

VOL. 29 ISSUE 2

# Soil Conservation News

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## *Business as Usual*

We are sure most of you have heard the FSA office next door has closed. You have also been told your FSA records are being transferred to another county.

The NRCS and SWCD are staying where we are and we plan to conduct business as usual. Unless you ask to have your NRCS records moved to another county they will stay right here.

Should you choose to have your records moved to another county please call us or the county where you want your file moved to and we will send them your information.

If you are applying for federal program nothing will change. HOWEVER, if you plan to use STATE COST-SHARE check with the Soil and Water Conservation District in the county you plan to move to and ask what their policy is for using their state cost-share funding in another county.

Each county receives limited amounts of state cost-share funding for each resource concern. Some counties prefer to spend the amount allocated for their county only in the county it is allocated for or give first priority to projects in their county. Some counties have longer waiting lists for state cost-share assistance. This needs to be taken into consideration before you move your records.

If you have any questions or concerns, please call us and we will help you the best way we can.

## *Farm Facts*

- *Today the average U.S. farmer feeds 155 people.*
- *In 1960, a farmer fed just 26 people.*
- *Farmers are a direct lifeline to more than 24 million U.S. jobs in all kinds of industries.*
- *Today's farmer grows twice as much food as his parents did-using less land, energy, water and fewer emissions.*



## ***Making Silage from Drought-Damaged Corn***

Dry conditions around the state have many corn producers wondering about making silage from drought-damaged corn. Although silage made from drought-damaged corn is usually not as good as that made from unstressed corn, drought-damaged corn can make good livestock feed. As a rule, drought-damaged corn will have 85 to 95 percent of the feeding value of normal corn silage. Ideally, corn silage would be 60 to 70 percentage moisture at harvest. If drought-damaged corn contains less than 60 percent moisture, producers could add some water at the silo. However, when drought slows plant growth and delays maturity, the moisture content is often higher than is suggested by the appearance of the crop. Taking the time to check the moisture content before harvesting could save a lot of trouble later. MU publication G3151 (<http://extension.missouri.edu/p/G3151>) contains detailed information on how to measure the moisture content of silage using a microwave oven.

Drought-damaged corn should be chopped to 3/8 to 1/2 inch in length. This length of chop should help in packing the silage to exclude as much oxygen as possible. Producers should also sharpen the knives on their equipment before making silage. Other tips include filling the silo quickly and packing the silage as tightly as possible. Remember, to make good silage, oxygen should be excluded at all points. One concern with drought-damaged corn is high nitrate levels in the silage. High nitrate levels are frequently found where high levels of nitrogen fertilizer were applied and where drought-damaged corn is chopped a few days after a rain.

Other factors that contribute to high nitrate levels in corn silage are cloudy weather, extremely high plant populations and shortages of soil phosphorus and potassium.

Ensiling drought-damaged corn is preferred to greenchop because during the fermentation process, the nitrate content can be reduced by 20 to 50 percent. If a producer suspects that the crop may have high nitrate levels, they should have it analyzed before harvest, if possible. One word of caution: corn with high nitrate levels produces more silo gas (mainly nitrogen dioxide or nitrogen tetroxide) than normal corn silage. During the fermentation process, a portion of the nitrate in corn silage is converted to nitrogen dioxide or nitrogen tetroxide; the higher the nitrate levels in the plant, the more silo gas that is produced. The red-dish-yellow fumes of silo gas often smell like chlorine bleach, and silo gas is toxic to humans. Remember that silo gas is heavier than air and thus tends to accumulate in low areas.

Most often, this is a problem for producers with upright silos, as the silo gas tends to accumulate in feed rooms at the bottom of silo chutes. Silo gas can be a problem for other silage storage systems as well and one should exercise caution around silos during the filling and fermentation process.

If producers have corn with high nitrate levels, there are a few things they can do.

First, they might delay harvesting until the plant begins to "outgrow" the nitrate accumulation. Usually, drought-damaged corn will have normal levels of nitrates after 10 days to two weeks of normal growth (once the drought ends!).

Second, producers might increase the cutting height to 8 or 10 inches. Nitrate levels are usually highest in the lower part of the stem, so increasing the cutting height can help lower nitrate levels in silage.

Finally, if they have high nitrate corn silage in the silo, they could dilute the silage in the ration with other low-nitrate feedstuffs.

Several producers have asked about making "big round bale silage" or baleage from drought-stressed corn. For those not familiar with the practice, this is simply baling high moisture forage and then wrapping the bales with plastic film to exclude oxygen. This could be a way to store the crop if typical silage-making equipment is not available, though corn is difficult to run through a standard round baler. Balers that have recutters to reduce particle length will make better silage out of corn than will balers without this equipment. Even for balers with recutters, corn stalks are prone to poking holes in the plastic film and thus spoiling silage. While 4 mil plastic thickness is recommended for normal grass silage, drought damaged corn made should be wrapped to a 6 mil thickness.

Harvesting drought-damaged corn for silage can be a way to salvage an otherwise useless crop. Paying close attention to moisture content, length of cut, packing and nitrate levels in drought-stressed corn cut for silage will help make the most of a bad situation. Source: Rob Kallenbach, MU Extension Forage Specialist 573-884-2213

## Be a Friend to Pollinators



*Did you know?* A world without pollinators would be a world without apples, blueberries, strawberries, chocolate, almonds, melons, peaches, or pumpkins.

Three-fourths of the world's flowering plants depend on pollinators to reproduce. Most fruit, vegetable, and seed crops—and other plants that provide fiber, medicines, and fuel—

are pollinated by animals. Some scientists estimate that one out of every three bites of food we eat exists because

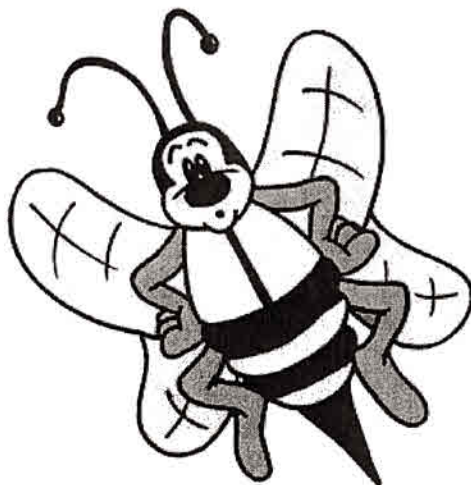
of animal pollinators like bees, butterflies and moths, birds and bats, and beetles and other insects.

Pollinators visit flowers in their search for food (nectar and pollen). During a flower visit, a pollinator may accidentally brush against the flower's reproductive parts, unknowingly depositing pollen from a different flower. The plant then uses the pollen to produce a fruit or seed. Many plants cannot reproduce without pollen carried to them by foraging pollinators.

Bees, bats, and other animal pollinators face many challenges in the modern world. Habitat loss, disease, parasites, and environmental contaminants have all contributed to the decline of many species of pollinators.

You can help provide food and habitat for pollinators to help them thrive.

- Use pollinator-friendly plants in your landscape. Shrubs and trees such as dogwood, blueberry, cherry, plum, willow, and poplar provide pollen or nectar, or both, early in spring when food is scarce.



- Choose a mixture of plants for spring, summer, and fall. Different flower colors, shapes,

and scents will attract a wide variety of pollinators.

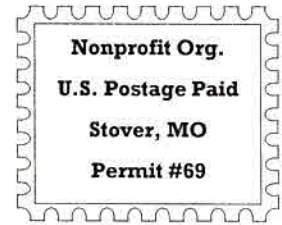
- Reduce or eliminate pesticide use in your landscape, or incorporate plants that attract beneficial

insects for pest control. If you use pesticides, use them responsibly.

- Renew forage and nesting habitats by adding flowering plants, hedge rows, and other

Morgan County Soil and Water  
Conservation District  
100 S. Burke Street  
Versailles, MO 65084

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***"Return Service Requested"***

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## ***Accepting Sealed Bids for Root Plow***

We are currently accepting sealed bids for a root plow. A root plow is used to increase yields in fields with a hedgerow border. The plow is attached to a tractor's 3-point hitch, inserted into the ground and pulled through the ground parallel to the hedgerow. The plow will sever roots that could compete for moisture with the crop plants. The plow comes on a small 2 wheeled trailer.

Sealed bids will be accepted here in the office until 5:00 PM on October 5th and will be opened at the October meeting of the Soil and Water District's Board of Supervisors. The root plow may be viewed here at our office at 100 S. Burke Street. Bids should be brought in a sealed envelope marked "ROOT PLOW".

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on a basis of race, color, national origin, gender, religion, age disability, political beliefs, sexual orientation, and marital status. (Not all prohibited bases apply to all persons.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET center at (202)720-2600 (voice and TDD).

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**To send registration form  
or for more information  
contact.**

*Morgan County, SW/CD  
100 S. Burke Street  
Versailles, Mo 65084  
573-378-5822 Ext. 101*

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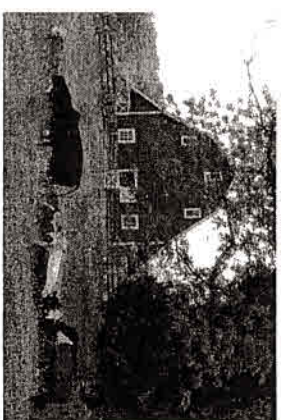
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## Morgan County Intensive Grazing School

Sept. 20th and 21st

Sim's Meeting Room  
Fourth Floor  
Morgan County  
Courthouse



Nonprofit Org.  
U.S. Postage  
Paid  
Stover, MO  
Permit #69

## Management Intensive Grazing

In this day and time, we must all learn to manage efficiently to stay competitive. This is particularly true in the forage and livestock world. Our management techniques determine the success of our project. Management intensive grazing includes understanding the components of a successful grazing system and learning the management techniques to make the system work for you.

Sound grazing management includes four basic factors. These factors will be the basis of a total system approach. Managing a grazing system to reach its full potential should be the goal of all farms.

Management intensive grazing is a goal driven approach to forage-livestock management. In this grazing school, you will learn to set goals and be given information to help you achieve these goals.

### DSP-3

#### Planned Grazing System

The state cost-share program has implemented a cost-share practice to assist landowners in developing a grazing system. This practice is referred to as DSP-3. The DSP-3 practice has stipulations to qualify for cost-share funds. One of these stipulations include the attendance of a certified management intensive grazing school.

This school is an opportunity to increase grazing capacity, and also meet the requirement of attending a grazing school for the DSP-3 cost-share practice participation.

## School Information

**Date:** September 20th 3:00 PM to 9:00 PM

September 21st 9:00 AM to 5:00 PM

**Location:** Sim's meeting Room

4th Floor Morgan County Courthouse

### Information to be covered includes:

- Basic grazing concepts & resource evaluation
- Soils (fertility, manure distribution, pasture suitability groups & layout design)
- Pasture growth & species
- Livestock nutrition
- Layout & design
- Fencing & watering
- Economics
- Managing the total system

## Registration Information

The cost of the two day Intensive Grazing School is \$75 per person. Two people may attend together and the cost will be \$100 per couple. Couples will be given one set of course material to share.

The fee includes the cost of the resource books and other handout materials pertinent to the course, as well as lunch and refreshments for both days. Registration for the school must be paid in advance.

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Method of Payment

Check

Cash

**Pre-payment is required for registration on first come first come basis. Send your registration form, along with payment to the address listed below. Make checks payable to :**

Morgan County Soil and Water Conservation District

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Versailles, MO 65084

Phone: 573-378-5822

Fax: 573-378-6163

E-mail: paty.witrock@swcd.mo.gov

### Sponsored by:

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