

Field Crops Newsletter

Granville and Person County
Mikayla Berryhill

Tips for Saving \$\$ on Fertilizer

1. Remember your 4 R's

The 4 R's of fertilizer application are Right rate, Right source, Right placement, and the Right time. This can look different in each crop and is especially important now with the cost of fertilizers. In wheat, for example, ensure you are putting your final topdress application out when the wheat is reaching growth stage 30 (GS30), or when your wheat starts "standing up." If you are putting out liquid nitrogen, this needs to be as close to GS30 as possible, so the nitrogen has not leached below the wheat root zone when it most needs it. If you are using a solid nitrogen source, be sure to put it out around 2-4 weeks before GS30 depending on how wet it is and the weather forecast. In tobacco, one way to pay attention to these 4 R's is by looking at your phosphorus management plan. It has been shown through research that applying 5lb of phosphorus in transplant water has the same growth response as 40 lbs of phosphorus banded in the complete fertilizer. This could greatly reduce the amount of phosphorus you need to apply to your fields (therefore reducing your fertilizer cost) just by changing the rate, timing, and placement.

2. Soybeans – do they need some preplant nitrogen?

In short – NO. I have gotten this question a few times since becoming an extension agent, and all the research done on this subject in North Carolina is unanimous that the answer is absolutely not. The thought behind this idea is that soybeans might not have the ability to fix nitrogen during germination and early development, so a small shot preplant could help increase growth. The reality is that soybeans having a lack of nitrogen when germination and in early growth is what can stimulate nodule development, which is how soybeans are able to fix their own nitrogen. When there is nitrogen in the system, it is like the soybeans say "oh, this is here for me, I might as well not do the work making those nodules and use up this nitrogen that's ready for me." You might can imagine that the downside of this is that later in the season that preplant nitrogen runs out, and now the plant does not have a way to fix the nitrogen it needs. So, let's not try to outsmart nature, save money on nitrogen costs, and allow the soybeans to do their job!

3. Take a Wheat Tissue Test

Whether you split apply your nitrogen or have a one-shot management system, you could benefit from taking tissue samples of your wheat to fine-tune exactly how much nitrogen your wheat crop needs. The NCDA&CS has a great system for doing this. To get this nitrogen recommendation, you must take a tissue sample of your wheat right before it reaches GS 30. When it reaches this point, you take a tissue and biomass sample to send in to the lab. You will get a report back with application rate recommendations for your wheat crop for any nutrients that your wheat may need. If this sounds like something you are interested in doing, please let me know and I will help you get this sample into the lab.

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This newsletter is designed to give you up to date information on crops from NC State University and other sources. For more information:

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Winter Workshop Series

This coming winter, I am offering a “Winter Workshop Series” to cover topics that are typically not discussed during annual production meetings and go a little more in depth. These will be offered on different days at the Person and Granville County Extension Offices. Please see the workshops being offered below. You can find the registration for all of these workshops by going to go.ncsu.edu/winterworkshopseries2023 or by calling your local extension office.

Understanding Soils and How to Manage Them

This workshop will go over some information on the basics of soil management (i.e. sampling strategies, soil test analysis) as well as some tools that can help bring your soil management to the next level. We will learn how to utilize WebSoil Survey and the Realistic Yield Expectations tool from NC State. While it is not required, please bring a mobile device (laptop or tablet) if you are able! We will be going over how to use online tools, and it would be beneficial for you to have the ability to work with the tools as we discuss it.

Field Crops Price Risk Management

Join Nick Lassiter, from the NCDA&CS Division of Marketing for this workshop on “Managing Price Volatility/Identifying Macro Indicators”. The following topics will be covered: Introduction to Grain Hedging, Basis Trading, Cost of Carry, ICE Cotton Futures, Option Trading on Futures, Energy Derivatives, and macro forces impacting the hedger. There will be an emphasis on the principles of options, spreading strategies, and using options to manage agricultural price risk.

SCHEDULE

County	Program	Date	Location
Granville	Understanding Soils	2/1/23 @ 11 a.m.	125 Oxford Outer Loop, Oxford, NC
Person	Understanding Soils	1/30/23 @ 11 a.m.	304 S. Morgan Street, Roxboro, NC
Granville	Price Risk Management	2/9/23 @ 11 a.m.	125 Oxford Outer Loop, Oxford, NC
Person	Price Risk Management	2/7/23 @ 11 a.m.	304 S. Morgan Street, Roxboro, NC

In compliance with the Americans with Disabilities Act, N.C. Cooperative Extension or NC State University will honor requests for reasonable accommodations made by individuals with disabilities. Please direct accommodation requests to: EventCoordinatorName, Email, or Phone Number. Requests can be served more effectively if notice is provided at least 10 days before the event.

Growing Corn in 2023 – Making Happy Choices

Ron Heiniger – NC State Corn Specialist

At this time of year, as happens in every over-winter cycle, there are choices a farmer must make. What crop should I plant? What hybrid should I choose? How much fertilizer, seed, chemicals should I purchase and when is the best time to purchase them? What changes should I make that might lead to better yield and certainly to better profit? With the cost of everything from seed to fuel to fertilizer increasing it becomes more and more important to make good choices if a farmer wants to stay in business. Choices that when December 31, 2023 comes around one can look back with happy satisfaction and say, “I’m glad I made that choice.” So how can we do a better job of making “happy” choices when it comes to managing your farming business.

1. **KNOWLEDGE** – Good choices are based on a thorough understanding of your environment, the crop you are planting, and the products you are purchasing.
2. The great thing about good farmers is that they come to know the land; its strengths and weaknesses when it comes to drainage, water retention, and nutrient levels.

Now is a good time to review these facts. Look at the soil survey, probe fields for compaction, and, of course, to get soil samples for nutrient analysis. The same can be said about understanding the crop you are planting. Knowing

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when, during the growth cycle, of the plant nutrients are most critical, when the plant can tolerate “wet feet”, and when stress will have its greatest impact are essential to planning nutrient applications and planting activities. How have crop genetics and varieties changed that might be an advantage in my situation. Again, this is a good time to review crop management guides, attend winter production meetings, review variety comparisons, and to talk to experts.

Weather is the most difficult thing a farmer faces. While our knowledge of weather patterns has improved to tell us what the weather might bring, 2023 is still mostly a guess. However, new tools like the Corn Climate Dashboard and weather predictions from NOAA can be useful in helping shape an understanding of what the year might bring in challenging weather conditions.

Finally, knowing the products you are purchasing requires careful study. This is where your investment in Extension pays off. Analysis of herbicides, fungicides, fertilizers, and even biological products from an unbiased standpoint is essential to selecting the right product for the right job and applying it in a timely manner.



Corn Trial in Person County 2022. Photo by Mikayla Graham Berryhill.

3. **HAVE A GOAL** – If you don’t have a goal it really doesn’t matter what choice you make. If you don’t know where you are going you really don’t know if you ever got there. As we used to say in the dairy business, “You are either increasing milk production or decreasing milk production but you never stay the same.” This is true about farming in general, you are either improving the land, your yield, your situation OR you are declining – you just can’t stay the same. Now is a good time to set goals. What yield levels are you shooting for, what profits are you seeking to obtain, what long-term improvements are you working for? These will help you decide what the best choices are based on the knowledge you possess.
4. **PUTTING KNOWLEDGE TO WORK** – Knowledge is only useful when you make it work for you. Once you have your goals written down now you can use your knowledge to decide what choices you need to make. What practices should I choose to make that higher yield? What can I do that might result in long-term improvements in my land that makes obtaining higher yields possible into the future? How much am I willing to risk on a different product or farming practice? The answers to these questions rise from your goals and your knowledge.
5. **2023 CHOICES** – I don’t know what choices will be best for your farm in 2023 but here are some things to consider.
 - a. Input costs for fuel and fertilizer will be high – These are two areas where good choices will pay off in a big way. Look for ways to conserve fuel by reducing tillage or other field operations that require lots of horsepower. Consider your fertilizer needs carefully. Know your fields fertility levels. Look for economical options to supply the nutrients you need.
 - b. A change is coming in our weather patterns – The La Nino pattern that has held sway for the past two years continues into 2023. BUT this pattern is not likely to hold throughout the year. While more moderate temperatures and drier conditions have persisted from 2022 into this year (all across the United States), this is likely to change by late spring or early summer. Expect to see more rainfall this spring and higher temperatures in late summer.
 - c. Genetics continue to change – Improvements in hybrids and varieties have been the foundation for increasing yield. This continues to be the case.
 - d. Consider something new – try a new approach to land preparation, something different at planting, a biological treatment, a fungicide, etc. Doing the same things over and over again and expecting different results is a form of insanity. Farmers have changed the world by innovation and experimentation. You can change your world by trying something new.

I often think that we are always in the fruit judging business. We judge our success or our failure by the fruits that result from our actions. Did our choices bring us peace, happiness, contentment, harmony, joy, good will, satisfaction – then we made “happy choices”.

OR did our choices result in anxiety, discord, sleepless nights, conflict, unhappiness, sorrow – then we made “unhappy choices”. Of course, the only problem with this is that one never knows for certain what the outcome might be for a given choice, either good fruit or bad fruit. It is my wish that all might make “happy choices” this winter season.

Upcoming Events:

Upper Piedmont Hemp Production Meeting

January 31st

- IN PERSON at the Person County Extension Center in Roxboro, NC
- Snacks and drinks will be provided
- N, D, O, and X pesticide recertification credits offered
- Registration required: go to <https://go.ncsu.edu/upperpiedmonthemp2023> or call your local extension office.

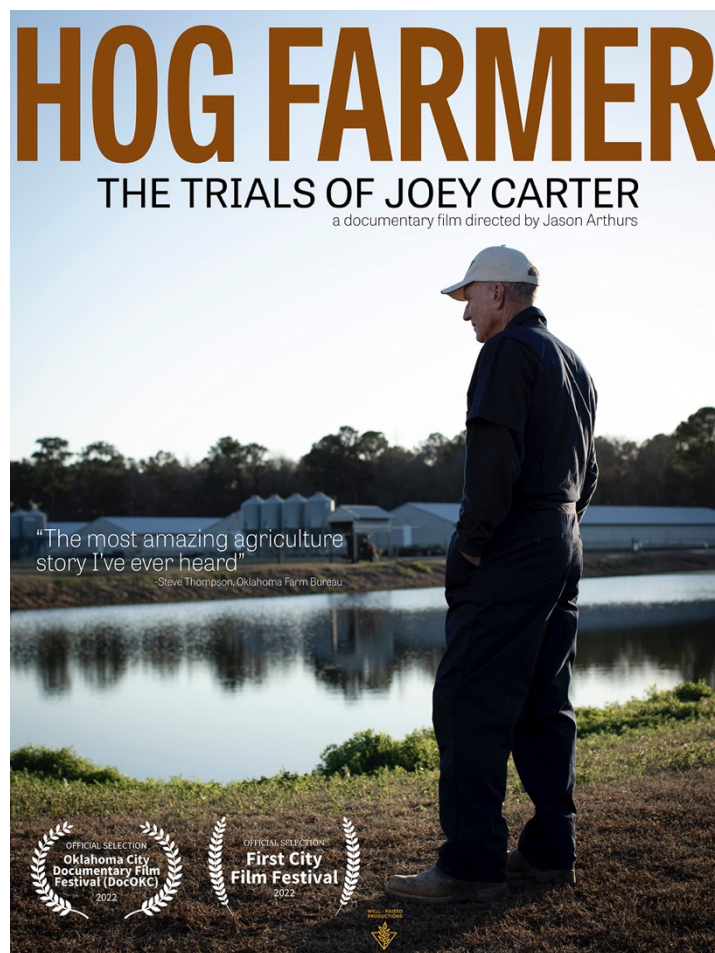
MOVIE NIGHT! Hog Farmer – The Trials of Joey Carter

N.C. Cooperative Extension, Granville and Person County Centers will host a “movie night” February 3rd (Granville) and February 10th (Person). The “movie” will be a documentary titled *Hog Farmer: The Trials of Joey Carter*. This documentary tells the story of a Duplin County, North Carolina hog farmer that found himself in the middle of a federal lawsuit involving some of the nation’s most ruthless lawyers and one of the world’s largest food companies.

The showing in Granville County will be at the Granville County Expo Center (4158 US Hwy 15, Oxford) on February 3rd. The doors will open at 6:00 pm and the movie will start at 6:30 pm. The showing in Person County will be at the County Office Building (304 S. Morgan St., Roxboro) in the auditorium. The doors will open at 6:00 pm and the movie will begin at 6:30 pm.

Admission is FREE, however donations will be accepted for the NC Agromedicine Institute in support of farmer mental health awareness and suicide prevention. There will be snacks and drinks available to purchase with any profits also going to the NC Agromedicine Institute.

For more information please contact N.C. Cooperative Extension, Granville (919-603-1350) or Person (336-599-1195) County Centers.



ABOUT N.C. COOPERATIVE EXTENSION

North Carolina Cooperative Extension is a strategic partnership of NC State Extension, The Cooperative Extension Program at N.C. A&T State University, USDA-NIFA, and 101 local governments statewide. Extension professionals in all 100 counties and the Eastern Band of Cherokee translate research-based education from our state’s land-grant universities, NC State and N.C. A&T, into everyday solutions. Extension specializes in agriculture, youth, communities, food, health and the environment by responding to local needs.