Section 15 – Fall/Winter Nutrient Management: We discourage fall and winter application of fertilizers due to an increased risk of nutrient loss from rainfall on fields without an active crop. If applying MAP (11-52-0) or DAP (18-46-0) in the fall, it should be applied before December 1st. In wheat rotations, a top-dress nitrogen fertilizer application in February or early March with an active crop growing reduces the risk of nitrate loading to local waterways.

Section 15 – Fall/Winter Nutrient Management: If NH3 (anhydrous ammonia = 82-0-0) is used during the fall through February time period, it should be applied with an inhibitor and when the 4-inch soil temperature is below 50 degrees Fahrenheit. Though not recommended, if a fall through February NH3 application is made, it should represent no more than 50% of the total Nitrogen program.

Section 15 – Fall/Winter Nutrient Management: Manure/Biosolids are best applied in the spring when there is less likelihood of leaching or runoff. If Manure/Biosolids are to be applied in the fall through February time period, they should be injected or broadcast when the soil temperature is below 50 degrees Fahrenheit and if broadcast, they should be incorporated. Management of such applications should include soil tests to determine exact amounts of nutrients being added. Research on stabilizers used in conjunction with manure applications is inconclusive, and the STAR Science Advisory Committee does not feel that the use of manure stabilizers is warranted at this time.

Section 16 – Spring/Summer Nutrient Management: While some crops require additional nitrogen inputs to sustain yields, limiting nitrogen applications can significantly improve downstream water quality. Nitrogen is best applied in the spring and/or summer, as close as possible to the time the crop will use it, minimizing nutrient losses from the field.

Section 16 – Spring/Summer Nutrient Management: Manure/Biosolids applied during the spring or summer should be incorporated if broadcast.

Section 17 – Additional Nutrient Activities: The "total nitrogen program" for a crop should incorporate residual soil nitrogen, nitrogen made available from organic matter mineralization, and nitrogen applied from all sources in the Crop Year. The maximum levels identified for this section are based on the maintenance needs for optimal corn yield goals in Illinois and should help to offset and/or limit losses due to leaching and denitrification. The continuous corn rotation allows higher nitrogen rates due to the maintenance needs of corn following corn versus corn following soybeans. Optimally, producers would 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: http://cnrc.agron.iastate.edu. The Corn N-Rate Calculator uses current corn and nitrogen prices to calculate the MRTN (Maximum Return to Nitrogen) but is not required for STAR. Participants should also consider using the 4R Principles (Right Source, Right Rate, Right Time, and Right Place) when making nutrient decisions. More details can be found here: https://nutrientstewardship.com/4rs/.

Section 17 – Additional Nutrient Activities: Limiting phosphorus applications will help meet the water quality goals of the Illinois Nutrient Loss Reduction Strategy. If phosphorus is applied, either in the fall or spring, it is best to follow soil test recommendations and apply subsurface. Triple Super Phosphate is better than MAP or DAP as it does not add the complexity of additional nitrogen. As stated earlier, it is best to apply phosphorus and potassium based on soil testing, but it is reasonable to replace those nutrients using estimated removal rates. Additionally, utilizing Variable Rate Technology (VRT) is economical and environmentally friendly and allows for the placement of fertilizer where it's needed. However, application rates when using VRT should not exceed the recommendations found in the University of Illinois Agronomy Handbook: https://extension.illinois.edu/global/agronomy-handbook.

Section 17 – Additional Nutrient Activities: Any fertilizer containing nitrogen or phosphorus, including manure, that is broadcast on either frozen or snow-covered ground increases the likelihood of loss, particularly via surface run-off, and should be avoided.