Soil & Water news

Spring 2025

STOKES SOIL & WATER CONSERVATION DISTRICT (SWCD)
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IN THIS NEWSLETTER...

STOKES SOIL & WATER CONSERVATION DISTRICT
Yours for Life

24TH ANNUAL

FARMER APPRECIATION DINNER

APRIL 10, 2025

NORTH STOKES HIGH SCHOOL

5:30PM - 8PM

Auction - 7:30PM

BBQ, CHICKEN & ALL THE FIXINGS
(SERVING 5:30PM – 7:30PM)

ENTERTAINMENT:
WHITE OAK RAMBLERS BLUE GRASS BAND

Livestock Management Success Strategies: Rotational Grazing

Rotational grazing has quickly been gaining traction among livestock producers for its numerous environmental and economic benefits; it involves dividing a pasture into smaller sections and rotating livestock through them to allow for periods of grazing and rest for each paddock. This approach offers a multitude of advantages that can revolutionize how we manage our land and livestock.

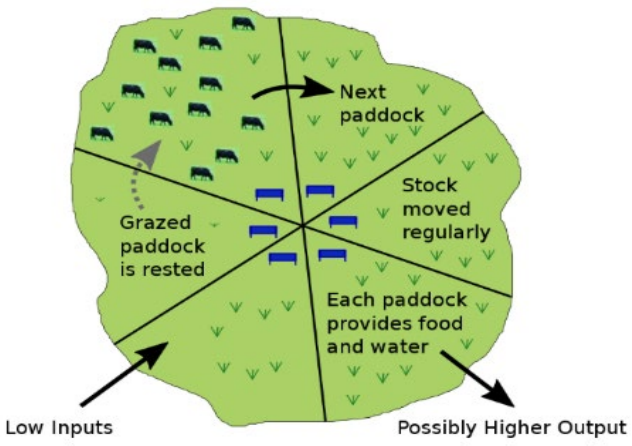
Rotational grazing **promotes healthier pastures.** By giving each paddock time to recover, plants can regrow and establish deeper root systems, leading to more resilient and productive plants. While helping maintain plant diversity, rotational grazing reduces the likelihood of overgrazing, which can degrade soil quality and lead to erosion. Rotational grazing ensures that pastures remain sustainable, providing a consistent source of nutrition for livestock, even well into the winter months where stockpiled grazing can benefit the herd and land as a whole. To optimize rotational grazing, producers can plant specific forage crops that incorporate legumes, grasses, and brassicas that are well suited for grazing due to their nutritional value and ability to improve soil health.

Rotational grazing can **improve soil health**. As livestock move through different sections of pasture, their hooves naturally aerate the soil, enhancing water infiltration and reducing soil compaction, as well as increases even distribution of nutrient deposition throughout the field. This process fosters a healthy soil ecosystem with the added benefit of increasing organic matter and beneficial microorganisms. Enhanced soil health translates to improved forage quality and increased pasture productivity, ultimately benefiting both the environment and the producers bottom line.

Along with environmental benefits, rotational grazing can significantly **enhance livestock health and productivity**. Livestock grazing on rested and nutritious pastures tend to gain weight more efficiently and exhibit fewer health issues. This method also allows producers to monitor and manage their animals more effectively, ensuring that they receive adequate nutrition and minimizing the spread of disease. Healthier livestock means higher quality products, therefore boosting the overall profitability of the farming operation.

Economically, rotational grazing can lead to **cost savings** for farmers. By maximizing pasture productivity and reducing the need for supplemental feed, producers are able to lower their feed costs. Healthier pastures and livestock can reduce veterinary expenses and improve overall farm efficiency. Rotational grazing is in most cases a low-cost, high-return strategy that can enhance the sustainability and profitability of farming operations.

However, implementing rotational grazing does come with its own set of challenges. Establishing and maintaining fencing for multiple paddocks can be labor-intensive and costly, though temporary fencing is a great way to cut costs and utilize the same materials in different areas. Producers must also develop a well-planned grazing schedule and continuously monitor pasture conditions, along with supplying an adequate water source in each section. **The Stokes Soil and Water Conservation District has programs that may be able to help alleviate some of these setbacks by offering cost share assistance with waterers, heavy use areas, division fencing, and agriculture wells where there is a resource concern.** The initial transition period can be stressful for both livestock and farmers as they adjust to the new system. These challenges require dedication and careful planning, but the long-term benefits of rotational grazing often outweigh these initial hurdles.



Though this type of management system requires some planning and upkeep, rotational grazing offers a host of benefits that make it an attractive option for modern livestock management. By adopting rotational grazing practices, producers can contribute to a more sustainable and productive agricultural system and as we are faced with growing environmental and economic challenges, rotational grazing stands out as a valuable tool in the pursuit of a thriving livestock operation. ♦

Building Healthy Soil with Crop Rotation

As spring approaches, farmers and gardeners alike are gearing up for the planting season. One of the most effective methods for maintaining and enhancing soil health is crop rotation. This age-old agricultural practice is gaining renewed attention for its ability to improve soil fertility, reduce pest pressure, and promote sustainable farming. Unlike monoculture, where the same crop is planted repeatedly in the same soil, crop rotation involves alternating crops with varying nutrient needs and growth characteristics. This approach helps prevent soil depletion and promotes a balanced ecosystem. Some of the important benefits of rotating crops are:

Improved Soil Fertility: Different crops absorb different nutrients from the soil. By rotating crops, farmers can ensure that essential nutrients are replenished, maintaining soil fertility. For example, legumes like beans and peas fix nitrogen in the soil, enriching it for subsequent crops.

Pest and Disease Management: Crop rotation disrupts the life cycles of pests and diseases. Planting the same crop repeatedly can lead to a buildup of pests and pathogens specific to that crop. Rotating crops reduces the likelihood of pest and disease infestations, minimizing the need for chemical interventions.

Enhanced Soil Structure: Different crops have varying root structures that affect soil composition. Deep-rooted crops like alfalfa can break up compacted soil, while shallow-rooted crops can help prevent erosion. Rotating crops promotes a healthy, well-structured soil that supports robust plant growth.

Weed Control: Certain crops can outcompete weeds, reducing the need for herbicides. Crop rotation can help manage weed populations by varying the planting schedule and disrupting weed growth patterns.

Increased Biodiversity: Crop rotation encourages biodiversity by incorporating a variety of plants into the farming system. This diversity benefits soil health, supports beneficial insects, and contributes to a more resilient agricultural ecosystem.

Tobacco, soybeans, and corn are common crops in many of our local farming systems and are easily rotated to maximize soil health. Tobacco is a heavy feeder that depletes soil nutrients, particularly nitrogen. You can follow tobacco with legumes that will fix nitrogen in the soil and replenish nutrients. Soybeans are legumes that improve soil fertility by fixing atmospheric nitrogen. After soybeans, plant a nitrogen-demanding crop like corn to take advantage of the increased nitrogen levels in the soil. But because corn is a heavy feeder, it greatly benefits the soil to follow it with a cover crop or another legume to prevent soil depletion and maintain fertility.

Implementing crop rotation requires careful planning and knowledge of crop families. Plan your rotation by creating a multi-year plan that outlines which crops will be planted in each field or garden bed. Consider the nutrient needs, growth habits, and pest susceptibility of each crop. Rotate crops from different botanical families. Regularly test your soil to track nutrient levels and adjust your crop rotation plan accordingly. Soil testing can also help identify deficiencies and guide your fertilization strategy. Contact the Soil & Water office for guidance on soil management and crop rotation practices. ♦

FUNDING ASSISTANCE DEADLINE APPROACHING

The Stokes Soil & Water Conservation District is still accepting applications for the 2025 Program Year of Cost Share funding to install best management practices that prevent erosion and improve water quality and quantity on agricultural land. **We specifically have funding remaining for a well that will provide water for agricultural use only, as well as funding for cover crops, stream exclusion systems, and many other practices.** Call us for more information about programs and services that our office can provide, or visit our website at www.stokesswcd.org ♦

STUDENTS WIN LOCAL POSTER, ESSAY, & SLIDESHOW CONTESTS

On February 13th the Stokes SWCD held its annual county-wide poster contest (for students in grades 3-5), essay contest (for students in grades 6-8) and the slideshow contest (for students in grades 6-8). The contest theme was "Wetlands Are Wonderful". Congratulations to the students listed below! These students will be recognized and given awards at the Stokes Soil & Water Banquet in May.

3rd, 4th, & 5th GRADE POSTER CONTESTS

3rd Grade 1st Place – June McCollum (Nancy Reynolds Elem.)
3rd Grade 2nd Place – Faith Mecimore (Nancy Reynolds Elem.)
4th Grade 1st Place – Adeline Schell (Mt. Olive Elem.)
4th Grade 2nd Place – Ivy Martinez (Nancy Reynolds Elem.)
5th Grade 1st Place – Laughter Jessup (Nancy Reynolds Elem.)
5th Grade 2nd Place – Erin Bullins (Nancy Reynolds Elem.)

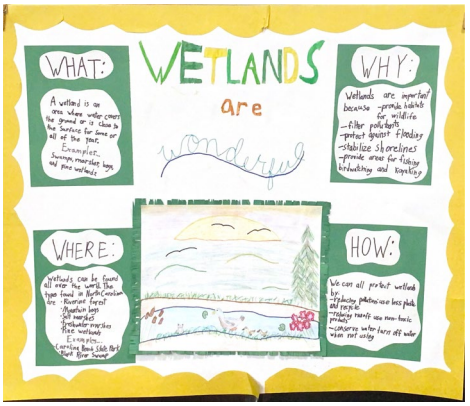
6th & 8th GRADE SLIDESHOW CONTESTS

6th Grade 1st Place – Marcus Goolsby (SEMS)
6th Grade 2nd Place – Mason Nelson (SEMS)
7th Grade 1st Place – Erica Pettitt (CGMS)
8th Grade 1st Place – Araya Wilson (PGMS)
8th Grade 2nd Place – Kourtney Pyrtle (PGMS)

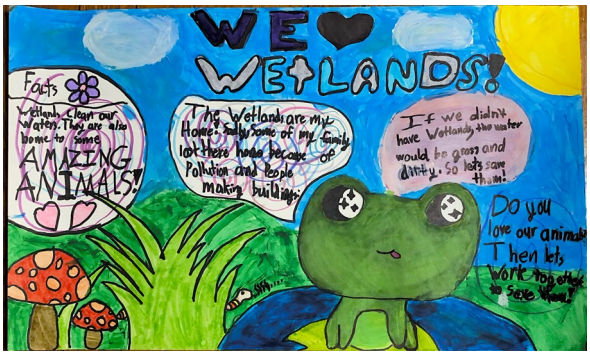
Pictured are 1st place posters for each grade level. ◆

6th & 8th GRADE ESSAY CONTESTS

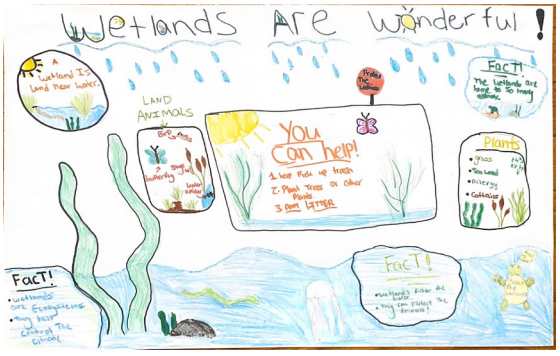
6th Grade 1st Place – Mason Nelson (SEMS)
6th Grade 2nd Place – Daemyn Freeman (SEMS)
8th Grade 1st Place – Allie Joyce (PGMS)
8th Grade 2nd Place – Austin Pettitt (CGMS)



1st Place 3rd Grade Poster



1st Place 4th Grade Poster



1st Place 5th Grade Poster

NOW ACCEPTING RESOURCE CONSERVATION WORKSHOP APPLICATIONS

Get Your Hands Dirty at the Resource Conservation Workshop!
Ready to swap screen time for stream time? The **Resource Conservation Workshop** is a weeklong deep dive into the world of conservation, where you'll explore natural resources, tackle real-world environmental challenges, and get hands-on with soil, water, forestry, and wildlife. This isn't just sitting in a classroom—think field studies, outdoor adventures, and behind-the-scenes tours of conservation hotspots. Plus, evening sessions help you navigate college and career choices.

You'll be **living the college life** at NC State, staying in dorms, meeting awesome people, and learning at places like Williams Hall, Lake Wheeler Soils Field Lab, Falls Lake State Recreation Area, and Clemmons State Educational Forest. It's the perfect mix of hands-on science, outdoor exploration, and future-planning.

Bonus: It's free to attend (the Stokes Soil & Water Conservation District will sponsor one student to attend the workshop by paying all fees). If you're in the 9th, 10th, or 11th grade and are curious about how to protect the planet—and want to level up your skills for the future—this is the workshop for you. To apply contact the Stokes Soil & Water Conservation District office at 336-593-2490 or email Janice Pack at jpack@stokesswcd.net. **The application deadline is April 1st, 2025.**

The **2025 Resource Conservation Workshop will be held June 15th -20th** at NC State University in Raleigh. Again, **students must be in 9th, 10th, or 11th grades to be eligible**, so contact Stokes Soil & Water today to get started on the application process. All applications will be reviewed by the Stokes Soil & Water Board and a student will be selected to attend the workshop on April 23rd. ◆