

SPREADIN' THE NEWS

Fall/Winter 2024



Fall and Winter Manure Application in the WLEB and Scioto Watershed

The days are continuing to get shorter, the air is progressively getting cooler, and harvest is in full swing; but have you given any thought about the status of your manure capacity and/or your planned manure applications for the remainder of 2024?

Surface Application

If you reside in the Western Lake Erie Basin (WLEB) or the Scioto watershed, it's important to keep in mind the manure application guidelines for your area, especially as we continue to move into the cold, wet weather season. The nutrient management standard (590) developed by the Natural Resources Conservation Service (NRCS) states that a producer should not surface apply manure or fertilizer when the following conditions are present:

- Soils are frozen
- Soils are snow-covered
- The top two inches of soil are saturated
- If there is a greater than 50% of precipitation of more than 0.5" within 24 hours of the application of **manure**.
- If there is a greater than 50% chance of rainfall of more than 1" within 12 hours of the application of **commercial fertilizer**.

Surface application is best paired with immediate incorporation (recommended within 24 hours of application) to avoid manure and nutrient runoff and to prevent odor complaints. According to Michigan State University, manure should be applied [in autumn] when soil temperatures are between 35-50 degrees Fahrenheit. Waiting until the soil cools limits nitrogen volatilization, protecting the fertilizer value (2012). If winter application is necessary and incorporation is not an option, fields only with at least 90% surface cover (growing crop, cover crop, good quality hay, all corn grain residue remaining after harvest and

Did you know?

Before you compost dead livestock, you **must** obtain an Animal Mortality Composting Certification. The certification course is available and can be completed through Ohio State University Extension. For more information, contact Crawford or Wyandot county extension at (419) 562-8731 or Marion county extension at (740) 914-3030.



all wheat residue cover remaining after harvest) should be applied to. Because manure is equipped with nitrogen, phosphorus, potassium and other micronutrients; it is in the producers' best interest to attempt to capture as much of the available nutrients as possible — immediate incorporation is recommended and is just one of the many ways to do so.

Direct Injection

In a study completed by the University of Minnesota Extension, injected manure applied on both corn and soybeans increased the overall yield of both crops respectively. The study also found that injecting manure with a low-disturbance system generated the most success in terms of managing crop stand (2021).

Direct injected manure can be a great way to capture the broad nutrient load of liquid swine or dairy manure, but some additional factors should be considered in opposition to surface application. In northwest Ohio, directly injecting liquid manure on subsurface (tile) drained fields should only be injected deep enough to cover the manure with soil. It is recommended to till the soil at least three inches below the depth of injection prior to application. In addition, vertical tillage can disrupt/close the preferential flow paths (worm holes, cracks, root channels, etc.) in the soil, which creates a condition for the soil to soak up the liquid manure. This is especially important if shallow tile are present (<2 feet deep). Ensure the soil and weather conditions are favorable before any manure application — surface or injection — to protect your available nutrients and the Waters of the State.

Variable Rate

No two fields, operations, or producers are the same. Soil tests and manure analysis should be thought of in the same fashion. It may seem simple, but variable rating your applications and considering what your soil and crops will need for the next season is important.

Stick to the 4R nutrient stewardship standard that focuses on the following:

- Right Source
- Right Rate
- Right Time
- Right Place

Each SWCD can assist you in developing a nutrient management strategy that is tailored to your operation. We can also assist with soil testing and manure analysis so that you can better understand what available nutrients you have access to.

Important Information

As producers, keeping current operation records is crucial for all of us. Having accurate records establishes a level of accountability for our farm management and allows us to reflect on our practice decisions and to make any necessary improvements as we see fit. When applying manure or any kind of commercial fertilizer, detailed records should be taken before, during, and retained after application for a minimum of four (4) years. A copy of the forecast is also required for all WLEB applications. The following are a few records that should be on file and should be maintained/updated regularly:

- 1) Soil tests — current within the last 3 years, in order to evaluate what nutrients and how much of each are needed to supply crop need.
- 2) Manure analysis — current within the last 3 years, in order to evaluate the content of the manure and to understand what nutrients and how much are being applied to supply crop need.
- 3) Date(s) of manure application(s)
- 4) Rate of manure applied (i.e., gallons or tons)
- 5) Loads of manure applied per day
- 6) Weather conditions of each application day
- 7) Previous crops grown on the field
- 8) Yields of past harvested crops



Profitable Pastures: 5 Tips to Maintain Your Pasture into the Fall & Winter Months

1) Weed Management

Managing pasture weeds through herbicide application in the early- to mid-fall will yield the most success, as weeds are beginning to uptake nutrients. Apply desired herbicides to the root base of the weed for the best results.

2) Fertilizer Application

Soil tests for crop as well as pasture fields should be completed every three years. If your soil test indicates a nutrient deficiency, a fertilizer application in mid-September or early October is acceptable, but it is recommended that you consult with your local agronomist first to determine needed fertility.

3) Re-seeding Grasses

Selecting a grass and legume mix of warm and cool season grasses is a good way to promote forage diversity. Frost seeding is a method that is recommended through the mechanical practice of broadcasting or drilling.

4) Stockpiling Forages

Stockpiling forages can serve as a great way for producers to maximize their grazing strategy. Remove livestock from pasture for the last 60-70 days of the growing season, allowing forage to accumulate. Return livestock back to the pasture when forage accumulation is adequate.

5) Winter Feeding Off Pasture

During the winter months, a producer can implement a variety of alternatives to avoid degradation of pastures from overgrazing and trampling. One option includes feeding livestock in a confined space or utilizing a sacrifice area/heavy use area (HUA) and grazing crop residue like corn stalks.



SAVE THE DATE

The Crawford, Marion and Wyandot Soil and Water Conservation Districts will be hosting a **Manure Management Meeting** on **Thursday, February 20, 2025**, at the Lykens Township Community Hall, 7191 State Route 19, Bloomville, Ohio, 44818 from 5:30 p.m. to 8:30 p.m.! Join us to hear from a variety of industry leaders and learn more about various manure application methods, soil testing, and much more! Be on the lookout for a formal invitation and follow the SWCD social media pages for the most current updates!

The event is free, but pre-registration will be required for all attendees. Dinner will be served and printed material will be provided for your reference.





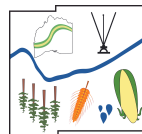
Greetings all! I hope you are having a safe and happy harvest, and if you have started any winter preparation, it is proving to be effortless! For our family and many others, this is one of the busiest, yet most enjoyable times of the year!

As the nutrient management technician for the tri-county area, I have the privilege of assisting producers in managing and improving their nutrient application and grazing strategies through a multitude of plans and programs. I am excited to be approaching my one-year anniversary with the Districts and look forward to continuing to work alongside all of you! As always, please feel free to reach out with any questions you may have regarding nutrient management or grazing.

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If you would like to receive this newsletter in electronic format, please contact Hannah Ziegler.

**Serving the Soil and Water Conservation
Districts in Crawford, Marion and
Wyandot Counties.**