

# Farmers Cooperative

## Cooperative News



Dorchester, Nebraska 402-946-2211 • 800-642-6439

Plymouth, Nebraska 402-656-3615 • 800-456-3538

SEPTEMBER 2017

*Investing In Our Owners' Success!*

THANK YOU!

# Challenging times moving forward



Ron Velder

By Ron Velder, General Manager

Each and every day this year continues to challenge us as a cooperative and each and every one of our patrons. Lack of rain, low grain prices, higher expense costs and many other factors continue to weight on the balance sheet of all agriculture business. The markets declines have created many challenges today. One thing we continue to look for is how to offer competitive pricing and service but never weaken our balance sheet.

There's no doubt margins are less in the ag sector today but how to balance that with your balance sheet to keep it strong is challenging. The business cycles may have turned but our values at Farmers Cooperative haven't. Farmers Cooperative is committed to serving our producers with integrity, supporting our employees, being involved in local communities and continuing to build relationships with our business partners. Have a safe harvest!

## Update at Fortigen

Fortigen plant continues to move forward with a completion of the ammonia plant in September. This 34,000 ton a year production plant will also have a 20,000 ton storage tank on site with load-outs for our trucks.



Fortigen



Jansen

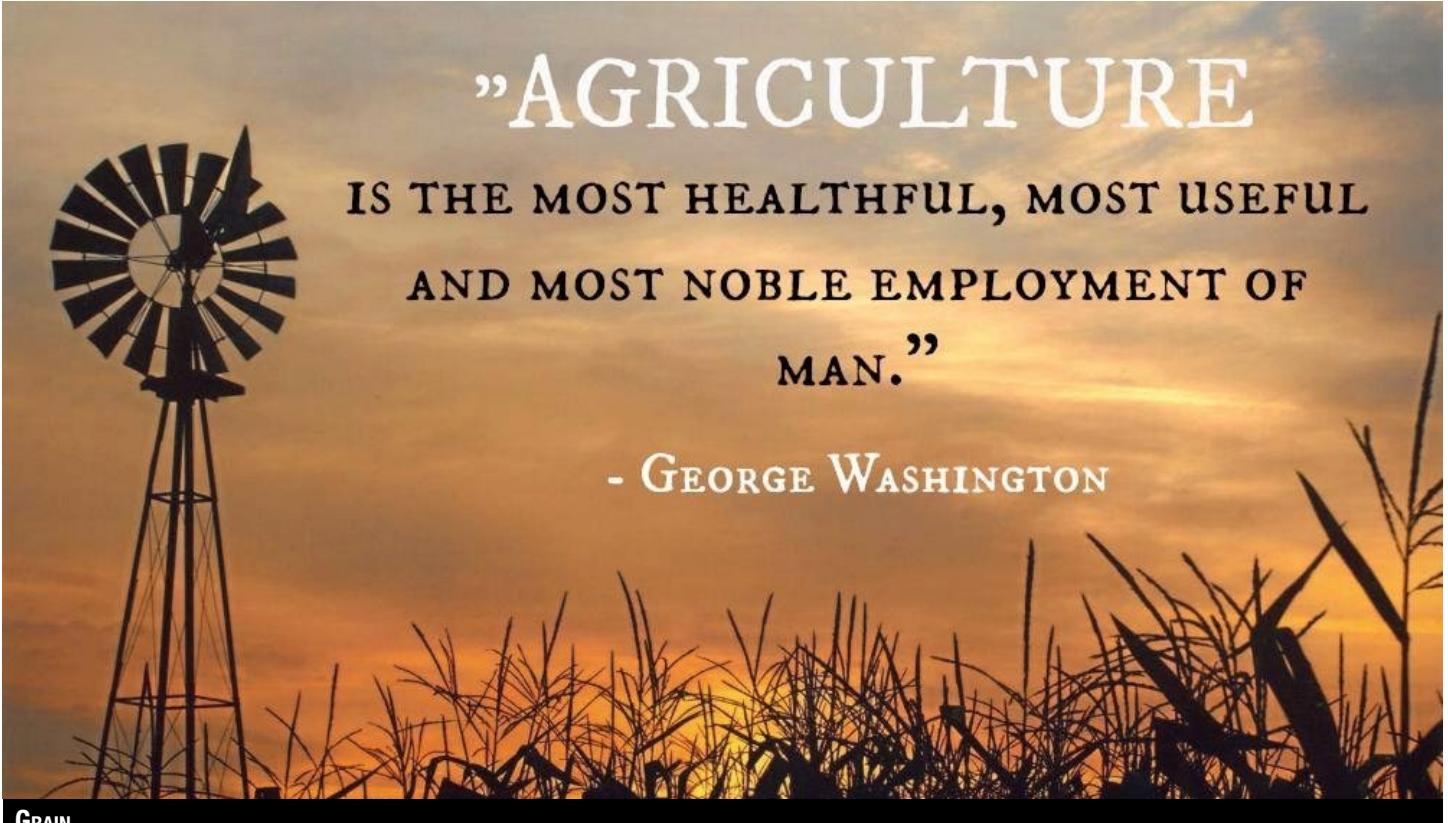


Raymond



Hanover

Grain	2
Accounting	3
Fuel	4
Recipe	4
Agronomy	5
Feed	6
Credit	7
Propane	7
USDA Markets	8
Cover Crops	8
The Oil Guy	9
Precision Ag	10
Tires	11
Public Outreach	12
Internships	14
High Fives	15
Open House	15



**"AGRICULTURE  
IS THE MOST HEALTHFUL, MOST USEFUL  
AND MOST NOBLE EMPLOYMENT OF  
MAN."**

- GEORGE WASHINGTON

GRAIN

## Becoming More Competitive

By Dale Hayek, Grain Manager

Harvest is quickly approaching and end-user markets sense it as well. We are feeling the effects of a large 2016 crop across the corn belt; coupled with limited export demand has given the farmer few marketing opportunities. During this time prior to harvest, the question remains on whether the remaining bushels get marketed at the current low levels, or if the farmer can/or is willing to carry them into harvest. Obviously our trade area production will be down from last year and soybean acres are larger. Coupled with new storage built in the last 12 months, it looks like grain storage space should be more available this year, allowing some 2016 bushels to be carried forward.

We are busy shipping grain at a never ending pace; in fact, as of July 31st we have shipped a record 150 (110 car) shuttle trains since September of last year. This is reflected in a record 17,400 rail cars in our first 11 months of our fiscal year, averaging over 50 rail cars a day. It is definitely a commitment from all of our grain personnel to move these bushels and the hours of dedication from our shuttle loading teams to execute loading the trains is most impressive. With that said, we will try to be as empty as possible going into fall harvest; not only to get the farmer unloaded quicker, but also to minimize the amount of ground piles.

We finally started shipping out of the new Frankfort Shuttle facility in June, and we will be at a very steady pace till harvest. They shipped 6 shuttles by the end of July and probably will ship 10 more trains by harvest time.

Local processing markets continue to struggle on getting enough ownership as farmers are reluctant sellers at these levels, and rightly so. Ethanol margins are respectable and most plants are running at capacity. Soybean processors still struggle with reduced crush margins. Their meal is still competing with corn DDG's for market share in feed rations.

The US is slowly becoming more competitive in the world market, primarily as the South American farmer is becoming less of a seller and our commodities find their way back into the export channels. There is no doubt we are less competitive than last year and our export numbers reflect this. But in the end, we need to export markets, primarily China for soybeans to accommodate a home for all this soybean production. The drought in North and South Dakota should force Nebraska and Kansas bushels to be more competitive sooner than previously expected this spring.

Finally, I would like to mention the most relevant issue pertaining to our employees and farmers alike, grain bin safety. It seems far too often we hear of an engulfment resulting in injury or death. Please be careful and diligent in your efforts as you empty your grain bins.



Dale Hayek

# Build A Strong Balance Sheet

By Brian Bohling, Controller



*Brian Bohling*

The balance sheet often lives in the shadow of its better known brother, the income statement. Assets and liabilities are not nearly as interesting as revenue and earnings. While earnings are important, they don't tell the whole story. Cooperatives with strong balance sheets are more likely to survive economic downturns and be ready to thrive when the going gets good again.

A balance sheet is simply a financial statement that summarizes Assets, Liabilities and Members' Equity at a single point in time. Assets are items of economic value that are owned by Farmers Cooperative while Liabilities are debt, financial obligations, that are owed to others. Members' Equity represents the amount of capital; patrons have invested along with non-member earnings. Additional equity is earned by your continued annual support of Farmers Cooperative paid back in the form of patronage. The relationship of these items is expressed in the fundamental balance sheet equation:

## **Assets = Liabilities + Members' Equity**

A strong balance sheet goes beyond simply having more assets than liabilities. The strength of a balance sheet can be evaluated by the asset and liability metrics found on balance sheets which are the windows to a cooperative's financial health. Solid balance sheets will possess intelligent working capital, positive cash flow, debt management and income generating assets.

Working capital is a common measure of liquidity, efficiency and short term financial health. Working capital is calculated as, current assets – current liabilities, or assets that are cash or will be converted into cash in one year less all debts owed during the same time period of one year. The working capital ratio, also called current ratio, (current assets/current liabilities) indicates you have enough short term assets to cover short term debt. Farmers Cooperative has averaged in excess of 1.6 over the past five years. Based on industry standards a ratio above 1.5 is considered healthy.

You have heard the sayings, "it takes money to make money" or "oxygen is the life blood of your business." Both are true for Farmers Cooperative as well. Cash in the bank will pay employees wages, purchase inventory and cover all other operating costs. Positive cash flow is when cash inflows for a particular period are greater than the cash outflow during

the same period. Positive cash flow does not necessarily mean profit and is usually due to careful management of expenditures. In the long term, a positive cash flow will generally be the direct result of a profitable cooperative and one that continues to allocate annual patronage and redeem equity timely like Farmers Cooperative has historically done.

Another key ratio of a strong balance sheet is the debt ratio which compares total debt to total assets which measures the amount of leverage being used. The higher this ratio, the more leveraged, which indicates greater financial risk has been taken. Meaning a significant portion of cash flow must be used for payment of principal and interest on the debt. A lower debt ratio implies a more stable cooperative with the potential of longevity. Farmers Cooperative is continuously well under the industry average while increasing grain storage and improving rolling stock each year. Constantly managing debt and interest costs has allowed Farmers Cooperative to take advantage of opportunities like the facilities in Frankfort, Kansas and Geneva, Nebraska.

All cooperatives require suitable capital assets to generate consistent revenue. Investing in assets which will assist in achieving long term financial goals has always been a priority with the management team and Board of Directors of Farmers Cooperative. Investment projects like train loading facilities, additional grain storage, fertilizer storage and upgrading equipment are analyzed and reviewed regularly. Strategic planning along with project cost controlling continues to allow Farmers Cooperative to "Invest in Our Owners' Success."

Add it all up; Farmers Cooperative has a very strong balance sheet that has taken multiple years to achieve. Growing your cooperative can be expensive, but our strong balance sheet will serve as a foundation to allow us to launch into new products and markets. Loan institutions love nothing more than seeing a solid balance sheet with healthy cash reserves and a balanced capital structure when assessing loan requests. With your continued annual support and cooperative business relationship Farmers Cooperative will continue to be agile and take advantage of options that will shape a more profitable future and maximize annual financial consistency.



# Ruby FieldMaster / RoadMaster XL



By Chuck Swerczek  
Petroleum Sales & Marketing

Todays engines use high pressure common rail (HPCR) direct injection technology to provide significantly greater efficiencies than conventional diesel engines. These engines operate under high temperatures and pressures that can literally "cook" typical #2 diesel fuel, resulting in injector/filter problems, reduced efficiency and costly repairs.

Farmers' Cooperative is an authorized Cenex Ruby FieldMaster, RoadMaster XL Premium Diesel dealer. Ruby FieldMaster, Roadmaster XL is recognized as the industries leading premium diesel fuel powering the demands of high-tech engines with an enhanced product formulation.

Cenex Ruby FieldMaster, RoadMaster XL contains a special

additive package to meet the 2014 Tier 4 engine technologies & EPA Mandates to reduce emissions. No other premium diesel contains a more complete balanced additive package that helps avoid the hassle of splash blending or top treating with aftermarket products.

Cenex Premium fuels are "Smart Injected" at the terminal while loading fuel to ensure quality specifications are met.

Ruby FieldMaster is a true premium diesel that is formulated to handle the rugged challenges of farming. It is an investment that pays for itself, plus it is backed by the best warranty of its kind in agriculture. Users of Ruby FieldMaster can purchase a "Total Protection Warranty Plan" that will cover new equipment for up to 10 years or 10,000 Hours and used equipment up to 8 years or 8,000 Hours.

## RubyFieldMaster / RoadMaster XL - Advantages

- Improves fuel economy by as much as 5 %
- Increases power by up to 4.5 %
- Boosts lubricity by 10-15 %
- Extends life of injectors/injector pumps
- Reduces maintenance costs
- Has a higher cetane number (typically 48 +)
- Helps prevent fouling issues (in 2007 and newer engines)



Contact your Location Branch Manager for more details, or call Chuck at 402-580-7562

**RECIPE | SUBMITTED BY ANNA GRONENTHAL, ADMINISTRATION – PLYMOUTH, NEBRASKA**

## Slow Cooker Garlic Parmesan Potatoes

(6 servings)

### Ingredients:

- 3 pounds baby Dutch yellow potatoes, halved
- 2 tablespoons olive oil
- 2 tablespoons unsalted butter
- 4 cloves garlic, minced
- ½ teaspoon dried oregano

- ½ teaspoon dried basil
- ½ teaspoon dried dill
- Salt & pepper, to taste
- ¼ cup grated Parmesan
- 2 tablespoons chopped parsley leaves

### Directions:

1. Lightly coat the inside of a slow cooker with nonstick spray. Place potatoes, olive oil, butter, garlic, oregano, basil and dill into the slow cooker; season with salt and pepper, to taste.
2. Cover and cook on low heat for 4-5 hours or high heat for 2-3 hours, or until tender.
3. Serve immediately, sprinkled with Parmesan and garnished with parsley, if desired.



# Tough Weeds Require Tough Decisions



*Scott Heinrich*

By Scott Heinrich  
Agronomy Sales Manager

At this point in the season many growers are asking themselves “what do I do differently next year to control resistant weeds in my fields?” This was my opening statement from last year for this quarterly newsletter and I believe

the question is still on the table for discussion. Each grower has many options and technologies to consider when it comes to controlling resistant weeds in both corn and soybeans. Marestail / Horseweed, Waterhemp and Palmer Amaranth are at the top of the list of tough weeds to control. Certainly we know the products used to control these weeds are not as effective as they used to be especially when used as the only tool. Rotation, tillage, trait choices, spray timing and residual chemistry are all pieces to the weed control puzzle.

The thought of “the chemical companies with have a new product to solve the issues” is false in the short term... another statement from last year’s newsletter. The chemical/seed companies do not have the silver bullet today but with some changes in management and cultural practices the producer has options for acceptable weed control. Our learnings in 2017 will assist our agronomist in helping you make the best choice when it comes to seed/trait to match your needs for weed control and yield. Currently most of our seed choices are single trait (ie Liberty Link, Enlist, and Roundup) technology. The exception is Roundup Ready Xtend soybean platform which has both the Roundup and Dicamba traits. Additional stack traits that will allow for multiple mode of action chemistry are on the horizon beyond 2018. Ultimately at this point we will have the same tools to work with as we did in 2017.

Let's again review the “**System Approach**” we talked about last season. Following this system does provide a best case scenario for overall success under the current state. ➔

1. Fall applied herbicide program.
2. Pre-emerge and Post emerge herbicides for **Corn**.
  - a. Start clean with multiple modes and full rates and follow with multiple modes of action and residual post products.
3. Pre-emerge and Post emerge herbicides for **Soybeans**.
  - a. Start with Authority or Sonic plus a grass herbicide like Dual.
  - b. Follow with multiple modes of action and residual post products.
  - c. Plant Liberty Link soybean varieties and spray Liberty post-emerge.
  - d. In some cases roughing out weed escapes may be needed.

## ***Decisions to consider...***

- A. Control weeds before they emerge or shortly after; use residual herbicides.
- B. If you think it's too early to spray... you're too late. Post at 21 days after planting.
- C. There is no such thing as a rescue treatment anymore.
- D. Consider Liberty Link soybeans. We will have several brands including NK, NuTech, & Credenz
- E. Dicamba tolerant beans will need to be managed based on manufacturer recommendations.
- F. Fall or Spring Tillage, narrow rowed soybean and corn, in-crop cultivation are all options.

Please be watching for field tours near you in the coming weeks. The time spent at one of our seed / agronomy tours will be very beneficial. There will be time to ask our agronomy staff about some of their learnings with the different systems described above.

*Thank you for your business and support of Farmers Cooperative.*

# Cooperative Creep Feeder Programs



Kevin Wittler

By Kevin Wittler  
Feed Department Manager

Your Farmers Cooperative Feed Team would like to remind you again of the expanded Veterinary Feed Directive "VFD" Regulation which became law on January 1st 2017. A VFD is a prescription issued by a licensed veterinarian within the context

of a client-patient relationship. The largest use medications locally, which now require a VFD, are Chlortetracyclines, Oxytetracyclines, Lincomycin, Neomycin, Penicillin, Sulfas, Virginiamycin and Tylosin. This is not a complete list and several name brands are registered that fit into these product categories. Additionally, production uses, such as growth promotion and feed efficiency, are no longer allowed on any VFD covered product. Your Feed Team is available to assist you to be in compliance and answer questions that you may have, however, the VFD must be issued by your veterinarian and we must have a current VFD in order to manufacture and deliver your order. Please plan ahead for your fall weaning feeds as this is the first fall weaning season under the expanded regulations and the most commonly used medications for the upcoming season are included.

Early fall is a time when many performance-robbing stresses face your cattle. Stocker calves seem to come head on with challenge this time of the year. Forage quality has dropped steadily as well as the mother's milk. Weaning,

shipping and sale barn stress can induce disease – specifically coccidiosis, shipping fever, scours, liver abscess and bloat.

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

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. Your Cooperative will once again offer a fall and winter cattle feed booking program. Please watch for this upcoming opportunity and realize 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. Their hard work and dedication put forth was very evident in the quality projects that were displayed. The lessons learned by the youth exhibitors, parents, volunteers, sponsors and spectators alike, make that experience part of the rural Midwestern life we all enjoy.

We want to thank all 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 expectations.



# Propane Tank Gauge Monitors are Available

By Roger Kreifels  
LP Operations & Compliance

Years ago, predicting customer propane usage used to be a fairly simple process. Back then, our average home heating customer used 1200 gallons of propane per year. Stopping by once a month in the winter and filling the tank made sense because the typical tank was down low enough to hold a 220-280 gallon delivery. Today, our average customer uses around 700 gallons per year so stopping by once a month in the winter is no longer feasible.

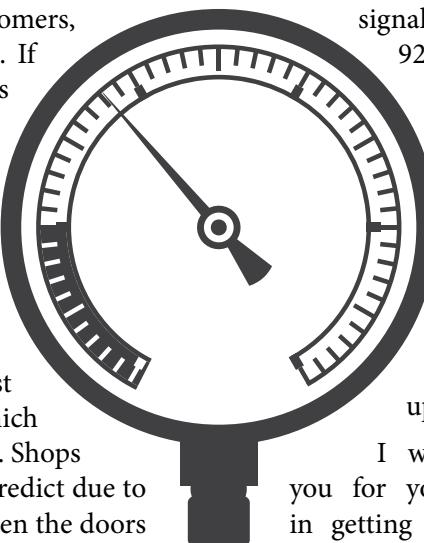
Even with the lower usage, for some customers, it's still pretty easy to predict their usage. If you have a gas furnace only, or even a gas furnace and a gas water heater, we can fairly accurately predict when we need to fill again based off the past temperatures.

For those of you with an alternate heat source like a heat pump or a wood stove, or a single room electric heater, predicting when your tank gets down to 25-30% and ready to be filled is almost impossible because we don't know which source of heat is running at any given time. Shops and large buildings are also very hard to predict due to how often they are being used and how often the doors are open. For those of you with this type of inconsistent propane usage who still want to be on our "Keep Full" program, we have tank gauge monitors available. The monitors are installed on your propane tank and connected to the gauge dial. The monitor then takes a reading every day around 2:00 a.m. and sends the reading to both you, the

customer, and us. Even though the reading is taken at 2 a.m., you choose what time of the day you want to receive your email. It is also set up to send both of us real time alerts when the tank hits a "Warning" level, typically at 30%, then another at "Critical" level, typically set at 20%. These monitors are great for customers with inconsistent usage or who may be gone for extended periods in the winter.

The cost for a monitor depends upon what type of signal we can get at your location. Approximately 92% of the ones we have in operation right now use a cell phone signal and are \$85.00/year or \$7/month. If a good cell signal is not available, we have to use a satellite monitor. Satellite monitors start at \$100/year with a maximum of 10 emails per month and increases from there depending upon how many emails per month beyond the 10 that you wish to receive. Monitored tanks must also be set up on a "Keep Full" delivery basis.

I would like to take this time to thank you for your business and if you are interested in getting a monitor, please call 800-473-4579. If you have questions or would like some additional information, please feel free to call me at 402-641-3863 and I'll help you in any way I can.



**Call 800-473-4579  
For All Of Your  
Propane Needs**

## CREDIT

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



By Rob Blahauvietz  
Credit Department Manager

Have you paid your account? The end of our fiscal year is August 31. At that time, the 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.

*Rob Blahauvietz*

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 will help your cooperative's financial strength and stability. Please pay your monthly statement before the last business day of the following month.

*Thank you for your cooperation.*

# USDA Forecasts Pressure on the Market

By Doug Lewis, Grain Originator

The market continues to trade weather forecasts and todays updated forecast shows a dry or drier outlook than the previous days forecast. Recent rains have given some relief, but there are still portions of the country that have been missed or were on the light side. This has led to decline in the current crop conditions. Time will tell how we finish out the rest of the growing season as August has yet to start and beans have some time yet. Some private estimates of the 2017 crop have been revised lower. As the forecast models change, so do the markets and this creates volatility.

Export sales and shipments on corn and beans for 2016 crop are running ahead of USDA projections. New crop sales for 2017 crop are at the second lowest level in the last 10 years. The Brazilian currency has strengthened recently and has slowed Brazilian farmer selling which has raised basis levels. This has made the US offers competitive for August again. With all the political uncertainty in Brazil, another news headline could push their currency lower and encourage the producers to resume selling. This increase in selling could push basis levels lower making them cheaper in the world markets.

The August USDA crop report is ten days away as of this writing. Over the last 24 years, yield estimates have risen over the July estimates 13 times. The biggest increase was in 2016 with a revised number 7.1 bu/ac larger than the July numbers. The biggest decrease was in 2012 with a revised number that was 22.6 bu/ac smaller than the July yield estimate. Earlier reports yield numbers were based on trend line yields, while the August report on growing conditions realized prior to the release of the report. August and September influences such as insect pressure and weather will still influence final yields. Final yield numbers as well as price remain unpredictable and effective risk management is not based on trying to determine them.

Option volatility remains low which is helping to keep option premiums low. Recommend getting coverage on bushels that are not sold or not protected currently. For those 2016 corn bushels being sold, a Dec \$4.00 call would give some upside if the market would rally through the fall. The Dec \$4.00 call is trading at around 14 cents with a \$3.90 board price.

Ironically, the 2017 and 2018 \$4.00 puts are trading within a couple cents of each other at around the 25 cent mark. 2018 puts give us over 15 months of protection.

## COVER CROPS



Brian Scherling

**By Brian Scherling,  
Seed Department**

The demand for cover crops in our area has steadily increased over the past 5 years. Every year it seems as though the popularity has gone up. However, many factors go into making a decision on what kind of cover crops to plant. Some of these factors include; timing of seeding, irrigated or dryland, type of seeding application – aerial or

drill, grazing or strictly soil health. Most situations are different and unique with each operation. So, most recommendations are handled on a one on one basis between the grower and our Farmers Cooperative Agronomy staff.

With cover crops being relatively new to our area, we are always learning about its benefits and in some cases some of the detriments. Through our recent experiences we feel that the benefits greatly outweigh the risks or problems.

Please contact your local Farmers Cooperative Agronomy representative if you are interested in learning more about cover crops in general or what Farmers Cooperative has to offer. Give us an opportunity to help you build a plan to meet the needs and goals of your operation. Thank you for your business!!

Following is a small list of benefits that our customers find value with the cover crops we offer.

- Suppression of weeds
- Reduce soil erosion (wind/water) and reduce soil compaction
- Recycle nutrients/add organic matter
- Supplement grazing and forage
- Promote wildlife habitat

Farmers Cooperative carries a full lineup of cover crop seed to meet the needs of growers in our area. We can source most anything that producers may need or want, but our main products include; Cereal Rye, Oats, Wheat, Turnip, Radish, Sorghum Sudangrass & Forage Sorghum. We can provide custom blends upon request. Aerial application of cover crops into standing row crops is also available. Typically we begin to fly on seed by the middle of August.

# Finally, a Seat at the “Cool Table”

By Chris Foree  
The Oil Guy

When I was a kid, the school cafeteria had a “cool table” where all the “neat” kids sat, away from the rest of us. Millennial translation: “Neat” meant “cool” in the “olden days” of the Seventies and Eighties.

Old-school stock car racing fans will recognize one very famous driver that probably always sat at the “cool table” in school. Famously cool under pressure, Richard Petty had the coolest car, the coolest fire suit, the coolest cowboy hat and the coolest- straightest -whitest teeth of any race driver who ever got behind a wheel. I’ll also bet every race fan of a “certain age” remembers the super-cool blue 1971 Plymouth Road Runner he drove to win that year’s Daytona 500 by half a car-length over Buddy Baker. If you’re like me you’ll also remember the STP® brand sticker on the front fender of that pretty blue ‘Runner. The ultra-cool red-white-and-blue oval STP® logo and “King” Richard Petty are forever woven together into racing history.

At age 79, “the King” of NASCAR is still one cool dude. And for over 60 years, for more miles than anyone can count, STP® has been one of the most trusted names in automotive care. STP® Coolants are still keeping engines cool all over the nation. It’s super-cool that I get to announce the introduction of the high-quality STP® line of automotive coolants to the Farmers Cooperative family of products.

STP® Coolant products offer Farmers Cooperative customers the latest coolant/antifreeze technologies at better prices than our former offerings. Plus they come in handy cases containing three one-gallon bottles. Other brands come in 6-gallon cases, and I can already tell you that half the weight is nice for those of us of a certain age (ahem) to haul around in the bed of a rusted-out old red pickup that might occasionally leave a little puddle of “goblin blood” on the driveway.

For a full overview of the latest technology in coolant / antifreeze, browse the Farmers Cooperative website at [www.farmersco-operative.com](http://www.farmersco-operative.com) and click the **FC Newsletter** tab. Click the link to the June 2013 Newsletter and you’ll find a terribly clever article about coolant selection. Read it and you’ll quickly understand why I never got to hang out with the “neat” kids at school. No matter; I’m all grown up now, at least about half-way. For sure, the STP® line is all grown up, offering top-notch coolants to meet every application.

Next time your radiator is low, pick up a case of STP® Coolant at your local Farmers Cooperative and you’ll see why we feel a little bit like we finally got a seat at the “cool table.” Check out this neat conversion chart to find which type is right for you.



Chris Foree

New STP® Coolants	Application	Former products offered
STP® ALL Makes & Models (OAT Technology)	Extended Life premix and concentrate for gasoline engines in cars and pickups	Peak Global Lifetime (OAT Technology)
STP® HD Nitrite Free ELC (OAT Technology)	Extended Life premix and concentrate for heavy duty diesel engines (Lemonade color)	FS Extended Life (OAT Technology)
STP® HD NOAT ELC (Nitrited/OAT Technology)	Extended Life PREMIX ONLY for heavy duty diesel engines (Red color)	FS Extended Life NOAT (Nitrited/OAT Technology)
STP® HD Pre-Charge* (Fully Formulated Technology) *Requires Supplemental Coolant Additives for proper maintenance	Fully Formulated premix and concentrate for diesel engines (Pink/Fuschia color)	FS Fully Formulated* *Requires Supplemental Coolant Additives for proper maintenance
STP® Conventional Green 50/50	My rusty old red pickup. Green “Goblin blood.” Not great for diesels.	Didn’t have premix in bottles
Jack Frost® Conventional 100%		Keeping Jack Frost® concentrate



Wesley Hedges

# Farming With Satellites

By Wesley Hedges  
Precision Ag Manager

Sputnik 1, the first earth orbiting satellite in history, was made by the Soviet Union on October 4, 1957. Since then, there have been about 6,600 satellites launched. Today, there are around 1,000 currently active.

Over the years, since the first launch, satellite technology has become vital for day to day life. You would be surprised of the things that wouldn't be possible without satellites. Satellites have enabled us to remotely monitor crop issues, navigate, forecast weather, talk on the phone and much more. Thirty-five years after Sputnik 1 was launched, satellite global positioning systems (GPS) merged with agriculture to create the beginnings of precision ag technology as we know it today.

## You Can't Manage What You Don't Measure

In the early 90's, yield mapping was being developed and tested. Like most inventions, yield mapping took a significant amount of persistent trial and error to get it right.

*Thanks to those inventors and early adopters, today we have an invaluable precision ag data layer (yield maps) that we can use to help growers make decisions and discover opportunities on their farm.*

What is a yield map? A yield map (Figure 1) is comprised of thousands of data points that visually explain the spatial variability of grain yield across the field. Yield mapping is created by integrating, satellite GPS, sensors on a combine and an in cab computer monitor to georeference each data point. As the combine harvests throughout the field, a data point is recorded every few seconds. Each data point is recorded according to the satellite referenced GPS location of the combine, resulting in a yield map.

Farmers Cooperative is on pace for a record bushel handled this year and we thank you, the producer, for giving us the opportunity to work together.

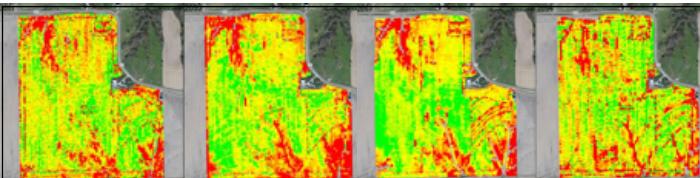


Figure 1. Here are four yield maps from 2011 (soybean), 2012 (corn), 2013 (soybean), and 2014 (corn), showing the temporal (year to year) yield stability across years and crop types. This field has a very solid foundation for the creation of management zones for variable rate applications.

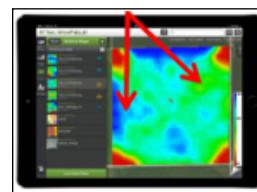
## Turning Data into Decisions

In order to have a good quality yield map, we need to read the yield data from a combine into a Geographic Information System (GIS) to clean errors and post calibrate the data. Then we analyze these yield maps to determine areas of the field that are yielding significantly lower than other areas. We then discuss with the grower ways to correct some of the lower yielding areas in the field. Common issues that we can correct in a field may include: low soil fertility, soil acidity, soil salinity, poor drainage, organic matter, and pests.

However, the primary sources of variable yields are from soil variability and topography. We typically can't correct these, at least in an economical manner, but instead we can categorize the field variability. By placing the varying field variabilities into management zones, the different rates of seed and fertilizer can be applied to each zone.

## Seeing Through Satellites

Satellite imagery (Figure 2) is another valuable precision ag data layer for remotely monitoring your fields. Satellites have cameras on board that automatically capture images, then download to computer software for processing and calibration. We then can quickly and easily view all of the fields in a matter of minutes and identify areas of the field that need attention. For example, in-season crop scouting can be paired with satellite imagery to help direct scouting certain areas of the field.



with the in-season satellite imagery and then adjusting the pivot settings was an easy fix.

Figure 2. The satellite imagery in the picture shows an "X" pattern, which was caused by the corner arm pivot system watering unevenly. The result could have been a yield loss of 10-15 bu/ac of corn on 50 acres of the field. Discovering this

Satellite imagery is archived so we can go back over ten years to look at field variability. Since we have multiple years of imagery, we can identify the temporal consistency and create field management zones based on the imagery.

*Managing inputs effectively with help from today's technology is critical for maximum profit gain.*

Cost of grain production is expensive and lower commodity prices equal narrower margins. The cost to produce corn can be in excess of \$300 per acre. With this kind of investment, now is the time to take advantage of today's technology so that you can place your products in the right place and at the right rate.

Harvest will be here before you know it. Contact us today to setup up yield mapping on your combine.

# Fall is Right Around the Bend

By Brent Colgrove  
TBA Manager

Down time in the field during harvest is very frustrating for everyone involved. The one thing that will kill your day is a flat or blown tire, so here are some tips. Inspect your tires on your combine and grain trucks. You need to look for outward bulges or bubbles on the tire as well as exposed chords and vertical cracking on the sidewall of the tire. Don't forget to check the air pressure on your equipment. Low air pressure is the leading cause of tire failure. Make sure the tire/wheel assembly and the air pressure is enough to carry and exceed the load you are putting on your equipment.



Brent Colgrove

PSI		70	75	80	85	90	95	100	105	Maximum load & pressure on sidewall	
kPa		480	520	550	590	620	660	690	720		
LBS	Single	9,060	9,540	9,980	10,440	11,020	11,460	11,900	12,350	S	6,175 LBS at 105 PSI
LBS	Dual	17,520	18,320	19,040	19,800	20,820	21,660	22,500	23,360	D	5,840 LBS at 105 PSI
KG	Single	4,100	4,320	4,520	4,740	5,000	5,200	5,400	5,600	S	2,800 KG at 720 kPa
KG	Dual	7,960	8,320	8,640	9,000	9,440	9,840	10,240	10,600	D	2,650 KG at 720 kPa

This chart will help you when checking the tires on your grain truck. The size for this chart is a very common 11r22.5 14 ply tubeless truck tire. If you still need help, please give us a call at the Coop. When checking your combine tires, here are some sizes and load ratings that should help:

- |                     |  |
|---------------------|--|
| 18.4r38 (480/80r38) | - 18 psi - 5,000 pounds dueled up - 30 psi - 6,690 lbs. dueled up            |
| 18.4r42 (480/80r42) | - 18 psi - 6,000 pounds dueled up - 30 psi - 7,080 lbs. dueled up            |
| 24.5r32             | - 11,000 lbs. at 30 psi. Radial tire, bias tire 12 ply - 32 psi - 8,800 lbs. |
| 30.5lr32            | - 13,200 lbs. at 30 psi. Radial tire, bias tire 14 ply - 28 psi - 9,900 lbs. |
| 800/70r38           | - 15,700 lbs. at 30 psi. Radial tire.  |

If you need more help trying to figure out what you need, again give us a call at the Coop and we will walk you through it. If you need tires for your combine or grain cart, the Mitas line of farm tires which we carry have a \$100.00 per tire rebated going on through the end of September. Take advantage of this, because with the added cost of raw materials many of the major tire manufacturers are taking a price increase of up to 8% on October 1st. Many of our competitors in the farm tire business will charge a mounting fee when you buy a tire from them. At Farmers Cooperative we will sell you a tire 2 different ways. If you want to mount your own tire, we will charge you a cash and carry price. If you want us to mount your tire, we will sell you the tire installed on your farm. If you buy one farm tire, we will charge you a service call, but if you buy a pair of farm tires, we will not charge you a service call up to 35 miles. If you are over 35 miles from one of our stores who has a farm tire service truck, the service call on a new set of farm tires will be \$80.00 and the mounting labor is free.

*The Farmers Cooperative Tire/Service Centers are here to serve you and we want to thank you for your support. See you next time.*

**SAVE BIG  
THIS HARVEST  
WITH  
MITAS' INSTANT  
TIRE SAVINGS**

Save instantly on any Mitas or Cultor agricultural radial tire.

At the time of purchase of any Mitas agricultural radial tire, instantly save \$100 per tire. With any Cultor agricultural radial tire purchase, instantly save \$50 per tire. To get a great start to your harvest, ask your sales representative about putting instant savings into your pocket.

For terms and conditions, visit [www.mitasharvestsavings.com](http://www.mitasharvestsavings.com).

Offer valid from July 1, 2017 to Sept. 30, 2017.









Firth- 402-791-5862 Plymouth- 402-656-4000 Milford- 402-761-2226

# The Gift of Time

By Dennis Kenning  
Sales & Marketing Director

As a former FFA Advisor, I would sometimes see an FFA member that was quick to pay their dues but failed to roll up their sleeves and get to work. I'm sure many of you have seen that same thing happen with community clubs or service organizations. We have that group of people who are "wannabes," they want to be involved but fail to be dedicated enough to get the job done.

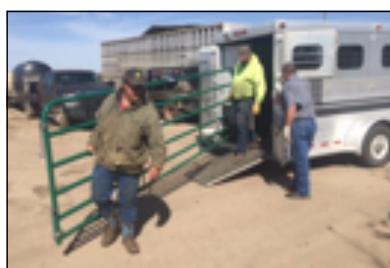
What does it really mean to donate? Is it simply about writing a check or is it about believing in something so much that you have people with boots on the ground getting the job done.



*The Fairbury FFA Chapter used their Farmers Cooperative Grant to start a Bee Keeping Project as part of students Supervised Ag Experience Program.*

Like most businesses we support the county fair through monetary donations but we also believe our duty goes beyond check writing. We go beyond the financial donation by providing the man power and thus providing the gift of time.

The Jefferson County Fair is just one such example of providing the gift of time. For 35 years, our Feed Department Manager, Kevin Wittler has served as the swine show superintendent. Kevin assembles a crew of Farmer Cooperative employees to check-in, identify, weigh and conduct the Junior Fair and Open Class Swine Show. Kevin also makes sure the equipment is there and an adequate supply of wood chips is at the fair for exhibitors.



*Kevin Wittler, Feed Manager helps local ranchers unload donated items for the Kansas Fire Relief Effort, near Wilson Lake, Kansas*

Rolan Knust, our Jansen Branch Manager, provides breakfast at the fair for 4-H and FFA exhibitors. Rolan provides the man power, supplies and cooking skills needed for this activity. Another example is, Mike Stephens from our feed department who often helps to line up the next



*Members of the Blue Valley FFA Chapter in Kansas used a Farmers Cooperative grant to start an Animal Science Learning Lab.*

class at the dairy show.

An activity at the Jefferson County Fair is our Market Broiler Project. In an effort to provide more 4-Hers and FFA members the opportunity to show at the fair, we have been providing exhibitors with baby chicks. The only requirement is that members must show the poultry in the market broiler class at our county fair. Exhibitors are responsible for all expenses in raising the chicks and bringing them to the fair. Obviously this is not a high profile activity but it provides youth the opportunity to take a project to the fair while learning animal husbandry skills.



*Dennis Kenning and Haley Zabel are pictured with John Mabry of the Food bank of Lincoln as part of the Farmers Cooperative hunger program.*

The Farmers Cooperative continues to support the County Fair Premium Livestock Auctions. Our goal is to support as many exhibitors as possible. Premium Livestock Auctions provide a real incentive for Junior Fair Exhibitors.

Many Businesses are quick to write a check and that's great. Fairs, 4-H and FFA need financial help. For the Farmers Cooperative it goes beyond this because we are dedicated to the cause. 4-H and FFA have and will continue to be a huge priority of the Farmers Cooperative. As we often say, these youth organizations represent our future patrons, community leaders and employees. Investing in our Owners' Success, also means investing in our future... youth! When you think about it, our future lies in the hands of our young people, so the Farmers Cooperative will continue to support Agricultural Youth by providing the gift of time.



*Farmers Cooperative provided training about Chemicals, Grain, and Machinery at Farm Safety Camps in Nebraska City, Tecumseh and Crete.*



Kansas Livestock Association representative Clayton Huseman (center) was on hand for the donations delivered to the Wilson Lake area



Through the University of Nebraska in Lincoln, the Farmers Cooperative hosted the Mandela-Washington program which had over 25 delegates from African



The Fillmore Central FFA Chapter used their Farmers Cooperative Grant for a number of projects including Hygiene Drive at their school.



Haley Zabel, Sales & Marketing Intern demonstrates the importance of grain safety for elementary students at a Farm Safety Day Camp.



Dennis Kenning, Sales & Marketing Manager uses a giant hamburger to talk about where their food comes from at a "Day on the Farm" event in Crete.



Jim Damrow, Swine Specialist teaches kids about swine production at the "Day on the Farm" event in Beatrice.

# Summer Internship Comes to a Close

**By Taylor Collins  
Human Resources**

My how the summer months seem to fly by each year! The Farmers Cooperative Summer Internship came to a close on August 4th. The program totaled 12 weeks in the summer and still left the interns a couple weeks of relaxation before the fall classes started up again. These interns helped out the company in numerous ways throughout the summer. Each intern was giving a specific project designed for their department and location they were at for the summer.

Aside from each project, interns also got to learn more about their industry and department. For example, Agronomy interns also learned about crop scouting, weeds and diseases, treating soybeans and the sales and training involved with the department. Our Precision Ag intern helped with the R7 tool, define productivity zones, yield analysis, etc. Marketing helped expand our social media platform with the creation of a Twitter account and spread content as well as help with all the local community involvement projects. Our Human Resources intern helped define job descriptions, go to job fairs and promote internal employee benefits.

We not only wanted to provide value to the company with their work, but provide valuable experiences for the interns themselves. Upon orientation, we had our Safety Director, Doug Salmon, show the importance of safety in cooperatives by giving them a physical tour of what to look for and how to follow safety protocols. A couple weeks into the program, we toured Ag Source Cooperative Services to show them the basic process of how soil and plant tissue samples get analyzed. Agronomy interns were able to attend crop scout and fertility training sessions in Grand Island and Beatrice. A few interns attended and helped work our Frankfort Shuttle Loadout facility dedication. To end the program, we gave a tour of Farmers Cooperative facilities so they could see our ever growing number of assets and mingled at an end of the summer event.

Overall, we were thrilled to have such hardworking and dedicated interns this summer. Farmers Cooperative understands the importance of continued Agriculture education and we were thrilled to offer a positive experience young individuals can learn and grow from. We want to acknowledge the interns below for their good work this summer!

<b>DeWitt:</b>	Haley Zabel – <i>Marketing</i>
<b>Dorchester:</b>	Jacob Goldfuss – <i>Human Resources</i>
<b>Frankfort KS:</b>	Clayton Branek – <i>Agronomy</i>
<b>Hallam:</b>	Max Latshaw – <i>Agronomy</i>
<b>Plymouth:</b>	Wyatt Kowalski – <i>Agronomy</i>
<b>Princeton:</b>	Bryan Wietjes – <i>Agronomy</i>
<b>Raymond:</b>	Joe Schulz – <i>Agronomy</i>



### Nebraska Unique Facts:

- 1** Unicameral Legislature – Single-house system also nonpartisan
- 2** Ogallala Aquifer – Spread evenly across U.S. would cover all 50 states with 1.5 feet of water
- 3** Lied Jungle – Largest indoor rainforest, covering 1.5 acres = Henry Doorly Zoo
- 4** Nebraska National Forest – Largest hand planted forest in America = 141,159 acres
- 5** Bailey Yard – World's largest railroad classification yard = North Platte

### Kansas Unique Facts:

- 1** World's Largest Hand Dug Well – 109 feet deep and 32 feet in diameter – Greensburg
- 2** World's Largest Outdoor Concrete Swimming Pool – holds 2.5 million gallons of water – Garden City
- 3** Longest Railroad Bridge – over 1,200 feet across the Cimarron River = Ashland
- 4** Longest Grain Elevator – 2,600 feet long, holds 46 million bushels = Hutchinson
- 5** The 4-State Lookout – Panoramic vistas of the Missouri River valley (KS, NE, MO & IA) = White Cloud

## A Successful Frankfort Open House

By Haley Zabel,  
Sales & Marketing Intern

On Tuesday, June 13, 2017, we opened a state of the art grain shuttle

loading facility in Frankfort, Kansas. The day began with a program where, Kansas Area Manager, Ernie Hroch, gave the opening remarks. Ernie then turned it over to CEO and General Manager, Ron Velder, who made his remarks on the project. During his remarks, Ron made a special presentation of a framed picture to Hub Roeder. Hub is 102 years young and had previously owned the 321 acres that the grain shuttle facility sits on. Dennis Kenning, Sales and Marketing Director, then presented the funds for the Kansas Fire Relief Effort to Matt Teagarden, CEO of the Kansas Livestock Association. Together, Farmers Cooperative and their patrons donated just over \$17,000. Grain Department Manager, Dale Hayek, provided the closing statements and invited everyone to watch the ribbon cutting ceremony. Previous land owner Hub

Roeder cut the ribbon to officially announce the grand opening of the new facility. The 450 guests were invited to stay for a meal and tours.

This facility is composed of 7 bins and 1 subsurface bunker, giving it a total storage capacity of 4,223,270 bushels. Unloading trucks has never been easier with an inbound and outbound scale along with two 17,000 bushel per hour receiving legs and one 15,000 bushel per hour receiving leg. This facility has a 7,500 bushel per hour dryer and a 60,000 bushel per hour loadout leg. 11,298 feet of railroad track was laid so that cars would not have to be uncoupled in order to fill. The goal is to be able to load a 110 unit train in less than 15 hours. This cutting edge facility will better serve producers in Southeast Nebraska and Northeast Kansas, with the hopes of speeding up harvest and providing more storage and giving great value to those area producers.





**Farmers Cooperative  
208 West Depot  
Dorchester, NE 68343**

**Address Service Requested**

**Check us out on Facebook!!!**

Go to our Facebook page and click on  
 Like to  
be updated on new photos and company news.  
<http://www.facebook.com/FarmersCooperative>

**LADIES' NIGHT OUT!**

Farmers Cooperative held their annual "Ladies' Night Out" on Thursday, April 20th at the Exhibition Hall in Tuxedo Park, Crete, NE with 422 guests in attendance. Tom Hermance was emcee for the event. A delicious meal was provided by Kerry's Restaurant & Catering of McCool Junction, NE. Schilling Bridge of Pawnee City, NE provided adult beverages for the ladies to enjoy. The ladies were entertained by the Wilber-Clatonia Swing Choir under the direction of Judy Vrbka. Guest speaker was Holly Hoffman from Eureka, South Dakota who shared her experience on the TV series "Survivor Nicaragua".

Holly is also the author of "Your Winner Within". Her inspiring message acknowledges that life is made up of challenges but each of us has the ability to focus our thoughts, emotions and energy to succeed. Thank you to everyone who attended the event and those who helped make it a success! Please watch your future newsletters for details on our 2018 "Ladies' Night Out".



*Holly Hoffman*



*Wilber-Clatonia Swing Choir*