Pesticide Collection for Farmers & Households

We will have a pesticide collection, Monday, March 28, 2016, in Texarkana at the Four States Fairgrounds, 3700 East 50th Street, Texarkana, AR, from 8:00 AM – 1:00 PM. No pesticides from businesses, pesticide production facilities, pesticide distributors or pesticide retailers will be accepted.

If you miss this date, they will be available March 29th in Ashdown and March 30th in Hope.

**Texarkana, March 28, 2016**

**ITEMS ACCEPTED**
- Fungicides
- Herbicides
- Insecticides
- Rodenticides
- De-wormers
- Fly-tags
- Fertilizers containing herbicides or pesticides

300 Days of Grazing Scheduled for Texarkana

Livestock producers can learn to shave dollars off expensive winter feeding during the 300 Days of Grazing field day Tuesday, July 19, 2016, at the Four States Fairground Ag Learning Center in Texarkana.

The 300 Days of Grazing program is to help producers improve their forage systems. The program is based on demonstrating 8 management practices. The program fits both small & large operations as well as for horses & small ruminants.

The program runs from 6:00 to 8:00 p.m. Participants can register for the event by calling Jennifer at 870-779-3609.

"Winter feed costs are often the most expensive part of cattle input costs. Using best management practices and complimentary forages can reduce supplementation and stored feed costs with little or no impact on animal performance," said Paul Beck, professor-Animal Science, for the University of Arkansas System Division of Agriculture.

The program’s managers say that producers may not always achieve a grazing season of 300 days during their first year, but they can get closer to the goal with each practice they adopt. Continual planning of forage management practices at least one season ahead can influence the availability of forage.


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Spring is a busy time for cattle producers so we would like to share a few pointers for this time of year.

To learn more about what all we offer, please visit our website at [www.uaex.edu/counties/miller](http://www.uaex.edu/counties/miller) or like us on facebook at [https://www.facebook.com/millercountyuaex](https://www.facebook.com/millercountyuaex).

Sincerely,

Jennifer Carraway
County Extension Agent-Agriculture
Why Soil Test?

Your soil is so much more than just dirt. It’s a matrix that teems with life, both visible and microscopic. The health of your soil – including its composition, its nutrients and its availability to hold water – is all essential to the lives it supports. If your garden or lawn isn’t looking so great, maybe it’s time to see how your soil is doing.

One reason for soil sampling could be to save money. For instance, if you have a 40-acre field that needs 60-0-60 but, because you didn’t have that analysis, you applied 300 pounds of triple 19.

If you had received and followed the soil recommendation, you might have applied:

**Urea** – 60/.46 = 130 lbs x .15 = $19.50

**Potash** – 60/.60 = 100 lbs x .1795 = $17.95

**TOTAL = $37.45**

However, if you applied triple 19 (because you didn’t have a soil analysis), the cost might be:

300 lbs. triple 19 x .2195 might cost

$65.85

$65.85 – 37.45 = 28.40 x 40 acres = $1,136.

(Costs are comparable estimates only and may not reflect current prices.)

Commercial & Non-Commercial Certification

Applying pesticides requires appropriate education and training to assure safe and effective use. Pesticide Education is the responsibility of the Arkansas Cooperative Extension Service. Pesticide Licensing and Certification, and the Training for Certification, are the responsibility of the Arkansas State Plant Board. Contact the Plant Board for information regarding certification and recertification exams and training sessions.

The schedule for the commercial & non-commercial initial certification training and testing classes have been posted to the following website – [http://www.uaex.edu/farm-ranch/pest-management/education-licensing.aspx](http://www.uaex.edu/farm-ranch/pest-management/education-licensing.aspx). These are the trainings that prepare applicators for tests they need to take. The tests are given at the end of the six-hour training session. This is only for the agricultural type categories, not the lawn care & turf/ornamental categories.

It’s Time to Spray for Buttercup

It’s time for producers to start thinking about spraying. Buttercup is a common weed found in many hay fields and pastures. The best time to spray is late February/early March before it flowers.

Buttercup is easily controlled with 2,4-D Amine at 1 to 2 pints per acre. Metsulfuron 60 DF, Cimarron Plus, Grazon P+D, Grazon Next HL, and Dicamba + 2,4-D.

Not only are some weeds toxic to cattle, but weeds adversely affect livestock operations. Weeds compete with desirable pasture grasses and legumes for nutrients. Some are unpalatable; livestock will not eat them so less feed is available in the pasture, says Dr. Fernandez. Some weeds cause injuries or pain if thorny.

“Weed control can be an effective way to increase production by improving forage availability,” says Dr. Fernandez. Mowing, grazing, improving soil fertility and herbicide spraying are some of the ways to control weeds. Mowing should be done in the boot stage before flowers emerge. Weeds can flower and set seed very quickly. Once the seeds develop, mowing just spreads them further into pastures.

Some weeds are both palatable & nutritious early in the growth, and livestock will readily graze them. To control weeds by grazing, subdivide weedy pastures, and place a high concentration of animals on one paddock. The animals will eat or trample the weeds. The grass can recover once the animals are moved to the next paddock. Grazing should not be used to control toxic weeds.

Spraying now for buttercup will prevent pastures from turning yellow with flowers this spring. Thistles are best treated in the rosette stage before the flower stalk begins to grow.

Two common, toxic Arkansas weeds, bitter sneezeweed & woolly croton, are best treated in May & June.
Why Soil Test?

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What else can you spend an hour doing on the farm and save $1,000.00??

How do you take a soil sample?

First, draw a sketch showing the different fields or areas, such as:

Sample areas separately that have been/will be managed differently.

Rake aside mulch or surface litter.

Take sample with a tine sample

Bring one pint sample to our office.

Top 10 Liming Questions Answered

How long does it take for lime to work?

Since water is required for lime to react with the soil, effects of a lime application will be slower in a dry soil. It often takes a year or more before a response can be measured even under perfect conditions. However, a response may be observed within weeks of the application when soil pH is extremely low.

It is important to apply lime immediately after the growing season or crop removal to allow lime to react, correcting soil pH before the next growing season. The reactivity time also depends on the type of lime used. Liming materials differ widely in their neutralizing powers due to variations in the percentage of calcium and/or magnesium. Usually, liming materials with a high calcium carbonate equivalent (CCE) tend to neutralize soil acidity faster than those with a low CCE. The coarseness of the liming material will also influence how fast the lime will react. In other words, the finer the liming material, the greater the surface area, resulting in faster reactivity.

How little or how much lime can be applied at one time?

The amount of lime needed depends on the type of crop being grown. If growing continuous wheat or bermudagrass, it is only necessary to raise the soil pH above 5.5. Therefore, ½ ton or 25% of the soil test deficiency amount required to raise the soil pH to 6.8 is recommended. If growing legumes, the soil pH needs to be raised to 6.8. If surface applying lime, apply no more than two and one-half tons per acre per year. Up to four tons per acre may be applied if the lime is worked into the soil. In situations where soil pH is extremely low and a large amount of lime is recommended, it may be a good idea to spread the cost over two to three years by annually applying one-third or half of the lime needed.

Should lime be worked into the soil or placed on surface?

Whenver possible, tillage should be used as a tool to incorporate lime into the soil. When lime is worked into the soil, a larger portion of its surface area is exposed to the soil, allowing for faster reactivity.

Lime applied on the soil surface does not react as fast as lime incorporated by tillage, but what other option is there in perennial pasture systems?

Surface-applied lime moves into the soil at a slow rate.

It is similar to non-mobile nutrients in its movement in the soil. However, there are a few crops that have roots that feed close to the soil surface, such as bermudagrass and alfalfa. It has been documented that correcting pH in the top 2 to 3 inches of the soil has a positive effect on forage production. Even though it is best to incorporate lime whenever possible, it is still important to surface-apply lime to correct the soil acidity problem in established pasture-land and no-till cropping systems.

Does liming have an effect on herbicide activity? There are several herbicide families that are soil pH dependent. For example, low soil pH levels may reduce the activity or residual time of triazine (atrazine, Sencor) & sulfonylurea (Peak) herbicides. High soil pH levels (>6.8) tend to increase herbicde activity that increases the risk of crop injury and/or carryover potential.

What effect do different tillage systems have on soil pH?

All lime calculations are
Top 10 Liming Questions Answered (Continued)

Based on neutralizing the acidity in the top six inches of soil. As a result, different tillage systems affect soil acidity. A conventional tillage system involves several tillage passes over the field prior to planting. If the subsoil is calcareous, deep tillage may mix enough subsoil into the top 6" to maintain soil pH at the surface. Conventional tillage systems allow the opportunity to thoroughly mix applied lime prior to the next growing season. A conservation tillage system is not as aggressive as conventional. Fewer tillage passes may be implemented prior to planting, leaving greater than 30% crop residue on the soil surface. As a result, there is a limited amount of soil mixing. It is critical to closely monitor soil pH in no-till systems since most lime and dry fertilizer is surface-applied. Over time, the top inch of soil may become extremely acidic due to the surface application of fertilizer. However, soil surface pH can also become too high if a large amount of lime is applied at one time and left on the soil surface. It is best to apply small amounts of lime more frequently to maintain soil pH in no-till system.

Are dolomitic sources of lime better than calcitic?
In general, our soils are not magnesium deficient. Therefore, the use of dolomitic lime to increase soil magnesium levels is not important. Dolomitic lime may be recommended in pastures that have a history of grass tetany to raise forage magnesium levels. Both calcitic and dolomitic lime sources work well in raising soil pH. In our region, it is more important to look at cost effectiveness rather than the source.

What are the advantages & disadvantages of liquid lime versus dry lime?
Liquid lime is a formulation of approximately 50% high quality dry Ag lime (usually greater than 90%) and 50% H2O. It has the advantage of providing better uniformity of spread over the field in comparison to dry lime. There are 3 main disadvantages of liquid lime. (1) there are normally higher operational costs since you must haul both water and lime across the field. (2) under-liming is more likely with liquid lime due to spread rate. (3) more frequent lime applications are often needed since liquid lime reacts quicker than a dry lime source, but the rate may not be high enough to correct all the reserve acidity. One must be very careful of the rate at which liquid lime is applied. It is appealing to the producer because of its fast reaction time and uniformity advantages. It is important to know how much active ingredient or neutralizing power that you are paying for.

What is the cost effectiveness of liquid lime products versus agricultural lime?
To make a decision about the cost effectiveness of these two products, one must compare both the total neutralizing power/unit weight of each and the cost/unit weight of each. This area can quickly become rather complicated. If you have any questions in comparing the cost of liquid and dry lime, we would be more than glad to provide assistance.

Why is the difference in soil pH & buffer pH on the soil report?

pH is an unbuffered measure of the hydrogen ion concentration in the soil (active acidity) whereas buffer pH is a measurement of total soil acidity (active + reserve acidity). Soils with low buffering capacities (low cation exchange capacity or CEC) usually have less total acidity than soils with a high CEC if the pH is the same.

Therefore, it takes less lime to correct the total acidity in a soil with a low CEC. The buffer pH on the soil test report is used to calculate how much lime is needed to correct both the active and reserve acidity. When soil pH is 6.5 or greater, the buffer index will not be reported on the soil test report due to its irrelevance.

How often should I apply lime?
The answer to this depends on a variety of considerations. A soil with a low CEC does not require a lot of lime to correct soil pH, but may need to be limed frequently. A soil with a high CEC requires a large amount of lime to initially correct pH, but it may be several years before another lime application is needed due to its high buffering capacity. The level of production also dictates how often lime will be needed. As fertilizer is applied to enhance forage or crop production, the removal of essential plant nutrients from the soil also increases. As a result, lime may be needed more frequently to replenish removed nutrients. Example, the rate of nutrient removal from a pasture being hayed is much greater than a pasture being grazed. Therefore, the hay field may need to be limed more often.