

# Weir AGChoice Newsletter



## Protect Your Nitrogen

December 2013

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Greg Baird, Field Crops ASM

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I think everyone would agree this past growing season certainly had its challenges. With that in mind, I would like to share with you the techniques I noticed worked in stressful conditions this last spring and summer. In the corn fields, I noted during pre-harvest time there was one management practice that stood out between the high yielding areas and the problem spots. Both types had a sound agronomic plan where the nutrient requirements would be met. However, the best looking plants had a nitrogen stabilizing product applied in addition to normal fertilizer applications.

These products allow the nitrogen to stay in the soil until the plant can use it at the proper time instead of being leached away due to the excess moisture we had this spring. We need to recognize that these products do not enhance the nitrogen but simply allow it to stay in place so the nitrogen is still there when the growing plant needs it the most. Whether you are using dry or liquid as your source of nitrogen, there are proven products that are designed for both types of application. These products and methods should be viewed as a reasonably priced insurance policy that will protect the investment you have made along with assisting you in accomplishing the goal that everybody has: to have a high yielding crop.

In closing, as you review your input needs this winter, it is my recommendation that you strongly consider using these practices and products since you cannot control the amount of moisture during next year's growing season. However, in this plan of action, a producer is able to ensure their crop has the proper amount of nitrogen readily available in the ground for utilization. Be sure to visit with your nearest AGChoice location for availability and assistance on deciding which product fits your operation the best.

### Special Points Of Interest

- December Recipe



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# New Programs Being Offered at Weir!

**Bill Garner, Weir AGChoice General Manager**



Greetings from the Weir consolidated group. I hope that your holiday season is going well. It is that time of the year for prepay. These are the best prices of the year on your input costs and an opportunity to lock in a supply of fertilizer, seed, chemical, feed, and livestock equipment. We offer prepay on application as well as our other services. We will take prepay dollars December 16, 2013 through January 10, 2014.

The Weir consolidated group is now offering the MFA Crop Trak program. This service offers you a crop scout for your fields every week that the crop is growing. The crop scout will provide a written report on the stage of growth of your crop, disease pressure, weed pressure, insect pressure and provide you with an accurate timing of application of fertilizer and chemicals. These recommendations will be unbiased and are **not** meant to be sales calls. We have two crop scouts on staff that will be scouting crops, Alex Bolack and Kaleb Nickell.



Benefits to you, the grower, include time savings, an unbiased second opinion, an accurate timing of applications, another resource for production knowledge, and accurate records of field/crop production. Other advantages to the grower are increased production and more efficient use of fertilizer, chemical, and fungicide.

We will be scouting the three major crops of wheat, corn and soybeans. If needed, we can scout forage crops and specialty crops such as sunflowers and milo. Just give us a call, and we will be happy to have Alex or Kaleb contact you to visit about the program.

As always, we appreciate your business and hope everyone has a safe and happy holiday season. Remember that this is MFA's 100<sup>th</sup> anniversary so stop in and see the special products we have to commemorate the anniversary.



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**We hope that all of our customers had a very Happy Thanksgiving! Everyone at the Weir AGChoice Group would like to wish you a very Merry Christmas, and a Happy New Year! May all your travels be safe! And all the time spent with family and friends be blessed!**





# Fetal Programming Gold Star Mineral

**Jon Roberts, Areas Sales Manager Livestock Products**



When I was young, like many young folks who had working parents, I spent a considerable amount of time with my grandparents. As I made observations about the oddity of people, plants and critters, I turned to my grandfather for explanation of the uniqueness of certain individual organisms. One of his standard responses to my endless questions was that whatever I viewed as abnormal “was likely grown in a drought”.

At the time I didn't see the connection, but decades ago estute naturalists recognized that drought has a profound effect on the development of ecosystems and organisms. When you couple drought with other stressors like heat, parasites, and fescue toxicity, the impact can be far reaching. When feed resources are in short supply and cattle are allocated based on apparent need, the dry gestating cow seems to be placed at the bottom of the priority list. After all, a couple of the critical hurdles like conception and lactation are completed. Some of the conventional wisdom was to focus on and supplement in late gestation when 75% of the mass of the fetus is being developed. One critical



development that occurs in early gestation is the placenta and vascular system. This conduit and pipeline between the cow and fetus carries vital nutrients. If the placenta is compromised and not fully developed, it can restrict the flow of oxygen carrying blood and everything else the fetus needs to completely develop. This is the crux of the concept of Fetal Programming.

Researchers are now able to identify the metabolic factors that contribute to fetal programming, as well as begin to quantify the negative and far reaching effect it can have on offspring for more than one generation. There is no time in the life cycle of the cow that she can coast nutritionally. We are asking her to perform to her genetic potential every day she is on the place of operation. It is up to the producer to recognize when drought or other forces compromise the nutrient profile of that cow so they can intervene.

Some producers see a problem and address it. This reactionary style of management is not always the best approach. Anticipating problems on the horizon and implementing an intervention plan ahead of the problem can pay dividends. If you have time to move a cow one body condition score, it costs less than when you have to add weight in a hurry. Drought, or most any stressor for that matter, can compromise the immune system and hinder nutrient uptake of animals. One way to circumvent this problem is to make nutrients more bioavailable.

Gold Star mineral with Bioplex Chelated Trace Minerals can have a positive effect on these stressors. To take it a step further, the Ricochet mineral product has additives to enhance the quality and quantity of colostrum for newborn calves.

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*...Continued from Page 3* When your cows are out there fighting against environmental forces every day, it is important that we give them the supplementation to offset and guard against production loss. Mineral is a good tool to deliver profit enhancing additives to your cowherd. Whether it be antibiotics, larvacides, ionophores, nutraceuticals, essential oils, or highly digestible microminerals, Gold Star® can deliver it all for you.



An ongoing and aggressive mineral program is exactly the kind of hedge against impending environmental forces that good cattlemen utilize. If you want to position your cowherd for whatever forces nature might bring, stop by your local MFA and pick up some Gold Star Mineral. It's some of the best insurance a cattleman can buy. From our outfit to yours, I hope this season brings prosperity to your camp!

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## Winterize Your Waterers

**Ben Murray, Farm Supply Manager**

By the time you sit down to read this, temperatures will be on their way down as winter approaches. If you have not already done so, now is the time to get your pressure waterers ready before the cold weather really sets in. There are some simple checks and repairs to perform now that will save you headaches later.

Now is the time to do the repairs, especially if you had trouble last year. Replacing thermostats and heat elements during 40-50 degree weather is better than waiting until it is 20 degrees, snowing and a blowing wind. Make sure to seal around the bottom of the waterer and pad. This will help keep the cold out, keep it from freezing and lower your utility bill.

Leaky valves create a mess and cost you money in wasted water. Often the repair is as simple as replacing the diaphragm on the plunger. If the valve has this problem on a frequent basis, the orifice size needs to be checked. Much of the area is serviced by rural water districts. It is not uncommon for line pressure to be above 60-70

psi, especially at night when use is low. Most valves are designed to operate at 40-50. Using a smaller orifice will help, or sometimes a pressure reducer is required.

Proper water level is important on the Mira-Fount and other energy-free waterers. If the water level is too high, it is difficult for livestock to use and promotes icing around the drinker balls. If the water level is too low, the cold air gets in and freezes the unit. The proper level will leave just enough gap around the drinker ball (slight movement of the ball in the opening) for the waste water to drain back as the animals drink.



Addressing these problems now will save you the trouble of doing so on a dark, snowy night.



# What Kind of Tool is Veris Technology and Where Can It Be Used

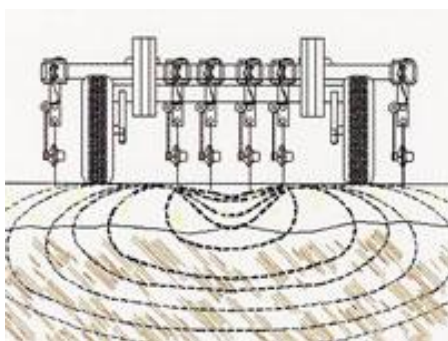
**Eric Preston, SW MO/SE KS Regional Precision Sales Manager**



For this article I have decided to talk about Veris Technology and how it can be used in our area in the future, and I am going to try and answer some of the basic questions about Veris Technology. One of a Veris machine's primary uses is to map "Soil EC."

## What is 'Soil EC'?

Soil EC is Soil Electrical Conductivity – a measurement of how much electrical current soil can conduct. It's an effective way to map soil texture because smaller soil particles, such as clay, conduct more current than larger silt and sand particles. Soil EC measurements have been used since the early 1900's - Veris mobilized the process and added GPS. As the Veris EC cart is pulled through the field, one pair of coulter-electrodes injects a known voltage into the soil, while the other coulter-electrodes measure the drop in that voltage. The result: a detailed map of the soil texture variability in the crop rooting zone.



## What can be done with this detailed soil texture map of the crop rooting zone information?

Soil texture relates to factors that have a major impact on productivity, such as: water holding capacity, Cation Exchange Capacity (CEC), topsoil depth, and nitrogen use efficiency. Therefore, EC maps often correlate well with crop yield maps. An EC map is a fundamental layer needed for precision action, such as guided soil sampling, yield map analysis, variable seeding, variable yield goals/ N, and land-leveling.

## In summary

I believe that the Veris Technology is something that will be a great tool in our area in the near future. Having accurate soil texture maps are going to be very critical in determining variable seeding rates and also helping refine nutrient application timing and rates. I believe that this technology will be just as valuable as the grid sampling that has been done in the last 2 years and will become a common practice very soon. This article has barely even scratched the surface on how Veris Technology can be used. To learn more, ask your local AGChoice location about Veris availability and pricing.

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# Kill Next Year's Thistles Now for Better Hay in 2014

David Moore, CCA, Range and Pasture Specialist

Fall is definitely upon us now, and thank goodness we have some grass again! Most of our spraying for the year is behind us now. However, we can attack next year's thistle crop this fall.

The three primary thistles we have here in Southern Missouri, Kansas, and Oklahoma are the Bull Thistle, Musk Thistle and Canada Thistle. The Canada Thistle is harder to kill, so we do need to try and identify what type we have. I'll give a brief description of each:

The **Canada Thistle** is a perennial and grows from rhizomes, so it tends to grow in patches or clumps. It does not typically grow a rosette in the fall, as do the Bull and Musk Thistle. The stems and flowers of the Canada Thistle do not have spines on them. Young leaves may have some fine hairs on them.

The **Bull Thistle** is a biennial, so it begins life as a rosette in the fall, then bolts upright in the spring. The rosette of the Bull Thistle is covered in coarse hairs. Stems and flowers have spines. The leaves arrange themselves in spiny "wings". This is the spiniest thistle we have here.

The **Musk Thistle** is also a biennial, so look for the rosette in the fall. Musk Thistle rosettes lack hairs on the upper leaf surfaces and are often more pale green than the Bull Thistle. Stems and flowers have spines.

In a nutshell, if you see rosettes in the fall, we are dealing with the Musk or Bull Thistle. When looking at plants that have bolted upright already, if the stem has no spines, we are looking at the Canada Thistle.

If the vegetation in our pasture and hay fields will allow spray to reach the rosettes, then we can expect a fall spraying to reduce our spring thistle population greatly. We have to remember that we will be hitting Bull and Musk Thistle only in the fall. Canada Thistles can be addressed next spring.



Canada Thistle



Bull Thistle



Musk Thistle

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*...Continued from Page 8* A November/early December application (when the temperature is 45° or above) of 2 pints of Forefront HL per acre or 2 ounces of Chaparral per acre or 1.5 quarts of Grazon P+D will do a nice job. Don't forget to use either Torrid or Astute as your surfactant. This means the difference between success and failure. The proper rate for either is 1 quart per 100 gallons of solution. To spot spray, mix 2 ounces of Forefront HL and 1/2 ounce of Astute per gallon of water.

I am often asked, "At what point should I sacrifice my clover to kill my weeds?" After looking at many of these fields, I have come to the conclusion that if you are asking the question, then it is time to spray now. A healthy, weed free grass stand will produce more pounds of beef than a weedy field with clover. After the weeds are controlled, and residual herbicide has dissipated, we can reintroduce clover.

Fall is also a great time to soil test. Knowing what nutrients are lacking and what the pH is can help us to formulate a plan for healthy grass stands. High fertilizer values and two big drought years in a row have had a big impact on the health of our grasses, and it wasn't a good impact. Act now so we can go into spring in better shape than we are today...

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## December Recipe: French Apple Pie

With the holidays approaching, the big question always seems to be: "What should I make for the family dinner?!" Well here is the recipe! It adds a different spin to an old favorite. And come on, who doesn't love a piece of hot apple pie on a crisp fall day? As if the recipe wasn't already good enough, it really is "easy as pie"!

### Prepare pastry for one 9" pie crust.

#### Filling:

3/4 c. sugar  
1/4 c. flour  
1/2 tsp cinnamon  
Dash of salt  
6 c. sliced tart apples (About 6 medium)

### Crumb Topping:

1 c. flour  
1/2 c. firm butter  
1/2 c. packed brown sugar



### Directions

**For the filling:** Mix all ingredients together and pour into pie crust.

**For the crumb topping:** Mix until crumbly. Sprinkle crumb topping over pie filling until it is covered. Bake about 42-45 minutes at 350°...best served warm.

The AGChoice newsletter is coordinated by Linda Heady, Tammy Peak, and MacKenzie Oswald. It is printed through MFA in Columbia, MO. If you have any agronomy, feed, seed, animal health, or grain topics you would like us to address, please call Linda at (620) 421-5110 or Tammy at (620) 396-8554 or send an e-mail to lheady@mfa-inc.com or tpeak@mfa-inc.com.



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Weir (town): (620) 396-8554

Check Us Out on the Web at [www.AGChoice.net](http://www.AGChoice.net)!!!!

# Upcoming Events...

**Tulsa Farm Show**  
**December 12-14, 2013**  
**Thursday & Friday: 9 a.m. - 5 p.m.**  
**Saturday: 9 a.m. - 4 p.m.**  
**River Spirit Expo - Expo Square**

**The Western Farm Show**  
**February 21-23, 2014**  
**American Royal Complex**  
**Kansas City, MO**