

FARMERS COOPERATIVE

INVESTING IN OUR OWNERS' SUCCESS!



SEWARD, NEBRASKA

COOPERATIVE NEWS SEPTEMBER 2018



Ron Velder
CEO

SHARING SUCCESS WITH OUR PATRON'S

Looking back one year, nothing has changed in the agriculture sector. We're confronted every day, in most cases, with lack of rain, low grain prices, higher expenses and many other challenges. This year we throw on tariffs, politics and higher interest cost to add more stress to all operations. A few goals of Farmers Cooperative we strive for are: the ability to anticipate and meet market needs in moving rail cars so we can take grain at harvest, booking and buying products such as energy, feed, and agronomy to be competitive in the marketplace. All opportunities come at a risk of being on the right side when purchasing in advance. Our patrons find value in knowing we will have products available and seeing accomplishments of "INVESTING IN OUR OWNERS SUCCESS." Farmers Cooperative has always stressed working together for shared success. When farmers and patrons are successful, we all get rewarded with the benefits of working in the cooperative system. When Farmers Cooperative endures annual success, patronage is distributed in January based on patrons' activities during the fiscal year. Success is also paid back by new assets like grain and fertilizer storage along with warehouses and transportation equipment.

Farmers Cooperative's fiscal year end is August 31, 2018. We are all preparing for harvest as well as preparing for auditors to review the last 12 months and give an opinion on financial statements that will be shared at the annual meeting in January 2019.

Lastly, please remember that safety starts with all of us making wise decisions. Smart choices always need to be made before entering grain bins for cleaning by testing air quality and making sure the slope of grain is safe before entering. Too many individuals don't get a second chance. Always think of your family first and make a wise decision. Have a safe harvest and please support your local communities and schools.

Keeping Accounts Current is a Sign of a Healthy, Well- Managed Operation

Rob Blahauvietz,

Credit Department Manager

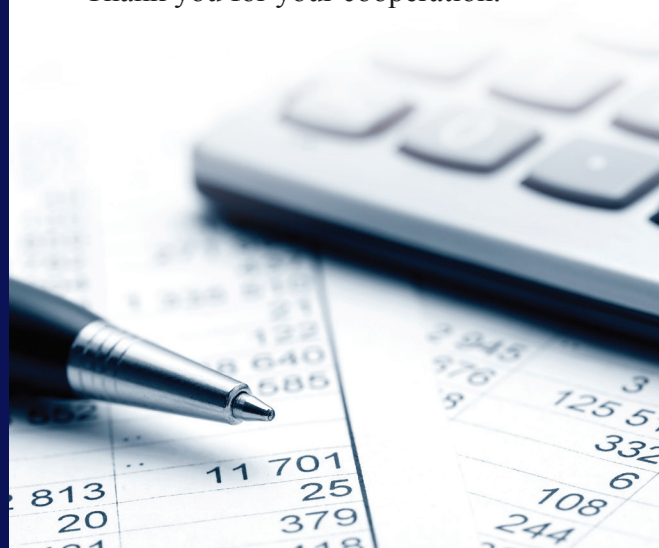
Have you paid your account? The end of our fiscal year was August 31. At that time, Farmers Cooperative will have its books audited to determine how financially successful your cooperative has been the past year.

The auditors will look at our accounts receivable to see if we are collecting accounts in a timely manner. It's a bad reflection on the cooperative's operations if accounts are slow, old, and deemed doubtful.

According to Farmers Cooperative Credit Policy, there should be no accounts receivable over 60 days old. All purchases made on credit during the month are due in full by the end of the month following the statement date.

Following the Credit Policy will help you avoid paying finance charges and also help your cooperative's financial strength and stability. Please pay your August statement before September 30.

Thank you for your cooperation.





Dale L. Hayek
Grain Manager

Another harvest is upon us and it looks like it will be one of the largest we've seen, not only for our trade area but the majority of the corn belt. Barring any unforeseen weather events, this will prove to be a challenging harvest just by the size of the crop in both soybeans and corn. Eastern KS, Northern MO, and Southern IA have below avg production due to drought conditions, but the nation

as a whole is looking tremendous.

Pressured by a large corn and bean carryout of 2017 stocks and an earlier than normal Fall harvest, the basis is feeling the pressure. The realization that China has not come to the market for soybeans in retaliation of the tariffs has put everyone in a tailspin. The industry relies on shipping soybeans at harvest time, especially the Northern states who are more tributary to the PNW for exports. The marketplace knows we have to find enough storage for the soybean crop (on farm or commercial) since we will not be executing large soybean programs in the gut-slot of harvest. The market's challenge is with storage and basis until we can execute through demand. We have never seen soybean basis weaken this quickly for both old and new crop. It has been brutal, especially with the board of trade looking at the large crop coming at us. The northern states will pile and cover soybeans since it is cooler in the North. Nebraska elevators have in the past when they knew they had sales on the books to execute on and the piles would get picked up timely. That isn't the case this year.

On paper, China will need soybeans before South America has a new crop in February '20. If the US and China come to terms on a program, it is estimated we lost 50-60% of our 'normal' volume to China already. The USDA has mentioned that there will be some monetary compensation allocated towards the lack of a soybean program with China to subsidize the producer. We're waiting for details at this time. Executing a PNW bean program in the winter months is more weather challenging for the railroads. And the central gulf is limited from the closing of the northern Mississippi River. It's a conundrum, to say the least.

Corn demand is constant and we are competitive in the world market. Although it feels like it is only a matter of time before the corn basis weakens, elevators are using traditional corn space for soybeans. There continues to

be good demand for corn, it is just this harvest bottleneck that will pressure basis.

We have been shipping out as much grain as possible in preparation for harvest. September will be our largest shipping month for the year. Obviously, Farmers Cooperative has been on a storage building pace, but it pales in the size of the crops we are seeing along with the fact that we are condemning the obsolete bins that are cost prohibitive. We will continue to build in the future and be strategic in doing so. This last year we built in Ruby, Virginia, Wilber, and Burchard as we were aware they are storage deficit areas.

Our Fall harvest policy is the same as last year, despite the value of storage this Fall, we kept the rates the same. The only difference is the 2018 harvest bushels placed on delayed pricing will have a 15 cent fee if not marketed by October 1, of 2019. I should hope we'll get a rally sometime in the next 12 months for those who traditionally carry grain with us. With today's current environment, farmers will plant millions of more acres of corn next year and storage will be a premium then also. We will need to be as empty as possible a year from now if we have the same growing conditions we had this year. And I hope we do.

Like every other month, we have several trains lined up at harvest, but they will rarely show up as quickly as producers can harvest. Therefore, we will be piling at several locations, so like always, practice patience as we work through this harvest.

I realize my tone of this article is negative with the large crop and shipping challenges. But in the big picture, we are shipping grain to destinations who historically rarely buy from the US. Other countries are taking advantage of these low prices and we all know low prices encourage demand. I still remain very positive and optimistic for US agriculture future, it is working through our customary grain moves in the short term that will be the frustration.

Lastly, and most importantly be safe this harvest. Our industry has seen a rise in grain-related injuries and deaths recently. Work Smartly and Safely. We realize commercial grain accidents get a lot of publicity but unfortunately, accidents don't discriminate as it is estimated 70% of grain related incidents are on the farm. Our employees have put in long hours this summer cleaning bins and shipping grain getting ready for this harvest so let's all be mindful of each other and put safety first. We don't want this to be anyone's last harvest.

CROP SIZE ESTIMATES



Doug Lewis
Grain Originator

The month of August is crop size estimate month. This year's USDA estimates of 2018 corn production number of 178.4 bu/ac, if realized, will be a record. Bean crop size estimate from the USDA of 51.6 bu/ac would indicate a crop that will be the second highest average if realized. Pro Farmer's numbers of 177.3 bu/ac for corn and 53.0 bu/ac for beans are in line with estimates from the USDA. As the crop size estimates have increased, the basis has

leaked wider and futures levels have moved lower.

Pricing bushels delivered at harvest and replacing with deferred calls in May or July can be done for less than the cost of storage. The advantage to this strategy is that it generates some cash and sets a defined floor with upside potential. The drawback is one does forfeit the opportunity to gain in any basis improvement that may occur post-harvest.

Cash and futures market is giving us opportunities to sell carry to later months at attractive numbers for bushels stored on the farm. It makes sense to lock the carry in with a deferred cash sale, HTA

or futures hedge. The HTA and futures sale leaves basis open for the opportunity to capture any improvement that may occur. Call protection, along with the sale or hedge, gives us upside should the market move higher. A put strategy giving us a floor could be used as well.

2019 Corn Crop

Dec 19 closed at 392 ½ on August 28, 2018. With option volatility being low, \$3.90 puts closed at 27 cents +/- and the \$4.00 closed at 33 cents. This protection looks attractive giving us over 400 days of downside protection with a strike price very close to current values. The current ratio of corn/soybean prices indicates we could see a shift of 5 million acres to corn next year. We could see a considerably higher corn carryout number next year with an increase in production here and a good corn crop out of Brazil.

Mother Nature is putting the finishing touches on the crop and accurately predicting the final yield number is impossible. Some believe the estimates on crop size are too optimistic and history has shown us that these numbers can change dramatically. Managing the price changes in volatility is a more productive use of our time than trying to predict what prices will do as a result of the changes in crop size predictions, weather forecasts and supply and demand predictions. Implementing and managing a risk management plan designed with flexibility allows us the opportunity to manage through changes in the markets.



PICKLE WRAP DIP

INGREDIENTS

8 ounces cream cheese – softened
1 cup sour cream
1 teaspoon onion powder

1 teaspoon parsley
¾ cup dill pickles – drained, finely chopped
5 ounces dried beef – finely chopped

Instructions

Combine cream cheese, sour cream and seasonings in bowl. Beat until smooth. Stir in pickles and beef. Cover and chill in refrigerator at least 2 hours. Serve with crackers or fresh vegetables.

Will Service Always be in Style?



Brent Colgrove
TBA Manager

Last week my wife and I did some shopping at a very well-known retail store in our town. After spending an hour overloading our cart, we headed to the check-out line. This particular store has a dozen or more check-out lines and only 4 were open. We could have used a “self-check” out, but with a load of stuff, it wouldn’t have been fun and we both

feel that the store could at least check us out and bag our groceries. We finally got through the line 30 minutes later with warm milk and melted ice cream.

Why has service gone out of style and why do we put up with substandard service? Thanks to the internet, we can easily order whatever we want and have it shipped to our house. Businesses are seeing profit margins getting tighter and tighter because of the competitive environment we live in. While retailers continue to struggle to keep hard-working employees due to wages or the fact that no one wants to work these jobs; self-check-out lines have become the new normal in bigger stores. This all leads to a reduction of the workforce.

Is service going to get better or worse for the American consumer today? I think if we stand on the sideline and watch then absolutely, it will get worse. But, if we stand up and talk to the store managers, voice our opinions about how we want to be treated, demand customer service it can get better. As for my wife and I, we will now make it more of a priority to shop at another store in town that will still bag our groceries and walk them to

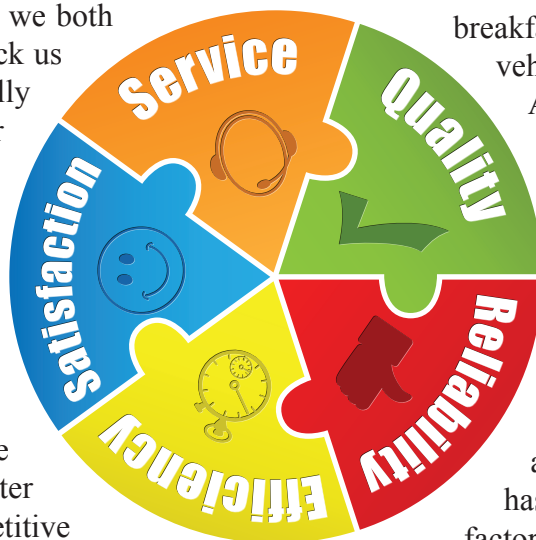
the car. We will continue to support the smaller stores, where customer service is still very important.

Here at your Farmers Cooperative we are a full-service Cooperative. We will continue to show customer service by fixing your tire, loading your oil and bag feed when picking up at any of our locally employed locations. Deliveries of fuel, agronomy products and seed to your farm will continue with accuracy and at the right time. We will be there day in and day out to load the grain trains and dump your trucks at harvest. In some of our small communities, we will serve you breakfast and lunch, provide fuel for your vehicles and have groceries on the shelf.

All these jobs are important to you in order to succeed at what you do best, feeding the world!

Switching gears, I want to update you on the Tariffs that our government is placing on the Chinese factories and the impact they will have on our local Agriculture market in Nebraska and Kansas. Today, the Government has placed a 10% tariff on the Chinese factories who build low-cost medium truck tires. So what kind of impact will we see in the

Heartland? Numerous medium truck factories are more prepared for this issue than in the past. Many of the tire companies have factories in other countries to help with this problem. So instead of China, we will see product built in other areas such as Thailand or Vietnam. Here at your local Cooperative, we will do everything we can to keep quality truck tires on hand at a competitive price. We’ll always stock the shelves with a tire that will not only stand up to the daily operations on the farm but it will be backed by a workmanship warranty for 4 years. Thank you for your continued support and we look forward to seeing you next time.





GRAIN BIN SAFETY



Tom Hermance

HR & Safety

Harvest season is here and in some parts of our trade area, it appears to be a record harvest. Even though our producers appreciate the record yields, along with that comes long days and nights, fatigue, complacency and even shortcuts.

On the farm, accidents continue to be the number one concern among safety and health professionals across the agricultural industry. Many organizations, including the Occupational Safety and Health Administration (OSHA), continue their emphasis on grain bin safety.

Farmers Cooperative continues to be extremely diligent in training and developing safe employee safety behaviors. The grain storage industry is an inherently dangerous occupation. Grain dust not only can create an explosive environment, but spoiled grain may create a hazardous atmosphere.

According to Purdue Universities annual survey in 2016, there were 29 on the farm grain entrapment incidents nationally which resulted in 18 fatalities. The record high for entrapment cases and deaths was in 2010 when 59 entrapments occurred and 31 people died.

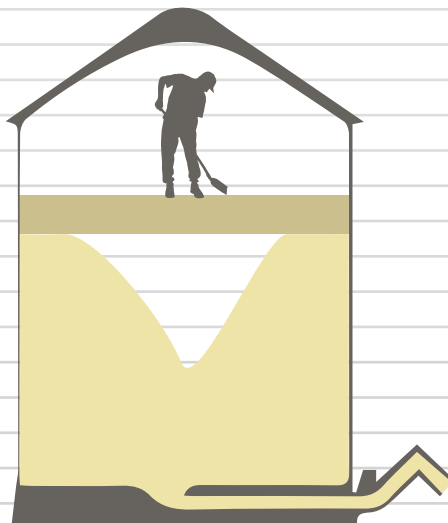
Farmers Cooperative employees are required to follow very specific procedures when entering a grain storage structured or confined space, including any below-grade

3 COMMON WAYS THAT ENGULFMENT OCCURS

1 When you stand on moving or flowing grain, it can shift like quicksand, burying you in seconds.



2 Moisture or mold can cause grain to clump and form a crust or bridge on the surface of a grain pile. As grain is unloaded, an empty space can form under the bridge and then collapse if you attempt to cross it.



3 Grain that has accumulated on the side of a bin can unexpectedly collapse.



pits. One of these procedures is completing a written entry permit used to assess potential hazards in the bin or confined space. While farmers are not required to complete permits, it's a good idea to take the time to assess potential hazards in your bins prior to entry. These hazards may include out-of-condition grain, grain stuck to the wall above you and/or steeply sloped grain.

Here is a basic list of potential hazards that all on farm storage producers should consider,

- Safety Harness Available
- Rescue Equipment (16"x48"x5/8" Plywood Panels)
- Standby Person for Rescue
- Communication Device
- Test Air Quality
- Ventilation
- LOTO - (De-Energize and Lock Out and Tag Out Power Source)
- Check the Angle of Repose of the Grain for Engulfment Hazard

Farmers Cooperative has also been very aggressive in training our area Fire & Rescue Departments on the safe and proper procedures to successfully complete a grain bin rescue. Even though the training has strong hands-on approach to rescue or retrieval, the key emphasis is on safe procedures prior to entering the bin so a rescue is not necessary.

Understanding the angle of repose rule for grain is extremely important. Often times grain bin entrants may think that just because grain from the middle of the bin is removed there is no engulfment hazard, whereas, the grain on the sides of the bin may easily collapse downward and engulf the entrant. Enclosed in this article, there are charts to use to help you determine your angle of repose in your own grain bin.

Farmers Cooperative will continue to train on grain bin entry rescue in hope that it will never be needed in a real situation.



THE VALUE OF SOIL SAMPLING



Wesley Hedges

Precision Ag Manager

Soil sampling is a lot like going to the doctor to have your blood tested. The blood test results show current levels of different substances and the optimum range for each. Depending on the results, the doctor may recommend a diet change or medication to correct a problem. The same goes for soil. We go to the field and pull soil samples, send the soil to the lab for analysis, run the results through our software and generate a

document that shows current levels and recommendations to fix any nutrient, not within the optimum range. Table 1 shows the 17 plant essential nutrients, which are nutrients that are required for any plant to complete its life cycle.

There are many factors outside of our control that affect a crops maximum yield, but soil nutrient levels are factors that we can control. Have you heard of Liebig's law of the minimum? Liebig's law states that the most limiting resource dictates growth. Like the analogy in Figure 1, "The availability of the most abundant nutrient

in the soil is only as good as the availability of the least abundant nutrient in the soil".

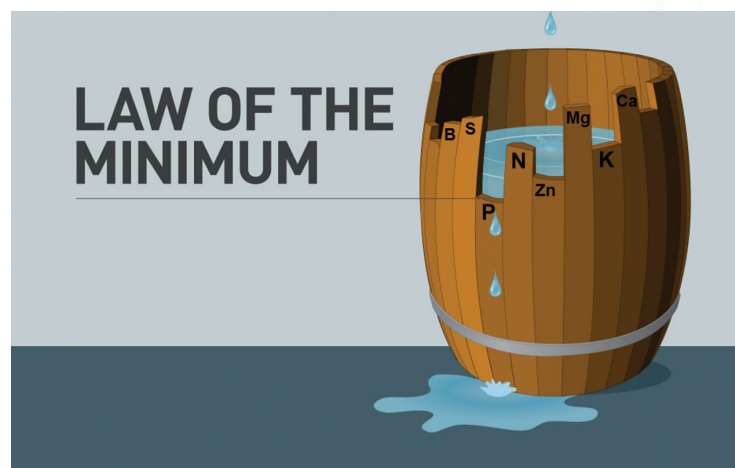


Figure 1. Liebig's law of the minimum states that the most limiting resource dictates growth.

For example, a very common nutrient that is limited in the Midwest is Phosphorus (P). The ideal level for P can vary by soil type and yield potential but generally speaking, the optimum range is between 25-50 ppm. If the P level is at 12 ppm it is commonly considered to be about 50% sufficient or half of what the crop needs to reach its maximum yield. So a field that can produce corn yields as high as 250 bu/ac could be reduced as much as 125 bu/ac if the P level is only 50% sufficient. Although this is only an example of one nutrient, it shows how quickly soil sampling could pay for itself.

Having 100% sufficient nutrient levels are required to achieve a field's maximum yield potential. To do so efficiently the in-field variability of soils need to be accounted for by intensively soil sampling. Grid sampling

Table 1

The 17 Plant Essential Nutrients.

Macronutrients		Micronutrients
Carbon	Nitrogen	Boron
Hydrogen	Phosphorus	Chlorine
Oxygen	Potassium	Copper
	Calcium	Iron
	Magnesium	Manganese
	Sulfur	Molybdenum
		Nickel
		Zinc

and zone (directed) sampling are the two most common methods of intensive soil sampling. We recommend grid sampling as an all-around good method. Grid sampling is best for determining the nutrient variability throughout the field which in turn makes the fertilizer application more efficient. We recommend zone sampling when we have the data layers (including at least one grid sampling event) to create good quality management zones. Perhaps the biggest benefit of zone sampling is the lower cost of sampling compared to grid sampling. Regardless of which method is best, both are far better than uniform management.

Another factor that should also be accounted for when correcting nutrient levels is crop yield. With soil variability and topography comes variable yields throughout the field and drastically different nutrient levels. Yield maps are the best source for showing the yield variability throughout the field. Also yield directly correlates with nutrient removal from grain, so utilizing yield maps to account for removal improves fertilizer application efficiency. For example, if part of a cornfield yields 100 bu/ac it removes about 35 lbs of P₂O₅/acre. Whereas, another area in the cornfield that yields 200 bu/ac removes 70 lbs of P₂O₅/acre. In this example, by accounting for the yield difference there can be a savings of about \$15/ac in parts of the field (see example in Figure 2).

Optimum nutrient levels are necessary to reach your field's maximum yield potential. Like a blood test, soil sampling your fields can identify issues. By correcting nutrient issues your fields will have potential to reach their maximum yield. Also accounting for field variability can save money on input costs by only applying nutrients where they are needed.

Field Trial wide versus narrow

Farmers Cooperative is looking at ways to control resistant weeds. This summer Ryan Franzluebber at Hallam Agronomy conducted a field trial on wide versus narrow row spacing in soybeans. He compared 15" rows against the conventional 30" row spacing. The idea here is to use the same planting population with plant placement in a configuration that shades the soil to reduce weed pressure. The results are overwhelming as you can clearly see the difference with more weeds found in the wider spacing. This is just another possible tool a producer can use to fight the war against those resistant weeds.

15"

Row Spacing

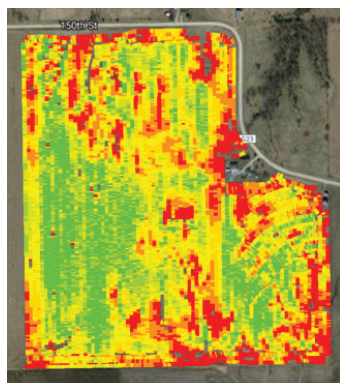


30"

Row Spacing

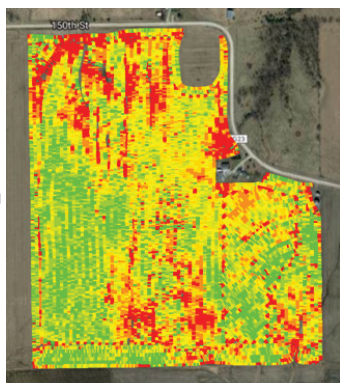


Corn Yield



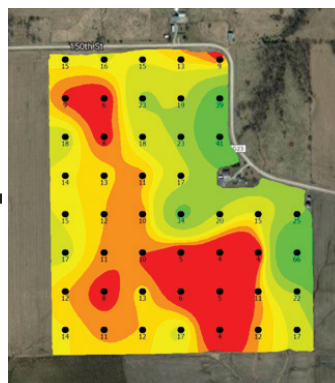
+

Soybean Yield



+

Soil Test P



=

Phosphorus Fet. Rec.

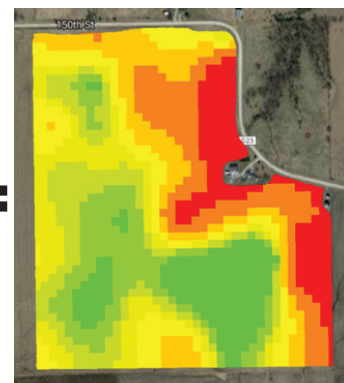


Figure 2. A fertilizer recommendation that utilizes yield maps to account for the previous nutrient removals and recent soil test P levels.

NUTRITIONAL NEEDS OF YOUR LIVESTOCK



Kevin Wittler

Feed Dept. Manager

Water is arguably the most important nutrient for your livestock. It's also the one that's mostly taken for granted. We all realize that water is essential for life but it's also extremely important for optimum performance. Most animals are at least 65% water and that water has many crucial functions in the body. From temperature regulation to eyesight and everything in between, they

need water to survive. Cattle can receive a portion of their requirement from lush pastures but as pastures mature and the dry matter of your forage increases, so does their water requirement. When it comes to water, we can't skimp. Access and an ample supply of water are extremely important year round. When the animal is not getting enough to drink their intake of feedstuffs diminishes. When intake drops performance declines, so remember that supplying adequate access to an ample water supply is the most crucial step to ensuring good nutrition. If you have questions regarding adequate access please contact your Cooperative livestock specialist.

Early fall is the time when many performance-robbing stresses face your cattle. Stocker feeders seem to come head to head with this challenge this time of the year. Forage quality has dropped steadily as well as their mother's milk. Weaning, shipping and sale barn stress can induce disease; specifically, coccidiosis, shipping fever, scours, liver abscess and bloat.

Your Cooperative's starter, conditioning and/or stress care feeding programs are specifically designed, formulated and fortified to:

- Generate optimum feed intake in stressed animals
- Stimulate rumen microbial growth and health in young stressed calves
- Enhance feed efficiency
- Accelerate weight gain to stimulate overall performance
- Build more metabolizable energy per pound of feed consumed
- Control/combat diseases including those mentioned above

For details on the program that best fits your operation please contact your Beef Specialist or nearest location.

Today, fall harvest is just over the horizon and before long area corn fields will transform into stalk fields. With a little help from Mother Nature and some supplemental nutrition, we should be able to winter these cows effectively. Your Cooperative offers many different protein and energy sources to meet the nutritional needs of your livestock. Delivery systems range from blocks and cubes to tubs or liquids, whichever fit your operational needs. Once again, we're offering fall and winter cattle feed booking programs. Please watch for this upcoming opportunity and make sure to take advantage of additional savings on your fall and winter nutritional needs while supplies last.

We want to congratulate all of our area exhibitors on the many accomplishments and honors earned at the county fairs this summer. The hard work and dedication put forth were very evident in the quality projects displayed. The lessons learned by the youth exhibitors, parents, volunteers, sponsors and spectators alike make that experience a part of the rural Midwestern life we all enjoy.

We want to thank each of you for the products and services you have allowed us to provide your operations. We continually strive to cost-effectively meet the needs of your operations and the expectations of you, our producer owners.



Have You Heard About Enogen Feed Corn?



Brian Scherling

Seed Operations Mng'r.

Enogen Corn is a relatively new concept in the agriculture industry. The Enogen corn trait was researched and developed by Syngenta in the early 2000s. After perfecting the trait it was released for commercial sale in corn hybrids in 2011. In the beginning stages, it was considered a value-added corn product

used in the ethanol industry. The value comes from increased efficiency in producing ethanol, therefore, yielding producers a premium for their bushels sold to ethanol plants. However, more recently researchers in the livestock industry have found that Enogen corn also brings great value to livestock producers.

The value of "Enogen Feed" corn is linked to a naturally occurring enzyme called alpha-amylase, which enhances the breakdown of starch into sugars. Enogen hybrids store this alpha amylase enzyme in the corn's endosperm and it triggers activation by conditions in the animal rumen and/or the silage bunker. The enzyme provides more readily available energy in the corn. The conversion of corn starches into sugar delivers energy to beef and dairy cattle. Ultimately, energy is a key component to maximizing beef production.

The key benefit of feeding Enogen corn is the "efficiency" that it provides. The advantage with Enogen Feed comes from greater starch digestibility and

more available energy. University research has shown the Enogen Feed can boost feed efficiency gain by an average of 5 percent in beef cattle production. The product is very versatile as well. The grain can be fed as whole or dry-rolled corn and it is also effective in silage rations.

Enogen corn is very simple for farmers to grow. You treat this corn no different than you would a field of number 2 yellow corn. It has the same agronomic features and yield potential as the rest of our hybrids. The Enogen trait version is available in many of the current NK corn hybrids that we are currently selling. If you are a beef feeder who grows your own corn, we would encourage you to take a close look at the benefit of Enogen Feed hybrids. If you have any questions regarding the Enogen Feed system please contact one of our Farmers Cooperative local agronomists or livestock feed specialist. We appreciate your business and look forward to serving you in the future!

 **Enogen® Feed**

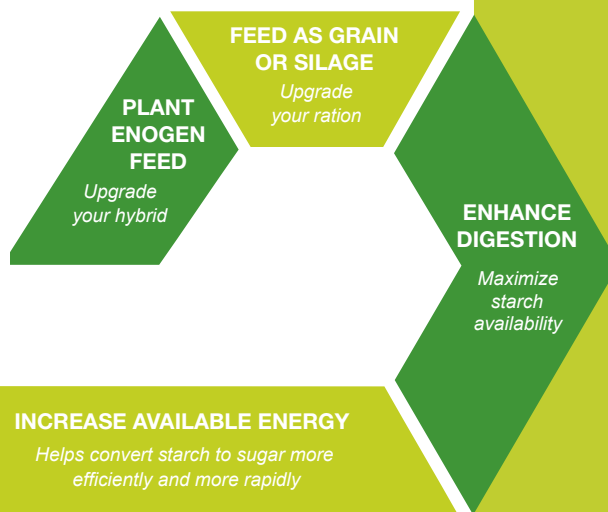
syngenta.

Unlock the energy potential of your ration – simply incorporate Enogen Feed hybrids in your feedlot operation.

It's as easy as replacing the corn or silage you currently grow and feed.



Energy is a key component to maximizing beef production, and corn is an important energy source. Corn supplies starch, that is converted to sugar, which ultimately delivers energy to feeder cattle.



¹Growers must comply with specific yet simple stewardship requirements.

²Syngenta production data from more than 1 million acres, 2012-2016.

WINNING THE WAR ON ABRASIVE WEAR

1. Every drop of bulk United® Universal Transdraulic Oil is pumped into our storage tanks through a big filter manifold we call “Big Blue,” fitted with eight 4-micron elements.

2. Using a special port, we pull a sample for lab analysis to ensure the oil meets our exacting cleanliness standards. If the sample fails the test, we recirculate the product through kidney-looping filtration systems built into each of our bulk plants.

3. United® Universal Transdraulic Oil is filtered once more as the product is transferred from our 3000-g holding tanks to delivery shuttles or drums for repackaging.

4. Every pail and drum of United® Universal Transdraulic Oil comes with a poly “shower cap.” Studies show that particulate matter and moisture content in sealed, barreled oil can double in just 180 days in a typical warehouse (a problem easily fixed with use of poly caps).

5. Air Sentry® breathers are fitted on EVERY tank and shuttle at Farmers Cooperative. These 2-micron breathers remove moisture from replacement and headspace air and prevent ingress of abrasive particulates.

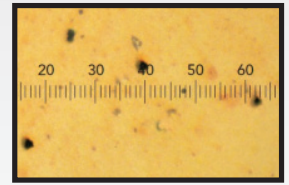
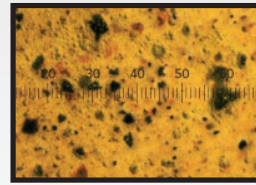
6. We are a bit obsessed with CLEAN in our warehouses and in the box areas of our trucks. Oil shuttles staged for delivery are kept spotless on top. Suction tubes are meticulously cleaned before they are placed in enclosed storage, and are cleaned again before insertion into a delivery shuttle. That’s a big part of the clean oil solution.

7. Our bulk oil delivery truck operators carefully remove all dust and grime from around the fill-cap of your storage tank prior to opening your tank and pumping in clean United® Universal Transdraulic Oil.

CLEAN OIL MEANS LESS DESTRUCTIVE WEAR, REDUCED DOWNTIME AND LOWER OPERATING COST.



Chris Forcee
The Oil Guy



Unfiltered ‘new’ oil vs. pre-filtered oil at 100x magnification.

Check the owner’s manual for your new tractor or combine, and you’ll probably find a section entitled “oil cleanliness.” It is almost certain that the concern will be contamination of the hydraulic circuit. Modern systems run at very high temperatures and pressures with extremely tight tolerances, and even microscopic particles can do a lot of damage to hydraulic components. The trouble is, new tractor hydraulic/transmission fluid is rarely as clean as it needs to be, even though it may be fresh from the bottle.

Regardless of lubricant manufacturer, new fluid typically contains three or four times too much particulate to be considered acceptable for use in hydraulic components built into systems for new tractors and combines. If we aren’t careful as we store and pour, the more abrasive particulate matter gets into our “new” hydraulic oil.

You don’t have to spend much time looking through a microscope at “new” hydraulic fluid samples to find out how much abrasive stuff is liable to show up before you even pour oil into your equipment. The dark chunks that appear in the images above are like tiny wrecking balls that cause three-body abrasive wear, damaging your equipment.

You can’t necessarily count on your oil filter to correct the problem. Most hydraulic oil filters for mobile equipment allow thousands of tolerance-sized particles to escape filter media and travel on, bumping and scraping their way between narrow passages and moving surfaces.

The best thing to do is start with clean hydraulic fluid. United® Universal Transdraulic Oil from Farmers Cooperative is “the cleanest bulk fluid in the field.” Engineered to meet or exceed the performance of brand-name tractor hydraulic fluids, pre-filtered United® Universal Transdraulic Oil can help extend equipment life, reduce downtime and lower operating costs. Cleaner Oil is Better Oil; those very words are painted on our delivery trucks and printed on the capseals of the drums we package. As a company, we know this by experience. At Farmers Cooperative, we put this stuff in everything (red, green, blue or yellow iron) and it just works! See the sidebar and you’ll understand what we mean by Clean.

To find out more about how Farmers Cooperative can help protect your tractor or combine with premium lubricants, coolants, and DEF, visit www.farmersco-operative.com/lubricants. Cleaner oil...just one more way we are Investing in Our Owners’ Success.



ENGINES!



Chuck Swerczek

Petroleum Sales & Mktg.

Even though it's only September, we are only a few weeks away from the beginning of harvest. It's hard to think about cold winter weather coming when it's still in the 90's.

Here are a few things to consider prior to the start of the cold season.

Maintain fuel tanks for cold weather performance: With proper tank maintenance and fuel handling, you can avoid most common-cold weather problems. During winter months, ice formation in fuels containing water creates severe fuel like and filter plugging problems.

It's important to regularly remove water from storage tanks, vehicle fuel tanks, and filter bowls, and to replace fuel filters according to manufacturer recommendations, or at least once a year. A waterlogged filter will swell and freeze restricting fuel flow.

It's once again time to take steps to protect your diesel-powered equipment from harsh winter weather. Premium Diesel Fuels are exactly what you need. Farmers Cooperative offers Roadmaster XL, Ruby Fieldmaster, seasonally enhanced with CFI (Cold Flow Improvers) and #1 Diesel Blends. All three are formulated for moderate climates and provide outstanding protection during extremely cold conditions.

Proper use of cold flow improvers can extend the operability of fuels without the use of #1 fuel. They serve two functions; first, changing the wax structure of diesel fuel so it can pass through filters more readily and second, keeping wax crystals dispersed longer when fuels are stored below the "cloud point" (temperature at which paraffin in fuel begins to form cloudy wax crystals and reduce flow). Cold flow additives do not reduce cloud point; Using #1 fuel is the only way to reduce the cloud point of diesel fuel as it typically has a very low cloud point.

Always blend fuel & fuel additives when fuel is at least 10 degrees above its cloud point. #2 Fuel made in our area typically has a cloud point of around 14°F (blending cold flow additives into diesel that is already at or below its cloud point will have no effect of the fuel)

Cenex Premium Diesel Fuels are enhanced with special additives designed for new diesel engines. These advanced additives help prevent common problems associated with using standard diesel, including injector failure, clogged filters, reduced efficiency, power loss, poor starting, costly repairs and even engine failures. The additives are smart injected at the terminal when the fuel is loaded. You can be confident each gallon has the additives you are purchasing to meet your needs.

Thanks for your continued support. Investing in our Owners Success. Now and into the future.

INDUSTRY WINTER TERMINOLOGY

Cloud Point - The fuel will look cloudy and wax crystals will begin to appear

CFPP - (Cold Filter Plugging Point) is a cold flow test that chills fuel to the point it will plug a 45 micron filter. New equipment filters today are two and five micron. Most cold flow additives are CFPP technology, which make the CFPP test somewhat less reliable

Operability - The lowest temperature at which equipment will operate without loss of power due to wax formation in the fuel delivery system

WASA - (Wax Anti Settling Additive) Keeps wax particles dispersed evenly for long periods of time;

- Long weekend shut downs
- Extended outside storage
- Avoids overwhelming the fuel filters
- Operability increases by dispersing smaller crystals

A GENERAL RULE OF THUMB IS THAT

For Every 10% of #1 Fuel Used, the Cloud Point Will Drop by 3°.

For example, 50% #1 into the 50% Ruby Fieldmaster + CFI will reduce the cloud point of the blended fuel by 15 degrees or lower.

Cooperatives, "KIND OF A BIG DEAL" October is Coop Month



Dennis Kenning

Sales & Marketing Mgr.

As a former educator, I would hear high school students often use the catchphrase "It's Kind of a Big Deal." For a high school student "Kind of a Big Deal" meant that something is important, popular or as they would say "awesome." Now I don't want to brag or boast, but in the business world, Cooperatives are "kind of a big deal" and here's why.

Cooperatives are "kind of a big deal" as noted by the government. The USDA understands the importance of Cooperatives as a huge part of agriculture and realizes their importance to the local economies. Cooperatives are a key part of agriculture with more than 29,000 cooperative businesses in the United States and over 350 million members. Cooperatives represent a strong business model and contribute to our local, state and national economies. Cooperatives in the US generate approximately 650 billion dollars in revenue and provide 2 million jobs.

Cooperatives are "kind of a big deal" in the way they operate. Cooperatives are truly a different form of business and they are in place to serve the needs of the member-owners. Cooperatives are democratically controlled and each member has one vote. Any profits at the end of the year are distributed back to the patron in the form of dividends or equity in the company. Cooperatives are motivated to serve its

membership while making a profit. Sometimes non-cooperatives are driven by corporate greed or individual wealth. Private businesses may only be concerned about the bottom line. Our Cooperative is concerned about the bottom line, as well, but we focus on the members' needs.

Even when Agricultural Cooperatives were first started they were "kind of a big deal." Many of our Agricultural Cooperatives were started at the turn of the century. During the early 1900's it became a problem for producers to market or sell their livestock and grain. There were very few places to sell their commodities and the private elevators often operated as a monopoly and did not provide a fair price. So Agricultural Cooperatives started for a

real purpose; the need for the producers to survive. For example, in Nebraska, the Dorchester elevator was founded in 1903 as the Dorchester Farmers Cooperative Grain and Livestock Association and started with 115 stockholders. In Kansas, the Farmers Cooperative Marietta Branch was the first Kansas Cooperative. It started January 1, 1900, and was formed to compete with a private elevator.

Agricultural cooperatives are "kind of a big deal" when it comes to marketing grain or offering supplies and services to producers. A year ago, Farmers Cooperative either shipped 54 rail cars per day or more than

100 railroad car units every other day. Cooperatives are designed for several other reasons such as providing energy, communication, and other services while bringing value-added products to consumers. Farmers Cooperative utilizes other cooperatives such as Land O'Lakes, CHS,

...more than
29,000 COOPERATIVE
businesses in the
United States and over
350 MILLION
members.

Growmark and CoBank to provide services to our patrons. Did you know that many of your favorite foods are marketed through a Cooperative? Some Cooperatives are Sunkist, Blue Diamond, Ocean Spray, Welch's Juice and Affiliated Foods. There are several other Cooperatives in our area such as the Nebraska Rural Radio, Farm Credit Services, Credit Unions, Dairy Farmers of America and Ace Hardware.

When you think about it, Cooperatives are a "big deal." Cooperatives provide 650 billion dollars in revenue and provide 2 million jobs. Cooperatives operate in the best interest of their membership and have a long history of serving their patrons. Today, twenty-nine thousand Cooperatives operate and bring about value-added products to the consumer.

October is Co-op Month. The 2018 theme is "Cooperatives See the Future" and stems from how viable Cooperatives are now and will continue to be well into the future.



Farmers Cooperative is providing on-going training to better serve our patrons. Doug Salmon lead the training at the DeWitt Campus.



The Farmers Cooperative is a proud sponsor of the Nebraska FFA Foundation. We provide \$15,000 dollars to support FFA thanks to our business partners CoBank and Land O' Lakes. The FFA Foundation honored our Cooperative with this Star Plaque at Company Headquarters. (L to R) Taylor Collins, Human Resource Recruiter; Stacey Agnew, Nebraska FFA Foundation Executive Director; Amanda Most, State FFA President Ogallala; Ron Velder, CEO; Brooke Bell, State Vice President from David City; Jordan Popp, State Vice President from Broken Bow; and Emily Vales, Marketing Intern.

NEBRASKA & KANSAS TOP 10 EXPORTS

NEBRASKA

1. Beef Cuts (Fresh/Chilled) = **\$603 Million**
2. Combine Harvester = **\$430 Million**
3. Corn = **\$430 Million**
4. Beef Cuts (Frozen) = **\$377 Million**
5. Soybeans = **\$336 Million**
6. Whole Hides = **\$260 Million**
7. Natural Gas = **\$211 Million**
8. Pork Cuts (Fresh/Chilled) = **\$199 Million**
9. Pork Cuts (Frozen) = **\$158 Million**
10. Spraying Mechanical Appliances = **\$154 Million**

KANSAS

1. Aircraft Including Engines = **\$2.6 Billion**
2. Wheat = **\$834 Million**
3. Beef Cuts (Fresh/Chilled) = **\$809 Million**
4. Soybeans = **\$404 Million**
5. Beef Cuts (Frozen) = **\$217 Million**
6. Corn = **\$216 Million**
7. Whole Hides = **\$208 Million**
8. Dog/Cat Food = **\$163 Million**
9. Radio Navigational Aids = **\$125 Million**
10. Shovel Loaders = **\$125 Million**



Farmers Cooperative
PO Box 263
Dorchester, NE 68343

YOUR COOPERATIVE

No other organizations reflect the American ideals of democracy and self-help as do cooperatives. Their success, importance, and beneficial impact on the American economy testify to the role they play in all of our lives.

In a cooperative, members democratically control the direction of the business. Members elect a board of directors to monitor the business, set goals, and hire management to operate their business. Ultimately, the board is accountable to the members for its decisions.

In private or stockholder-owned business, individuals invest to earn a financial return. In a cooperative, individuals are motivated by a shared need for certain products or services. By joining together, members gain access to products, services or markets not otherwise available to them. When forming a cooperative, members are motivated to become co-owners of the business primarily so that their mutual needs can be met. Also, cooperatives return financial gains to their members, whether through discounts, lower costs or patronage refunds.

SOLE PROPRIETORSHIP/PARTNERSHIP

A business owned by one or more people, usually to provide employment and a return on investment to the owners.

\$ OWN +  CONTROL

Individual Owners or Partners

 **USE**

General Public

INVESTOR-OWNED CORPORATION

A business whose stock is traded publicly by any number of investors.

\$ OWN

Stockholders

 **CONTROL**

Board of Directors

 **USE**

General Public

COOPERATIVES

A member-owned and member-controlled business that operates for the mutual benefit of all members. The cooperative form of business is one that brings the owners, controllers and users of a business together into one group.

\$ OWN +  CONTROL +  USE

The Co-op's Members

www.farmersco-operative.com