# CFAES

# **COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES**









May 11 (Edition #146)

Soybean Planting Progress, Emergence & Misconceptions

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Expiring CRP Contracts Eligible for the Transition Incentives Program -Help a Beginning, Veteran or Socially Disadvantaged Farmer Victory Garden Seed Distribution Name that Tree Workshop Slated for June 29

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Hello Coshocton County!! This week's weather is just what we needed. It has been really great to see all the field activity across the county. It is impressive how much spraying, forage chopping, fertilizer application and planting that has been done already this week.

Today was Earth Day at Wills Creek. It was great to see many of our 5<sup>th</sup> and 6<sup>th</sup> grade students from the county learning about sustainability, agriculture, and agencies which help make our county a great place to live and work. We were excited to share Victory Garden seeds with the students to take home to their families. Kudos to US Army Corps of Engineers, Coshocton County Farm Bureau, the Ridgewood and River View FFA Chapters, and all the participating agencies for making this event a success!

Have a good and safe week!

Sincerely,

## David L. Marrison

# Coshocton County OSU Extension ANR Educator

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# Soybean Planting Progress, Emergence & Misconceptions

By: Laura Lindsey

Source: <a href="https://agcrops.osu.edu/newsletter/corn-newsletter/2022-13/soybean-planting-progress-emergence-and-misconceptions">https://agcrops.osu.edu/newsletter/corn-newsletter/2022-13/soybean-planting-progress-emergence-and-misconceptions</a>

Recent wet weather across the state has slowed soybean planting progress, but should be picking up with warmer and dryer weather. As of the last week of April, 2% of the soybean acres in Ohio were planted. Last year at the same time, 17% of soybean acres were planted. However, 2018 through 2020, planting progress was similar at 1-2%.

Table 1. Percent soybean acres planted in Ohio by week for the past five years (USDA NASS).

Week	2022	2021	2020	2019	2018
2nd Week of April	0%	1%	0%	0%	0%
3rd Week of April	0%	8%	0%	0%	0%
4th Week of April	2%	17%	2%	1%	1%
1st Week of May	*	20%	7%	1%	8%

<sup>\*</sup>Not reported yet reported when this article was written.

As soybean planting continues and plants emerge, here are some things to look for as well as some common misconceptions from soybean extension specialists across the U.S.

**What Matters at Planting and Emergence:** At this point in the growing season, obtaining a stand of sufficient plant population is the first step in ensuring maximum soybean yield. It is important to seed at a rate that will provide an adequate and relatively uniform stand. In Ohio, for soybean planted in May, we recommend a seeding rate of approximately 140,000 seeds/acre with the goal of at least 100,000 plants/acre.

**Soybean Emergence Misconceptions:** There are several common misconceptions about soybean emergence:

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Misconception	Reality
Soybean plants need to have uniform emergence and uniform spacing aka "the picket fence" to maximize yield.	Emergence uniformity is not critically important in soybeans. Recent research has shown planter downforce did not impact grain yield regardless of tillage, soil texture or gauge wheel type. Rate of emergence over four days was altered but did not result in yield differences. Additional research has shown no difference between random drop and precision planting until seeding rates were reduced to 40,000 seeds/acre.
Seed size of planted seed influences end of season crop yield.	Seed size can influence percent emergence (smaller seed size increased emergence 10%), but as long as an adequate stand is established, there is no influence of planted seed size on yield. Effect of seed size on emergence is dependent on soil texture, planting depth and environmental conditions from planting through emergence.
Supplemental nitrogen is essential to maximize yield in high yield environments.	Soybeans with active nodules <u>do not require additional nitrogen</u> , <u>even in high yield</u> <u>environments</u> . Yield responses to N are rare, unpredictable and not economically viable.
Suboptimal stands (<80,000 plants/acre) call for an automatic replant.	Visual stand assessment at VE often underestimates the total number of plants that will emerge. We often ask growers and crop consultants to wait until the VC growth stage to make the call about replanting. Even at suboptimal stands, an automatic replant is not always the best economic decision. Cost of replanting plus added planting date penalties must be considered before replanting.

For more information on soybean emergence misconceptions, this Science for Success video featuring my colleague Dr. Michael Plumblee from Clemson University: <a href="https://www.youtube.com/watch?v=MpdokEECT5M">https://www.youtube.com/watch?v=MpdokEECT5M</a> and also this Science for Success FactSheet: <a href="https://soybeanresearchinfo.com/wp-content/uploads/2022/01/Science-for-Success-Soybean-Growth-Stages-V3.pdf">https://soybeanresearchinfo.com/wp-content/uploads/2022/01/Science-for-Success-Soybean-Growth-Stages-V3.pdf</a>

# Corn Planting Progress in Ohio is Slow But Coming Along

By: Osler Ortez

Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2022-13/corn-planting-progress-ohio-slow-coming-

along

April was a difficult month for farmers in Ohio; conditions were cold. Some snow and late freeze events were part of the month. This was conducive to limited water evaporation/evapotranspiration, and hence, generally, soils stayed wet.

Getting into May, the first week was still wet with some more precipitations spread around the state. As we move forward into May, warmer and drier weather would help push planting progress around the state. According to models, chances for freeze in May seem to be over on a positive note. The last Ohio weather report can be accessed here for more information.

#### **Corn planting: USDA Crop Progress reports**

For the week ending on May 1st, 2022, corn planting progress in Ohio was at 3%, while emergence rates were virtually 0%, which is understandable due to the weather conditions outlined above. For the week ending on May 8th, 2022, corn planting progress in Ohio only increased to 5%, while emergence rates remained at 0%. Planting and emergence progress in 2022 is slower than records from past years. Progress in Ohio for the week ending on May 8th in 2021, planting was at 26% and emergence at 8%. If looking at the 2017-2021 averages for that same week, 27% of corn was planted, and 6% emerged.

On the other side of the Corn Belt (May 8th, 2022 report), states like Iowa (14% planted) and Nebraska (39% planted) have had stronger starts to the planting season. Like Ohio, closer east, Indiana (11% planted) and Pennsylvania (13% planted) are also having a slower start.

Certainly, some areas of Ohio can have more progress than others. The results presented in these reports can be variable, and they give a general understanding of the overall condition for each of these states. If you would like to see some more information on weekly Crop Progress Reports, you can access the USDA-NASS information here.

# Forage Quality Targets Based on Animal Class

By: Mark Sulc & Bill Weiss

Source: https://agcrops.osu.edu/newsletter/corn-newsletter/2022-13/forage-quality-targets-based-animal-class

The optimal time for making a first cutting of forages is fast approaching. But what is the optimal timing to take

the first cutting (or any cutting for that matter)? Many will answer by saying it is when you have time and there is a good weather window to get the forage cut and put up! Yes indeed, that is a valid answer. Both of those factors are important and can't be ignored. However, we know that forage quality declines as the crop moves into flowering stages. The first cutting is usually the highest yielding cutting, so we should try to aim for good quality for as much of it as possible!

But what is "good quality" forage? The correct answer is that it depends on what you feed it to. The concentration of neutral detergent fiber (NDF) is a

measure of most of the fiber in forages. The concentration of forage fiber increases with maturity and is negatively correlated with feed intake by animals and the energy concentration of the diet. With hay crop forages, digestibility of the fiber and NDF concentrations have a strong negative correlation so one can assume forages with greater NDF concentrations have fiber that is less digestible.

Below are good forage NDF targets to aim for when feeding different classes of livestock (Table 1). These are

general guidelines, but forage within these NDF ranges should provide good animal performance in properly balanced diets.

Table 1. Optimal ranges for forage neutral detergent fiber (%NDF) for different classes of livestock.

Forage type	Dairy cows: high producing & early lactating	Dairy cows: average producing (<27,000 RHA1)	Beef cows: Gestating	Beef cows: lactating	Horses
Legumes	35 – 40%	38 – 45%	50%	45%	42 – 46%
Grasses	48 – 53%	50 – 55 %	60%	55%	55 – 60%
Grass/legume mixture	42 – 46%	46 – 50%	52 – 56%	47 – 51%	48 – 52%

<sup>1</sup> RHA = rolling herd average, calculated as the total pounds of milk produced in the last 365 days for the average cow in the herd.

So how do these targets help us with harvest timing? How do we know when the forage growing in the field is approaching these targets? Many factors affect forage quality, but we can make some educated estimates. An article published last week in this newsletter explains how to estimate alfalfa NDF in the field and we are tracking alfalfa NDF in fields across Ohio each week for the month of May (see this week's article for updated estimates of alfalfa NDF).

The lower value of the NDF ranges in Table 1 should be the latest starting point to begin harvest, weather permitting, because the cutting, field curing, and harvesting process always results in higher NDF values than what the NDF value of the forage was at the time of cutting. Because forage quality changes so fast it is better to start too early than a little too late.

Grasses mature quickly and the optimal harvest window can be only a few days. In general, for high quality grass forage (50 – 55% NDF) suitable for lactating cows, the first harvest should be taken in late vegetative (pre-boot to very early boot stage) in the spring. The grass stem will have one to two palpable nodes (you can feel and see them on the lower stem) and no flowers have emerged. As soon as you see flowering heads emerging in the grass, the NDF is most likely just over 55%. As harvest is delayed, the NDF levels will quickly increase to 60% or higher. Maturity of the grass has a much bigger effect on forage NDF level than does grass species.

For subsequent harvests after the first, alfalfa can be harvested in the bud to early bloom stage (about every 30 days) for excellent quality. Bud stage alfalfa will usually contain 22% or higher crude protein (CP) and 40% NDF, while early bloom alfalfa will average 20% CP and 40 to 45% NDF. However, protein and NDF are not strongly correlated; often CP concentrations will be much higher or lower than these values. A good compromise to extend stand life of alfalfa in a dairy operation is to harvest at least one cutting during the summer months in the early bloom stage. The first two cuttings should be taken near 40% NDF, and later summer cuttings can be taken in the early bloom stage. The NDF content of alfalfa declines more rapidly with maturity early in the season, so the late summer harvests can be made at a later maturity stage without as great a penalty on forage quality. The PEAQ estimation procedure for alfalfa NDF works well in all cuttings and for all types of alfalfa, including reduced lignin varieties. But reduced lignin varieties will have slightly higher fiber digestibility than standard varieties across all levels of NDF concentration. So reduced lignin varieties can offer a wider harvest window to achieve acceptable fiber digestibility when compared with standard alfalfa varieties.

For high quality pure grass stands, subsequent cuttings of grasses after the first harvest should be taken every 24 to 28 days, depending on location. For example, in northeastern Ohio, cutting intervals of about 28 days have provided forage of adequate quality for lactating cows. Delayed cutting beyond these intervals greatly

reduces nutritional value of grass forage. Such cutting intervals are challenging, and that is why grass-legume mixtures should be considered if higher quality forage is needed. Legume-grass mixtures provide a much wider harvest window for good to high quality forage as compared with pure grass stands.

My hope is that this article helps you be alert and prepared to cut forages in a timely manner, and that the weather cooperates for a successful harvesting season this year!

# Focus on Optimizing the First Cut

By: Amber Friedrichsen, Hay and Forage Grower 2021 editorial intern

(Previously published in <u>Hay & Forage Grower: May 10, 2022</u>)

Source: https://u.osu.edu/sheep/2022/05/10/focus-on-optimizing-the-first-cut/

First cutting is just around the corner, and this initial harvest is an opportunity to target high forage quality and

yield. However, making the wrong move may create consequences that can

affect stands for the rest of the season.

Joe Lawrence, dairy forage systems specialist with Cornell University, says greater inclusion rates of high-quality forage in livestock diets can lower feed costs. He encourages farmers to prioritize first cutting over other operations and aim to cut forage at its peak fiber digestibility.

"Success culminates with putting planning into action when the crop tells you it is time to harvest," Lawrence states. "It is critical to be prepared to harvest at the optimum timing, even when that means parking the corn planter or putting other tasks on the back burner for a few days."

#### Start to finish

Before getting in the field, acknowledge the risks surrounding harvest. "The spring season on the farm is exciting, but also very busy, increasing the chances for accidents," Lawrence asserts. "Work with your harvest team to identify and mitigate potential

hazards and maintain balance between the critical time demands of this work and adequate breaks."

When it comes time to cut, adjust machinery to an appropriate cut height. The ideal cut height for legumes is roughly 3-4 inches, whereas grasses require at least 4 inches of stubble. Lawrence suggests working with equipment representatives to ensure proper machinery setup. This will help reduce leaf loss and minimize ash content in the harvested crop.

Utilize wide swathing techniques to prevent dry matter losses from respiration. Then, store forage according to quality to meet the needs of animals in different stages of production. Allocate the highest quality forage to lactating animals, as they will have the greatest nutrient demands.

"Once adequate inventories of lactating-quality forage are secured, attention can turn to forages for nonlactating animals," Lawrence says.

Continue to manage forage while it is in storage to limit shrink loss. Shrink not only causes forage quantity to decline, but it can negatively affect forage quality and palatability as well. Furthermore, high input costs make shrink an even bigger threat to an operation's expenses.

#### **Another reason**

Aside from improved forage quality, one benefit of an early first cutting is that more soil moisture is available for regrowth. Although wet conditions may sometimes delay first cutting, dry weather after a first cutting can negatively impact regrowth. The latter has become prevalent in Lawrence's home state.

"In most areas of New York, three of the last five years have resulted in dry conditions following first cutting

and persisting through July or longer," Lawrence notes. "This weather pattern led to a notable impact on second cutting – and sometimes third cutting – performance."

The dairy forage systems specialist recommends harvesting forage early when soil moisture is still generally sufficient. Doing so will give plants a strong start on regrowth and benefit overall production.

## Grass Tetany – A Complicated Disorder with An Easy Prevention

By: Dr. Jeff Lehmkuhler, Extension Professor University of Kentucky and Dr. Michelle Arnold, UK Veterinary Diagnostic Laboratory

Source: https://u.osu.edu/beef/2022/05/11/grass-tetany-a-complicated-disorder-with-an-easy-prevention/

Classic "grass tetany" is a rapidly progressing and potentially fatal disorder caused by low magnesium level in the blood, also known as "hypomagnesemia". It is usually seen in older, lactating beef cows when grazing young, succulent grass in early spring, particularly during cool and rainy weather. Other common names for this disorder, including spring tetany, grass staggers, wheat pasture poisoning, and lactation tetany, reflect the season of the year, symptoms seen, types of forage, or physiology of the animals most often involved.

Magnesium is an essential mineral as its presence is vital for many enzymes of major metabolic pathways, in normal nerve conduction and muscle contraction, and in bone mineral formation. Approximately 60-70% of total magnesium in the body is bound up in the bones. Grass tetany occurs when the magnesium (Mg) level in blood decreases rapidly, resulting in less than adequate Mg reaching the cerebrospinal fluid surrounding the brain and spinal cord. Without Mg present in spinal fluid, there is uncontrolled activation of the nerves supplying muscles throughout the body. This causes constant overstimulation and contraction of muscles, appearing first as nervousness then muscle stiffness and rigidity ("tetany"), that can progress to convulsions then death.

Maintenance of normal blood magnesium depends on daily absorption of enough Mg from the rumen to meet the amount required for milk production, soft tissue and bone growth, fetal development during pregnancy, and the small amount lost in feces. Any excess dietary Mg is excreted by the kidneys in the urine (see Figure 1). Hypomagnesemia results when magnesium absorption is less than the daily Mg lost. Cattle have no effective tissue Mg reservoir so a shortage cannot be compensated for by removal from bones or increasing Mg²+ ion absorption from other sites in the body. In addition, Mg is not under direct hormonal control to keep it in balance as with other major minerals. Although a simple lack of Mg intake in the diet can happen as in cases of starvation or if off feed, deficiencies are most often due to interference with Mg absorption in the rumen. Absorption basically depends on 1) the amount of soluble Mg²+ ions available ("in solution") in the rumen fluid and 2) the performance of the transport mechanisms that move Mg²+ ions across the rumen wall to the bloodstream.

Known factors negatively affecting Mg absorption include:

1. High potassium (K<sup>+</sup>) in rumen fluid. High K<sup>+</sup> is consistently cited as the most important factor in development of hypomagnesemia. The movement of magnesium across the rumen wall depends on an active transport mechanism (or "pump") driven by an electrical potential created at the cell membrane. High potassium along with low sodium conditions alters the ion gradient required for active transport. If this active transport mechanism fails due to high K<sup>+</sup>, there is a secondary pathway, but it requires a much higher rumen magnesium concentration (4X higher) to enable Mg<sup>2+</sup> ions to override the pump and passively flow down a concentration gradient to the blood.

High  $K^+$  levels in rumen fluid (Figure 2) are expected in any of the following situations: 1) cattle naturally high in K 2) cattle graze pastures fertilized with excessive potash or when high nitrogen fertilizer is added when soil phosphorous is low; 3) when cows are deficient in sodium (salt) and 4) when the diet changes suddenly from hay/dry feed to lush pasture. Small grain forages, including wheat, oats and rye, ryegrass and cool season perennial pastures in spring are often high in potassium ( $K^+$ ) and nitrogen ( $N^+$ ) ions and low in magnesium ( $Mg^{2+}$ ) and sodium ( $Na^+$ ) ions; these forage factors collectively reduce absorption of dietary magnesium.

- 2. Sudden increase in rumen ammonia. Lush grass is often high in soluble nitrogen and rumen degradable protein which allows for an increase in rumen ammonia levels. A rapid change from low-nitrogen to a high-nitrogen diet and rapid increase of ruminal ammonium ions (NH4+) impairs ruminal Mg<sup>2+</sup> absorption, although the effect is transient and lasts for just a few days.
- 3. Insoluble Form of Magnesium. Magnesium must be present in soluble form (ionized) to be absorbed through the rumen wall. Solubility declines as the rumen fluid pH rises above 6.5. Grazing beef cattle often have higher rumen pH due to buffers present in saliva and slower production of volatile fatty acids from forage fermentation compared to grain diets. In addition, Mg²+ ion binders within forages, such as unsaturated fatty acids, can form insoluble Mg²+ salts reducing availability for absorption in the rumen.
- 4. Lack of dietary energy (fermentable carbohydrates)- In rumen fluid, a lack of fermentable carbohydrates results in fewer short-chain fatty acids (SCFA), a higher rumen pH, and an increase in ammonia concentration which decreases Mg²+ ion absorption. This is an important factor in development of winter tetany, an underlying form of hypomagnesemia that most often occurs when feeding harvested forages high in K⁺ but low in Mg²+, calcium (Ca²+), sodium (Na⁺) and energy throughout the winter. Cattle will have borderline low Mg and Ca blood levels but do not show tetany symptoms until triggered by a stressor such as severe weather, a new feed or environment, or after shipping. The stress hormone adrenaline rapidly shifts Mg²+ ions to the inside of cells, making it unavailable to the spinal fluid of the animal. If blood calcium is concurrently low, Mg levels in the spinal fluid decline even more quickly.

The classic grass tetany cow is most often found dead with disturbed soil around her hooves due to paddling and seizures before death. The interval between first symptoms and death may be as few as 4-8 hours. However, if noticed in the beginning stage, the earliest signs are twitching of the ears, facial muscles, shoulder, and flank and a stiff gait. The affected cow separates from the herd and may show a variety of symptoms including excitement, teeth grinding, aggression, galloping, bellowing, staggering and may appear blind. As the fall in magnesium progresses, sustained muscle spasms eventually cause the cow to stagger and fall, legs outstretched, stiff and paddling. Convulsions and seizures follow with the head arched back and the legs paddling. The heart rate may reach 150 beats per minute (approximately twice the normal rate) and can often be heard without the use of a stethoscope.

Respiratory rates of 60 breaths per minute (normal is 10-30 breaths per minute) and a rectal temperature as high as 105°F may result from the excessive muscle activity. Animals may get up and repeat these convulsive episodes several times before death. The diagnosis is made based on history, symptoms, and low magnesium concentration measured in the blood, urine or cerebrospinal fluid prior to death. After death, postmortem samples of spinal fluid that test below 1 mg/dL of magnesium or vitreous humor, fluid within the eye, below 1.34 mg/dL are reliable indicators of grass tetany if collected within 1-2 days after death.

Cattle exhibiting symptoms of grass tetany need immediate veterinary treatment; preferably 1.5-2.25 grams of magnesium intravenously for an adult cow. If unable to treat in the vein, a 10% magnesium sulfate solution given SQ or as an enema is a useful alternative therapy until a veterinarian arrives. Response to therapy depends on the length of time between onset of symptoms and treatment. Cattle that do recover take at least an hour to return to normal. Many of these cows will relapse and require additional Mg treatment within 12 hours. Administering oral magnesium gel or drenching with magnesium oxide or magnesium sulfate once the animal has regained good swallowing reflexes will reduce the rate of relapse. A magnesium sulfate enema can be administered because the large intestine can absorb Mg rapidly. If grass tetany has occurred within a herd, an effort should be made to immediately increase the intake of magnesium to other members of the herd to prevent further losses.

Prevention of grass tetany is based on maintaining consistent intake of soluble magnesium to be absorbed in the rumen of susceptible cattle when conditions for grass tetany exist.

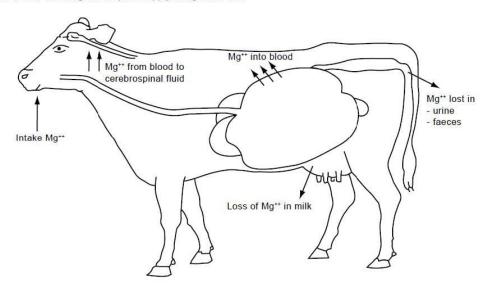
Highly susceptible groups include lactating cows or cows in late pregnancy, especially 2-3 weeks prior
to spring grass. These groups should be provided supplementary dietary sources of magnesium,
commonly magnesium oxide. The average beef cow reaches peak lactation at 6-8 weeks post-partum

- which is her highest demand for magnesium.
- UK Beef IRM mineral recommendations for free choice supplements for grazing beef cattle include 4 oz/head/day of a 12% magnesium trace mineral mix and all from magnesium oxide (no dolomitic limestone or magnesium mica). This will provide approximately 13 grams of magnesium which is approximately 50% of the daily requirement for lactating beef cows. These complete mineral mixtures also supply additional sodium in the form of salt to aid in combatting high potassium intakes that can interfere with the active transport of magnesium.
- For cooked molasses products with a recommended intake of approximately 1 pound per day, the guaranteed analysis for Mg<sup>2+</sup> should be approximately 4%. Read the label to ensure adequate Mg<sup>2+</sup> levels; know recommended intake and monitor consumption.
- Mineral consumption should be monitored because intake is generally inadequate if using poor quality mineral products since magnesium oxide is not palatable.
- High magnesium mineral may be discontinued in late spring once the grass is more mature, the water content of the forage is decreased, and daily temperatures reach at or above 60°F.
- Provide the required amount of salt in the diet. A deficiency of sodium triggers the release of the
  hormone aldosterone that conserves sodium in saliva and rumen fluid and replaces it with potassium.
  Adding the correct level of sodium to the diet is important but too much sodium increases urination and
  loss of magnesium in the urine. Research has shown that the negative effects of high potassium cannot
  be overcome by the addition of large quantities of salt.
- The ionophores monensin and lasalocid significantly increase Mg absorption. Both ionophores lower ruminal K<sup>+</sup> concentrations and help maintain Mg transport.
- If feeding grain is an option, mixing 5# Magnesium Oxide (MgOx) to 50# Dried Distillers Grains (DDG) and feeding the mix at 1#/head/day will provide 22 grams Mg daily. MgOx is often sold as a "laxative powder".
- If the water source is a tank, soluble Mg<sup>2+</sup> salts can be added, such as magnesium acetate, magnesium chloride and magnesium sulfate (Epsom salts) at a rate of 3 g/L water.
- Delay turn-out to spring grass until plants are 4 to 6 inches tall. Mg<sup>2+</sup> is more available in mature plants.
- Graze the less susceptible animals (heifers, dry cows, stocker cattle) on the higher risk pastures since the threat of disease is lower in non-lactating cattle.
- Limit grazing to 2-3 hours per day and provide free-choice access to hay while cattle are grazing lush pastures. Dry forages can provide additional Mg<sup>2+</sup> and Ca<sup>2+</sup>and slow passage through the rumen, increasing the time available for absorption.

In the long term, prevention of disease is based on instituting management changes that decrease K<sup>+</sup> and increase Mg<sup>2+</sup> and Ca<sup>2+</sup> in the forage.

- One approach is to incorporate more legumes into pasture mixes, as legumes have higher Mg<sup>2+</sup> and Ca<sup>2+</sup> than do immature grasses, resulting in a better balance across the pasture.
- Soil test and apply fertilizer based on soil test results and use no more potassium than recommended. When potassium is applied to forages in the early spring, plants take up more potassium than needed, called "luxury consumption". High soil potassium also inhibits Mg<sup>2+</sup> uptake by forages. The resulting high potassium forage blocks the uptake of Mg<sup>2+</sup> in the rumen.
- Use caution if applying broiler house litter for fertilizer as this has been associated with an increased risk of grass tetany due to the high K<sup>+</sup> and N<sup>+</sup> content.

Figure 1. Cow receiving an adequate supply of Mg in her diet.



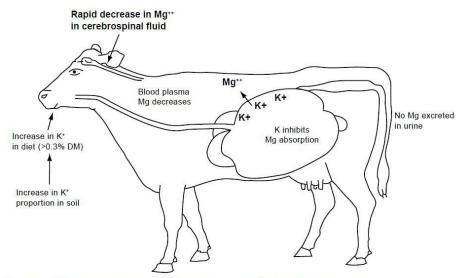


Figure 2. Cow with a temporary magnesium deficiency as a result of a high intake of K in her diet.

Figures 1 and 2 from: Primefact 785; Grass tetany in Cattle-Predicting its Likelihood. Mac Elliott, Livestock Officer. New South Wales Department of Primary Industries (<a href="www.dpi.nsw.gov.au">www.dpi.nsw.gov.au</a>). June 2008 © State of New South Wales. For current information go to <a href="www.nsw.gov.au">www.nsw.gov.au</a>. All NSW Department of Customer Service material on this website is licensed under the <a href="mailto:Creative Commons Attribution 4.0 licence">Creative Commons Attribution 4.0 licence</a>.

# Beware of Unnecessary Costs with New Entities

By Robert Moore, Attorney and Research Specialist, OSU Agricultural & Resource Law Program Source: <a href="https://farmoffice.osu.edu/blog/wed-05112022-1025am/beware-unnecessary-costs-new-entities">https://farmoffice.osu.edu/blog/wed-05112022-1025am/beware-unnecessary-costs-new-entities</a>

Establishing a new entity in Ohio is relatively easy. The first step is to submit an application to the Ohio Secretary of State along with a \$99 fee. This application can be done online with the fee being paid with a credit card. For an LLC, the application only needs to include the name of the entity and the name and address of a contact person. Applications for corporations and other entities may require a bit more information but nothing overly burdensome. The Secretary of State reviews the application and either approves the application or rejects and provides information as to what needs corrected.

Upon approving the application, the Secretary of State will issue an Articles of Organization certificate, or similar document, for each new entity. This certificate is confirmation that the state of Ohio recognizes the entity, and it is permitted to conduct business in Ohio. Upon the entity being registered, business documents such as operating agreements and ownership certificates should be completed.

Usually, a few weeks after registering a new entity, credit card applications will begin to show up. As mentioned previously, each new entity must provide the name and address of a contact person for the entity. The name and address are publicly available on the Secretary of State's website. Credit card companies retrieve this information and send applications hoping the new entity needs a credit card to conduct business. Credit card companies are not the only solicitors to use the contact information.

The credit card applications are easily identifiable, obvious in their intent and can be easily discarded if



not needed. However, a more nefarious letter is likely to show up as well. It is common for new entities to receive an envelope that looks like it is from an official government entity. Upon opening the letter, a form that also looks official will request \$67.50, \$90 or some other amount for a copy of the certificate of organization or certificate of good standing. Upon first glance, the letter and enclosed form looks like something you would receive from a government agency.

The certificate of organization will be provided to the new entity upon registration. At any time, a copy of the certificate of organization can be obtained from the Ohio Secretary of State web site for no cost. A certificate of good standing, sometimes requested by lenders, can be obtained from the Secretary of State for \$5. The certificate of good standing merely states the entity is still registered with Secretary of State. The point being, there is likely no reason to pay a company for the articles of organization or a certificate of good standing. There is nothing illegal about the letters requesting money for a certificate of organization. If you look closely at the form, somewhere it will say it is not from a government agency. If someone wants to pay \$90 for a certificate that is provided for free by the Secretary of State they are within their rights to do so.

The intent of this article is to make new business entity owners aware that they do not need to spend extra money on certificates after their entity is registered with the state. Paying for the requested certificates is probably just a waste of money. Unfortunately, people who are registering entities for the first time are often not aware of what is required by the state and just assume they are required to pay the extra fees. If in doubt, contact your attorney.

Below is an example form letter requesting \$67.50 for a certificate of good standing. You will need to look closely to find the disclaimer that it is not from a government agency.

	ohmilipping-դեու		QUESTIONS?  OLL FREE (888)
		OMPLETING	THIS FORM, PLEASE PRINT CLEARLY,
Key Code: OH-CS3847-0205		e Date:	PLEASE RESPOND BY:
Business Address:	02/03		February 19, 2020
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# Expiring CRP Contracts Eligible for the Transition Incentives Program -Help a Beginning, Veteran or Socially Disadvantaged Farmer

By: David Marrison, OSU Extension Educator-Coshocton County

Source: <a href="https://u.osu.edu/ohioagmanager/2022/05/05/expiring-crp-contracts-eligible-for-the-transition-incentives-program-help-a-beginning-veteran-or-socially-disadvantaged-farmer/">https://u.osu.edu/ohioagmanager/2022/05/05/expiring-crp-contracts-eligible-for-the-transition-incentives-program-help-a-beginning-veteran-or-socially-disadvantaged-farmer/</a>

Are you a landowner that has land enrolled in the Conservation Reserve Program (CRP)? Does your CRP expire in the next year? Would you like to help a beginning, veteran, or socially disadvantaged farmer get a head start in farming and in return receive an incentive to do so? If so, you may be interested in the CRP Transition Incentives Program available through the Farm Service Agency.

#### What is the Conservation Reserve Program?

The Conservation Reserve Program was authorized by the Food Security Act of 1985 and was reauthorized by the Agricultural Improvement Act of 2018. The goal of CRP is to voluntarily contract with agricultural producers to not farm environmentally-sensitive land but instead utilize it for conservation benefits.

CRP participants plant long-term, resource-conserving plant species, such as approved grasses or trees (known as "covers") to control soil erosion, improve water quality and develop wildlife habitat. In return, participants receive rental payments and cost-share assistance as well as are eligible for climate-smart practice incentives. The contract duration is between 10 and 15 years. The CRP suite of programs include General CRP, Continuous CRP, Grassland CRP, Conservation Reserve Enhancement Program (CREP), Clean Lakes, Estuaries, and Rivers Initiative (CLEAR30) and State Acres for Wildlife Enhancement (SAFE). CRP protects more than 20 million acres of American farmland.

#### What is the Transition Incentives Program (TIP)?

The Transition Incentives Program (TIP) was authorized under 2018 Farm Bill to encourage the voluntary transition of land enrolled under an expiring CRP contract to a veteran, beginning, or socially disadvantaged (SDA) farmer who will return the land to sustainable grazing or crop production. The Agricultural Improvement Act of 2018 (2018 Farm Bill) authorized \$50 million for TIP for the fiscal years 2019 through 2023.

TIP provides landowners and operators with an incentive to return land to production on an expiring CRP Contract in a way that preserves established conservation practices. It also provides an opportunity for beginning and socially disadvantaged farmers and ranchers to purchase their own land or rent land.

Table 1: Definitions of Farm Operator for the Transition Incentives Program

Type of Farm Operator	Means a person, or for entities has at least 50 percent interest in that entity, who:
Beginning Farmer	Has not been a farm or ranch operator for more than 10 years
Veteran Farmer or Rancher	Has served in the Armed Forces and who has:  Obtained status as a veteran during the most recent 10-year period, or  Operated a farm or ranch for no more than 10 years.
Socially Disadvantaged Farmer	Is a member of a socially disadvantaged group whose members have been subjected to racial or ethnic prejudice because of their identity as members of a group without regard to their individual qualities.  Gender is not included.

TIP provides landowners or operators with up to two additional annual rental payments on existing CRP land which is set to expire, on the condition they sell or rent this land to a beginning farmer, veteran or to a socially disadvantaged group who is not a family member. The new landowners or renters must return the land to production using sustainable grazing or farming methods. Key provisions of TIP include:

- Beginning, veteran, and SDA farmers and CRP participants may enroll two years before the scheduled date of CRP contract expiration, or until the \$50 million limit is reached.
- Only land enrolled in an expiring CRP contract is eligible. TIP enrollment is on a continuous basis.
- The owner or operator must agree to sell, or have a contract to sell, or agree to lease long-term (at least 5 years) the land enrolled in an expiring CRP contract to a beginning, veteran, or SDA farmer who is not a family member.
- Owner or operator must agree to permit the beginning, veteran, or SDA farmer to make conservation and land improvements according to an approved conservation plan.
- Beginning, veteran, or SDA farmers participating in TIP may re-enroll eligible land under CRP.
- Beginning, veteran, or SDA farmers must materially and substantially participate in the operation of the farm involved in CRP contract modification.

#### More information:

More information about the Conservation Reserve Program Transition Incentives Program can also be found at:

https://www.fsa.usda.gov/programs-and-services/conservation-programs/transition-incentives/index

If you are interested in learning more about this or other Farm Service Agency programs, contact your local FSA office. Not sure which FSA serves your county? Use this link

(https://offices.sc.egov.usda.gov/locator/app) to locate your nearest FSA office.

Resources

Conservation Reserve Program- Transition Incentives Program. Accessible

at: https://www.fsa.usda.gov/Assets/USDA-FSA-

Public/usdafiles/FactSheets/2019/crp transition incentive program-fact sheet.pdf

Conservation Reserve Program-Overview. Accessible at:

https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/2019/conservation-reserve program-fact sheet.pdf

About the Conservation Reserve Program. Accessible at:

https://www.fsa.usda.gov/programs-and-services/conservation-programs/conservation-reserve-program/index

OSU Extension is thankful the support of USDA through the Outreach Education and Technical Assistance for Farm Service Agency Programs grant.

# Victory Garden Seeds Distribution

OSU Extension in Coshocton County and the Coshocton County Master Gardener Volunteers are once again participating in the state of Ohio's Victory Garden seed distribution. Coshocton County is one of 42 counties across Ohio selected to be part of this distribution. Coshocton County was allocated 500 packets of seeds to distribute to our community. Each of these packets contains contain lettuce, carrots, cucumber, and sunflower.

Victory Gardens originated during World War I as an answer to a severe food shortage at the time. The idea was wildly successful, growing an army of amateur gardeners and serving to boost morale and patriotism across our Country. Although there's no food shortage now, ODA and OSU Extension are reviving the effort to once again encourage people to plant seeds, realize the fruits of their labor, and share with others if inspired.



The victory garden seed packets are now available at the Extension Office located in Room 110 at 724 South 7<sup>th</sup> Street in Coshocton. These packets are being distributed on a first come, first served basis. The Extension office is open Monday through Friday from 8:00 a.m. to 12 noon and from 1:00 to 5:00 p.m. Along with the seed packets, you will also receive a packet of Extension factsheets which will assist you as you grow your lettuce, cucumbers, carrots, and sunflowers.

# "Name that Tree" Workshop Slated for June 29

Have a tree that you pass on a regular basis that you always wonder 'what is that? Or do you own a woodland

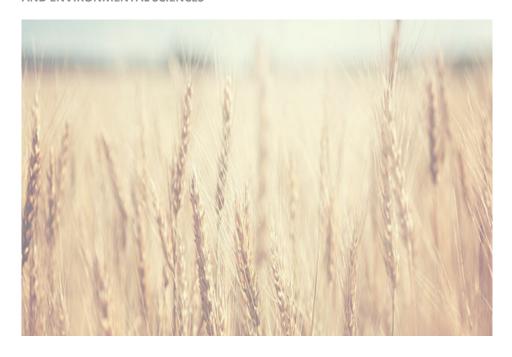
and want to know exactly what trees you have? If so, OSU Extension and Clary Gardens will be hosting a "Name that Tree Program" on Wednesday, June 29 from 10:00 to 3:00 p.m. at Clary Gardens located at 588 West Chestnut Street in Coshocton, Ohio. This one-day workshop is designed to give participants in-depth training and practice on identifying trees using leaves and other common characteristics. The class begins in a new outdoor event pavilion with some introductory identification clues and samples that we use to work through a dichotomous key. The afternoon is spent out in the woods practicing



(expect moderate walking). The registration fee for this program is \$40 per person. This registration fee includes the program, light refreshments, lunch, and handouts. There is limited seating so pre-registration is due by June 21. For more information about this program, contact the Coshocton County Extension office at 740-622-2265.



COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES



**OSU EXTENSION - WAYNE COUNTY PRESENTS** 

# Small Grains Field Day

Attention all Small Grain Producers. Are you interested in learning more about wheat cultivars, updates on grain variety trials, disease and insect management, barley for brewing and how to identify wheat quality? Please join us!

This event is free to attend thanks to the generosity of the Ohio Corn and Wheat Board. Lunch will be provided.

RSVP is required for lunch orders by June 7.

REGISTER: go.osu.edu/small-grains-field-day or call 330-264-8722

**DATE:** June 14, 2022

**TIME: 8:30AM-2:30PM** 

**LOCATION: OSU Schaffter and Snyder Farms** 

3230 Oil City Rd.

Wooster, OH 44691





# **Topics Include:**

**Wheat Cultivars** 

Small Grain Variety Trial Updates

**Seeding Rates** 

Small Grain Disease and Insect Management

**Barley for Brewing** 

**Wheat Quality** 

# **EVENT SPONSOR:**

Ohio Corn and Wheat



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# 2022 Ohio Beef Day and Tour



Saturday July 16 9:00 a.m. - 2:30 p.m.

# Muskingum County Self Driving Tour

## **Agenda**

8:00 a.m. Registration Opens - Donuts

Muskingum Livestock

944 Malinda St. Zanesville, OH 43701

8:50 a.m. Welcome and Tour Instructions

Garth Ruff, OSU Extension Beef Cattle Field Specialist

9:00 a.m. Depart for Tour in Own Vehicles - Stops in Order

Michel Livestock

Starting and Receiving Feedlot Cattle

Shirer Bros Meats

Local Meats Q&A

Peggy Hall, OSU Extension Ag Law Specialist

Hatfield Farms

Fencing, Fall Calving, and Farm Succession

12:30 p.m. Lunch at Roger's Auction Barn

Prepared by Muskingum Co. Cattlemen's Association

Lunch Beef Industry Update

Ohio Cattlemen's Association/Ohio Beef Council **Herd Health – Vaccinations and Anaplasmosis**Dr. Justin Kieffer, DVM OSU Clinical Veterinarian

Beef Quality Assurance Wrap up

Clifton Martin, OSU Extension Muskingum County

2:30 Adjourn

1:15

2:00

Please complete program survey and have a safe trip

home!

## PROGRAM DETAILS

\$10 per person

Register by July 7, 2022 at:

go.osu.edu/2022beefday

#### Registration fee includes:

- Refreshments
- Lunch
- Resources

**Education Credits Offered** 

Beef Quality Assurance Certification (BQA)

#### Contacts:

Garth Ruff, OSU Extension <u>ruff.72@osu.edu</u> 740-305-3201

Clifton Martin, OSU Extension

martin.2422@osu.edu

740-454-0144

beef.osu.edu

