

SPRING 2021

# RVC INSIGHTS

WITH YOU EVERY STEP OF THE WAY



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ALLEY**  
COOPERATIVE

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## Central Office

563-285-7820  
1-866-962-7820

[www.rivervalleycoop.com](http://www.rivervalleycoop.com)

## Locations

Altona • Annawan • Bradford  
Broadmoor • Cambridge • Camp Grove  
Clarence • Danville • Deer Grove • Dixon  
Donahue • DeWitt • Durant • Edelstein  
Eldridge • Fenton • Galva • Geneseo  
Kasbeer • Lost Nation • Manlius • Martelle  
Mineral • Olin • Osco • Ryan • Sheffield  
Sperry • Stanwood • Sunbury • Walcott

## FLEET PURCHASING PROGRAM

Available Through Land O'Lakes

River Valley Cooperative customers are able to enjoy deep savings on light-duty vehicles, medium and heavy-duty trucks, heavy equipment, and feed transportation equipment by consolidating the purchasing power of our cooperative network.

Any local Ford, General Motors, or FCA/Ram dealer can use the program. Ask for the Fleet Manager and mention you want to use the Land O'Lakes Fleet Program or order through our authorized central order dealer, Saxon Fleet. They can be reached at 1-800-456-1265.

A cooperative membership and equity are required to qualify for this program. To request a copy of your equity report, please call 1-563-285-1727.

To learn more about the Fleet Purchasing Program that is available, visit [www.co-optrucks.com](http://www.co-optrucks.com), or call 1-866-377-4652.

To learn more about products and services available through River Valley Cooperative, visit our website: [www.rivervalleycoop.com](http://www.rivervalleycoop.com) or call 1-888-962-7820.

# FUELING FARMERS

River Valley Cooperative expands refined fuel delivery business

**Jean Bowen, Energy Business Lead**



**The addition of two new fuel trucks to River Valley Cooperative's fleet will provide the opportunity for additional deliveries and faster service.**

They have arrived! With the goal of being a partner in our customers' whole acre, River Valley Cooperative is excited to announce the addition of two new fuel trucks. These new trucks will allow for a revised fuel strategy to ensure our continued commitment to providing exceptional customer service. While our partnership with CHS and CENEX fuel will still be an option, having our own fuel trucks will provide another delivery alternative to customers.

We are also pleased to introduce our new Energy Department staff. Once again, to ensure our continued customer commitment, we have added resources to provide the expertise and follow-up you expect. We want to partner with you, whether by providing market insights or filling your storage tanks.

Joining the River Valley Cooperative

staff are Jean Bowen, Energy Business Lead; Dan Woolsey, Illinois Energy Account Manager; and Gary Carpenter, Iowa Energy Account Manager. Jessie Stone and Steve "Opie" LaMar will be the refined fuels drivers.

Referring to the markets, as we put 2020 behind us, we have learned in the energy business that the year was anything but normal. We saw record lows after the COVID-19 outbreak and ended the year with energy commodities outpacing other commodities' increases 14% to 26% since October 1, 2020. Historically, changes in pricing were heavily influenced by domestic supply and demand. This year's polar vortex over Asia has caused export demand to escalate to never-before-seen levels.

All of these factors have caused the market to be one of the most volatile markets ever. From a crude and

refined fuels perspective, like propane, we saw pricing sink to levels unheard of, followed by increases as we closed out the year. As we know, impacts from COVID-19, OPEC decisions, legislation changes, and global demands will continue to drive volatility in the markets.

What will 2021 bring is anyone's guess, but rest assured our team is ready to help navigate the market dynamics and deliver solutions for your home and business needs.

We are now offering contract and daily pricing for premium fuels. Propane contracting will begin soon.

Additionally, customers can stay informed with weekly energy updates, which can be found under the "Energy" tab on our website. Stay tuned for further details!



# THE FUNGICIDE JOURN





# RNEY

**Jeff Bode, Regional Sales Manager**

History has allowed us to realize many incentives of why we now plan for fungicide applications rather than taking the wait-and-see approach.

Can you believe we have been discussing fungicide applications for over 10 years? Products have advanced greatly since BASF introduced us to Headline. I still remember one of the first fungicide trials I conducted on DKC61-69, and how amazed we were when we saw the yield gain.

The evolution of products has been quick, starting with products that only were preventative single modes of action. We then added another mode to bring in the curative aspect, and most recently have products with three modes of action that deliver consistent control over an expanded list of diseases as well as giving us a larger time frame for protection against these diseases.

Increased plant health has always been a key benefit from this application, whether you were applying at the V5 growth stage or around pollination for corn or during pod fill for our soybean crop, and it shows up many different ways. We see higher forage quality when fungicide is applied on fields that were harvested as corn silage, and we have all seen the videos of combining a corn field

that was only partially treated with fungicide. It is great to see the combine increase speed in the treated areas of the field, and then panning to the yield monitor to show the increased yields. And lastly, we cannot forget about soybeans, where we visually see a field maturing naturally. If we look back to just last fall, we were thankful for those beans that were holding some moisture rather than delivering soybeans that were less than 10%.

While better products and increased plant health were big gains over the last decade, the advances in science have given us the greatest gains. We once had to guess and hope that the hybrid planted was going to give a positive return on Investment.

Today, all of River Valley Cooperative's seed partners provide us with predictive responses to a fungicide application. In addition to these recommendations, WinField United provides us with Response to Fungicide (RTF) scores on many of the hybrids that are planted today. These scores provide predicted yields gains in fields with limited disease pressure. It is incredible that yield



## Personalized Quotes

Request Quotes Your Quotes

Enter products, quantity, and delivery

Product	Quantity	Delivery Date
<input type="text" value="Product name, ingredient, or description"/>	<input type="text" value="Quantity"/> <input type="text" value="units"/>	<input type="text" value="Delivery Date"/>
<input type="text" value="Product name, ingredient, or description"/>	<input type="text" value="Quantity"/> <input type="text" value="units"/>	<input type="text" value="Delivery Date"/>
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<input type="text" value="Product name, ingredient, or description"/>	<input type="text" value="Quantity"/> <input type="text" value="units"/>	<input type="text" value="Delivery Date"/>

+ Add More Products

## CREATE A FUNGICIDE QUOTE IN THE GROWER PORTAL

1. Login in to the RVC Grower Portal at: <https://shop.rivervalleycoop.com>
2. Select "Quotes" from the menu and then "Get a Quote."
3. Enter the product name, ingredient, or description of product, quantity, and the delivery date.
4. Enter any comments you have for your River Valley Cooperative Account Manager and submit the request.
5. Your River Valley Cooperative Account Manager will then respond to your quote.

gains ranged from 3.9 to 35.3 bushels per acre in 2020, and surprisingly, the average response was slightly less in 2020 than in previous years. While the cost of fungicide varies by brand and application method, a positive ROI can be easily calculated on many of the hybrids tested last year from the yield gain alone before factoring in any additional benefits.

The last piece I want to discuss is what we now know about canopy penetration. Fungicide applications need to penetrate the entire canopy of the soybean plant, and when it comes to corn, every leaf above the ear needs to be protected to maximize photosynthesis.

History has allowed us to realize many incentives of why we now plan for fungicide applications rather than taking the wait-and-see approach. Decreased combine separator hours, protection against new diseases like tar spot, and better cow feed are just a few benefits that add to the increased ROI equation.

Whether you have been using fungicide for years or never considered it, I challenge all growers to have a conversation with your River Valley Cooperative Account Manager to discuss the different modes of actions available as well as identifying the RTF Scores of the hybrids you are planting this spring.



# LEADING THE WAY TO A SUSTAINABLE FUTURE

Looking for answers on sustainability and carbon credits?  
River Valley Cooperative can help.

River Valley Cooperative continues to strive for new and state-of-the-art ways to work with member-owners to implement and document best soil health management and stewardship practices. Stewardship has always been important, but now more than ever, it is gaining exposure and momentum across the country. In February of 2021, River Valley Cooperative signed an agreement with Truterra, LLC, a subsidiary of Land O' Lakes. Truterra offers the only farmer-owned, farmer-driven food and ag sustainability program in the U.S.

The Truterra™ Stewardship Platform is a groundbreaking system that delivers profitability, stewardship, and key insights on a field-by-field basis. What does this mean to our member-owners that participate? River Valley Cooperative's Data Specialist will use this state-of-the-art platform to work with growers to gain a deeper understanding of each field they farm. With this tool, River Valley Cooperative can document the grower's stewardship efforts and capture the information needed to participate in developing markets such as carbon and sustainably produced commodities.

An example of one of these developing markets was announced this past month by Truterra with the launch of TruCarbon, a new carbon program that will help growers generate and sell carbon credits to

private sector buyers. TruCarbon represents the first and only farmer-owned carbon program in the U.S. designed to provide both the best experience for farmers and a different approach for carbon credit buyers.

TruCarbon offers buyers carbon credits created by populating soil and conservation science field data

“River Valley Cooperative is a proud partner in this endeavor to bring new conservation resources to the farm. Our agronomists have continuously delivered positive results to our farmers, and we look forward to adding additional value with the TruCarbon offerings.”

-Craig Patty  
Vice President of Sales and Marketing

in combination with confirmation procedures. This program will make it easier to develop and sell carbon credits. By working with River Valley Cooperative Data Specialists utilizing the Truterra™ platform, the new TruCarbon program provides growers and River Valley Cooperative a powerful soil health planning suite of tools. These tools will help growers decide what is best for their business while optimizing their fields' carbon

credit potential. TruCarbon also maximizes the value and return for farmers with a premium carbon credit value.

TruCarbon is launching with Microsoft as its first secured buyer to purchase carbon in 2021, which will help meet its ambitious commitment to be carbon negative by 2030. For this initial launch, participating farmers may receive \$20 per ton of carbon with payments this summer for this first tranche of credits. Qualifying farmers may be compensated for carbon credits retroactively up to five years based on the soil health practices they adopted in those prior growing seasons.

With the launch of TruCarbon™, our partner Truterra is working through channels to reward River Valley Cooperative customers whose practices now have the potential to earn carbon credits. Today, the relationships between local farmers and carbon buyers begin. These are exciting times for growers, and River Valley Cooperative looks forward to helping our customers take advantage of these opportunities.

To learn more, please contact your local River Valley Cooperative representative or visit us at [www.rivervalleycoop.com](http://www.rivervalleycoop.com). We're ready to begin answering sustainability and carbon questions today!

# CARBON CREDITS

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# PASTURE SEASON CONSIDERATIONS FOR YOUR COW HERD

Taylor Handy, Livestock Specialist

Cow-calf producers prepare for spring with fly control and creep feeding programs. Properly planning and implementing these programs in your operation can be beneficial to your herd's performance and productivity.

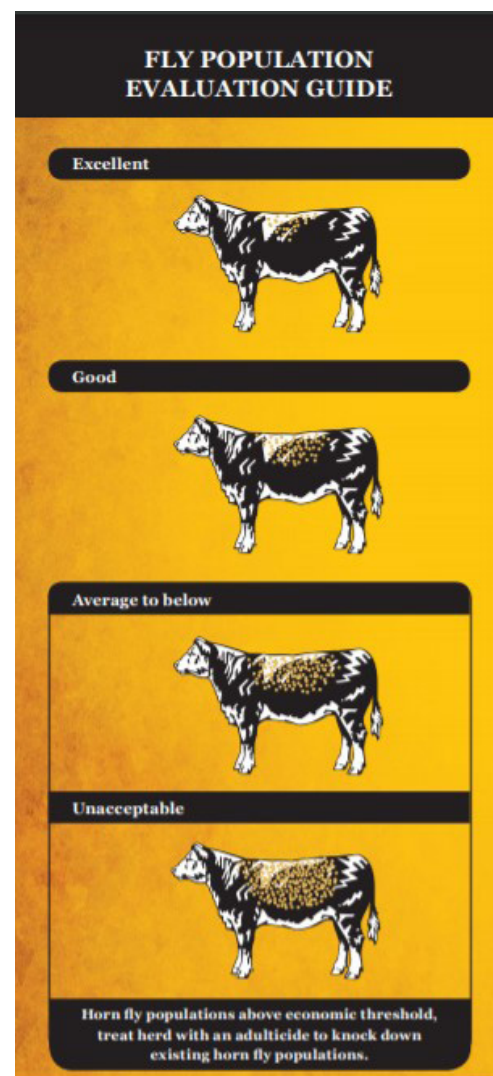
The snow and ice will melt, and spring will be here before we know it. The grass will start turning green, and it will be time to turn the cows and calves out onto pasture. There is no better time than the present to start preparing for pasture season and all that comes with it!

Fly control and creep feeding are two programs that cow-calf producers should not overlook. Proper implementation and planning for these two programs can benefit your herd's performance and productivity.

## Fly Control Mineral:

One of the biggest enemies of a cow-calf operation is a small, black fly, only about four millimeters long: the horn fly. These little pests thrive on cattle and depend on them to live – taking up to 20 to 40 blood meals each day. A horn fly level of 200 or fewer flies per animal is considered an effective control program. If not kept below this threshold, herd health and productivity can be negatively impacted, making the horn fly one of the most pervasive and costly external parasites of cattle in North America. Early-season planning can help to keep fly populations under control all season long.

At River Valley Cooperative, we carry Wind and Rain Fly Control Mineral containing Altosid®, making it easy to combat pesky horn flies on your operation. Cattle require mineral supplementation 365 days a year, so this feed-through method is convenient and does not require additional labor besides normal mineral feeder maintenance.





**How It Works:**

When the fly control mineral is consumed, it functions through the manure excreted by the cow. Altosid®, the insect growth regulator (IGR), passes through the cow and into the manure where horn flies lay their eggs. The horn fly's life cycle is broken by the IGR and prevents the eggs from further developing into adults.

For the best results, we recommend feeding Wind and Rain Fly Control Mineral about 30 days before the last spring frost until 30 days after the first frost in the fall. Keeping an eye on your mineral feeder is also critical for success in this program. Well-managed mineral feeders that never run empty will have the best results with this feed-through fly control method.

If you chose not to use this feed-through fly control

method, make sure you have a plan put in place for the entire season well before the flies start emerging. Waiting until later in the season after flies are present can pose greater challenges in controlling the population and impacting performance and productivity in your herd.

**Creep Feeding:**

In the cattle industry today, creep feeding programs are no longer only about adding additional calf weight before weaning for a positive return. We need to take a closer look at the entire system to understand this further.

First, let's take a look at the concerns you might have. Common producer concerns are high consumption levels, increased out-of-pocket costs, labor and equipment, loss of efficiency as weaning approaches, and fleshy calves.

(Continued on page 10)

Beat the buzz with Purina Wind and Rain Fly Control Mineral. Pesky flies can become problematic in spring. However, early-season planning can help keep fly populations under control all season long. A well-balanced cattle fly control mineral can help ensure consistent intake, and in turn, consistent fly control in manure piles.





Secondly, we need to discuss the benefits to your calf crop. If you chose not to creep feed, milk and grass are the only two components of a calf's diet. Depending on these two feed sources alone can leave a "gap" that may result in less than optimal gain for your calves.

This gap can become bigger if you do not supply your herd with adequate forage quality and quantity. According to research, calves who are on a creep feeding program 80-120 days versus calves who are not fed creep can add up to 60 – 70 pounds of gain. The best times to creep feed to optimize the

genetic potential for gain are during a season of decreased forage quality and quantity, first-calf heifers (lower milk production), and purebred breeders raising bulls.

Introducing calves to creep feed also helps reduce stress at weaning. Calves who are fed creep often come to the bunk quicker after weaning because they are familiar with feed. Creep-fed calves that experience less stress at weaning time often have optimized health and weaning weights compared to calves who did not receive creep feed.

Thirdly, we cannot overlook the

benefits creep feeding provides to your cows. By feeding creep, we will take some of the stress off the cow. Cows will need less energy to produce milk and will, in turn, reduce the nutrient demand needed. You can save pasture due to this decreased demand for energy, and your cows will remain in better condition throughout the end of the season.

Finally, let's put this all together and talk about the potential payback by creep feeding in this specific scenario. Creep cost for a 90-day feeding period will be about \$32 per calf. If no creep is fed and the cows need to regain the weight and condition they have lost, it will cost about \$22 per cow. So, for an investment of about \$10, you will receive 60-70 pounds more in weaning weight, improved cow condition, calves that know how to eat, and less stress at weaning. Ultimately, a well-thought-out creep feeding program can have many benefits to your operation and your herd.

We should not forget that creep feeder management and maintenance play a big part in successfully creep feeding calves. Do not leave an empty or non-working empty feeder in the pasture. Ensuring that your feeder gates are set to the right height and the feed trays' cleanliness can influence feed intake.

At River Valley Cooperative, we understand that not every operation is the same, and we offer our producers a couple of different creep feed options.

### **Rangeland Calf Creep:**

This is a pelleted creep that comes in either a 14% or 16% all-natural protein and is popular among producers across our trade area. Rangeland Calf Creep does not contain intake-modifying technology but is made with ingredients like wheat midds and soy hulls that help promote a healthy rumen in your calves. This product is available in a variety of medicated options.



### AccuCreep:

The AccuCreep program, with intake modifying technology to help control consumption, can improve feed conversion by up to 33%. This program will provide the same gain as the pelleted creep but utilizes less feed. When starting this program, we first introduce calves to feed with the pelleted Rangeland Calf Creep and then transition around 30 days later to AccuCreep. AccuCreep is a grain mix containing cracked corn and Accuration Range 33 supplement, which contains the intake modifying technology. This technology allows the calves to “snack eat” rather than consuming a few large meals per day. With this program, producers need to monitor their calves’ feed intake. Ideally, calves will consume about 1% of their body weight per day on this program.

By implementing fly control and creep feeding programs on your operation with the products mentioned, you will see great performance and productivity results. River Valley Cooperative’s Livestock Specialists are here to be a resource for your cattle nutrition needs and be an active contributor to your farm. They will help you reach your goals and make the best decisions on your operation. Please reach out if you have any questions at all on the topics covered.



## NOW BOOKING SPRING MINERAL

March 1st - April 16th

### Bookings:

River Valley Cooperative offers mineral bookings to our customers. These bookings allow producers to lock in their summer mineral needs at a discounted price. We offer a wide variety of minerals in both bag and tub options. Our 2021 Spring Mineral Booking, which began March 1st, runs through April 16th. All orders need to be placed no later than April 16th to receive the discount.

### Trials:

- Creep and mineral trials are available on select products and may qualify for additional discounts! Some exclusions do apply.
- For more information on any of these programs, contact one of our Feed Livestock Specialists:

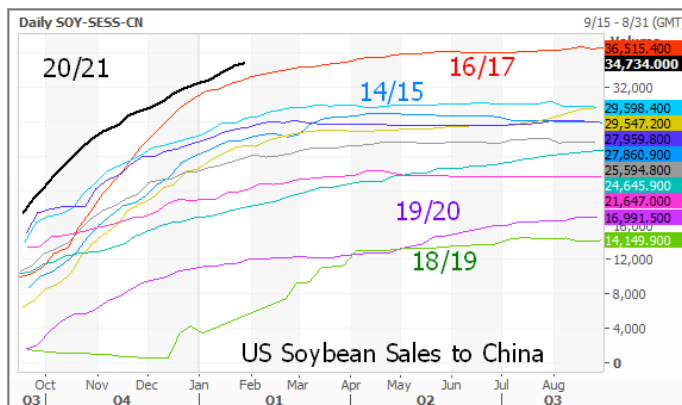
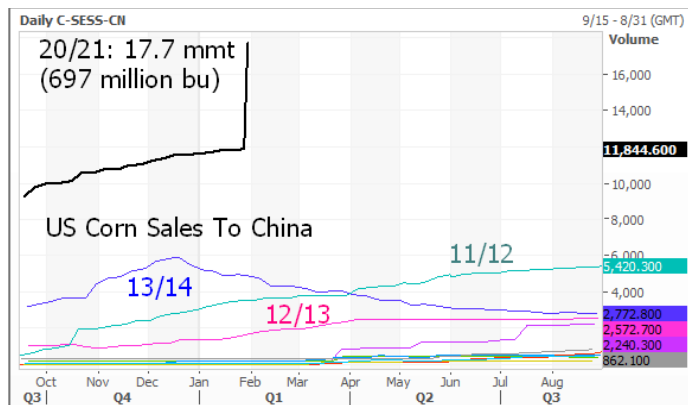
**Shawna Lorenzen**  
(563) 320-7276

**Taylor Handy**  
(641) 777-5863

# MAKE SALES FOR PROFIT, NOT FOR PRICE

Create a strategy for selling 2021 crops

Sam Lowers, Regional Sales Manager



Since the middle of August, old crop corn futures have rallied over \$2.00, and old crop bean futures have rallied nearly \$5.00. One of the biggest factors for the rally has been the record amount of Chinese buying of both commodities. As you can see in the charts above, current corn sales to China are approaching 700 million bushels. The previous record export number to China was in the 2011/2012 crop year, which finished the year at just over 200 million bushels. Current soybean sales to China are sitting around 1.276 billion

bushels, and we are on pace to break the previous export record to China which came in 2016/2017. That year, 1.341 billion bushels were exported to China.

Unfortunately, with China coming to the table strongly during harvest, many growers sold both corn and beans early in 2020. As a result, many producers are now questioning when to begin selling corn and beans in 2021. The simplest recommendation to this question is to sell at profitable levels. That may sound easier said than done, but the recent rally in

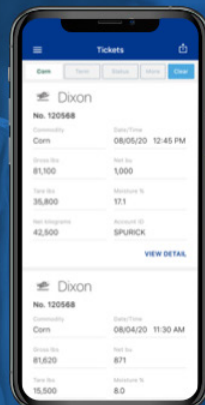
the markets has given growers the opportunity to do so.

We will all remember the rally in the corn and soybean markets during the harvest of 2020 and into 2021, but we cannot forget the global pandemic that shocked the commodity markets this time last year. Use your crop insurance guarantees, book your inputs, set price targets at and above your breakeven, and never be afraid to reward a rally.

To discuss or create a marketing plan tailored to your own operation, please give your local River Valley Cooperative grain originator a call.

Another tool you may find beneficial to your operation is the RV Coop Grain App, which is available for download in the Apple App or Google Play Store.

If you already have an account with River Valley Cooperative login is easy! Simply type in your cell phone number, and you will receive a text with a code. Once you receive the code, enter it to log in. Inside the app, you will find cash bids, contract and settlement details, real-time scale tickets, and much more. We believe it is a great tool that will help you make real-time decisions easily and quickly in the palm of your hand!



## RIVER VALLEY'S "RV COOP" APP

Download our **FREE** app from the App or Play stores to access tickets, contracts, cash bids and more.

POWERED BY **BUSHEL**





# DERECHO RECOVERY UNFOLDS

After powerful winds destroy grain storage facilities, RVC unveils new bins

**Mike Moellenbeck, VP Grain Business Unit**

A group of storms that tore through the Midwest on August 10th, 2020, left homes destroyed, crops demolished, and over a quarter of a million people without power days later.

The rare group of storms called a derecho brought rain and hurricane-force winds of 70-100 miles per hour to the Midwest, causing extensive damage across most of River Valley Cooperative's trade areas in Iowa and Illinois. The counties most heavily impacted by the storm were Delaware, Linn, Jones, Cedar, Clinton, Jackson, Scott, and Muscatine in Iowa, and the Illinois counties of Whiteside, Carroll, and Rock Island.

The storm's devastating winds flattened crops in the field and toppled grain storage facilities. Since the storm, on-farm bin construction has rapidly taken place, and producers had to decide whether to simply rebuild what was lost or evaluate long term needs for space and infrastructure as operations continue to grow in acres and production.

Three River Valley Cooperative locations sustained grain facility losses. Clarence, Stanwood, and Martelle locations were heavily impacted, resulting in the loss of nearly two million bushels of grain storage.

Just as many growers across Iowa and Illinois consider plans for grain storage options, River Valley Cooperative's management team and Board of Directors has spent time considering the best plan of action to rebuild the loss of grain infrastructure at these facilities.

The Martelle location lost nearly one million bushels of storage space, including a 450,000-bushel bin that was newly constructed in 2019, and damage was sustained on a second 450,000-bushel bin. Repairs were made to one bin before harvest, and the decision was made to rebuild the destroyed 450,000-bushel bin. Construction has already been completed on this bin. The remaining lost storage space, approximately 500,000 bushels, will be replaced with an 850,000-bushel bin.

In Clarence and Stanwood, approximately one million bushels of bin space were lost. While the remaining 240,000-bushel space left at Stanwood will be utilized for internal bean storage, the other lost space will not be replaced.

To compensate for the loss of space at Clarence and Stanwood, an 850,000-bushel bin and 20,000-bushel-per-hour receiving system will be constructed in Olin. This will be a solution to long wait times to unload that often occurred at the Clarence, Stanwood, and Olin locations during the fall.

Olin's growth is consistent with our 3-5-year strategic plan of making the facility an accumulation point for grain into Cedar Rapids, much like our facility in DeWitt accumulates grain for the Clinton market. Because of the storm damage our locations endured, the timeline of this project was moved up, and we are moving forward with this project before the fall of 2021.

Thank you for your continued patience as we work through these projects, and thank you for your grain business.

# GROWER PORTAL CONTINUES TO EVOLVE

Stay digitally connected to your River Valley Cooperative account

## Craig Patty, Vice President of Sales and Marketing



On September 2, 2020, River Valley Cooperative's Grower Portal powered by AgVend went live, and the adoption and overall success of this e-business platform have been tremendous.

Through this application, AgVend has connected River Valley Cooperative to approximately 50% of invited member-owners through a portal on the Cooperative's website, [www.rivervalleycoop.com](http://www.rivervalleycoop.com), and River Valley Cooperative's branded mobile app. This portal offers growers real-time digital access to agronomy product pricing info, inventory, invoices, with more to come. One of the most popular features of the Grower Portal is the ability and ease for a customer to review statements and pay their bill online.

"Initially, we said we would measure success with member-owner engagement. Our initial goal was to have 50% of our cooperative membership registered within six months of launching the site. I'm proud to state that we accomplished this goal. We now want to focus on usage and ensuring each user has a tremendous experience. We continuously work with AgVend to enhance the portal," stated Craig Patty, VP of Sales and Marketing at River Valley. "They have been a great partner in this journey," Patty adds. "We are excited to continue to enhance our agronomy customer experience and begin to focus on adding the other facets of our

business."

On December 8, 2020, AgVend announced the launch of their new Grower Portal Ecosystem to offer River Valley Cooperative and our member-owners convenient access to a broad suite of products and services through integrations with leading agribusinesses. The expanded Ecosystem breaks down silos between individual technology interfaces to create a central view within the River Valley Grower Portal powered by AgVend.

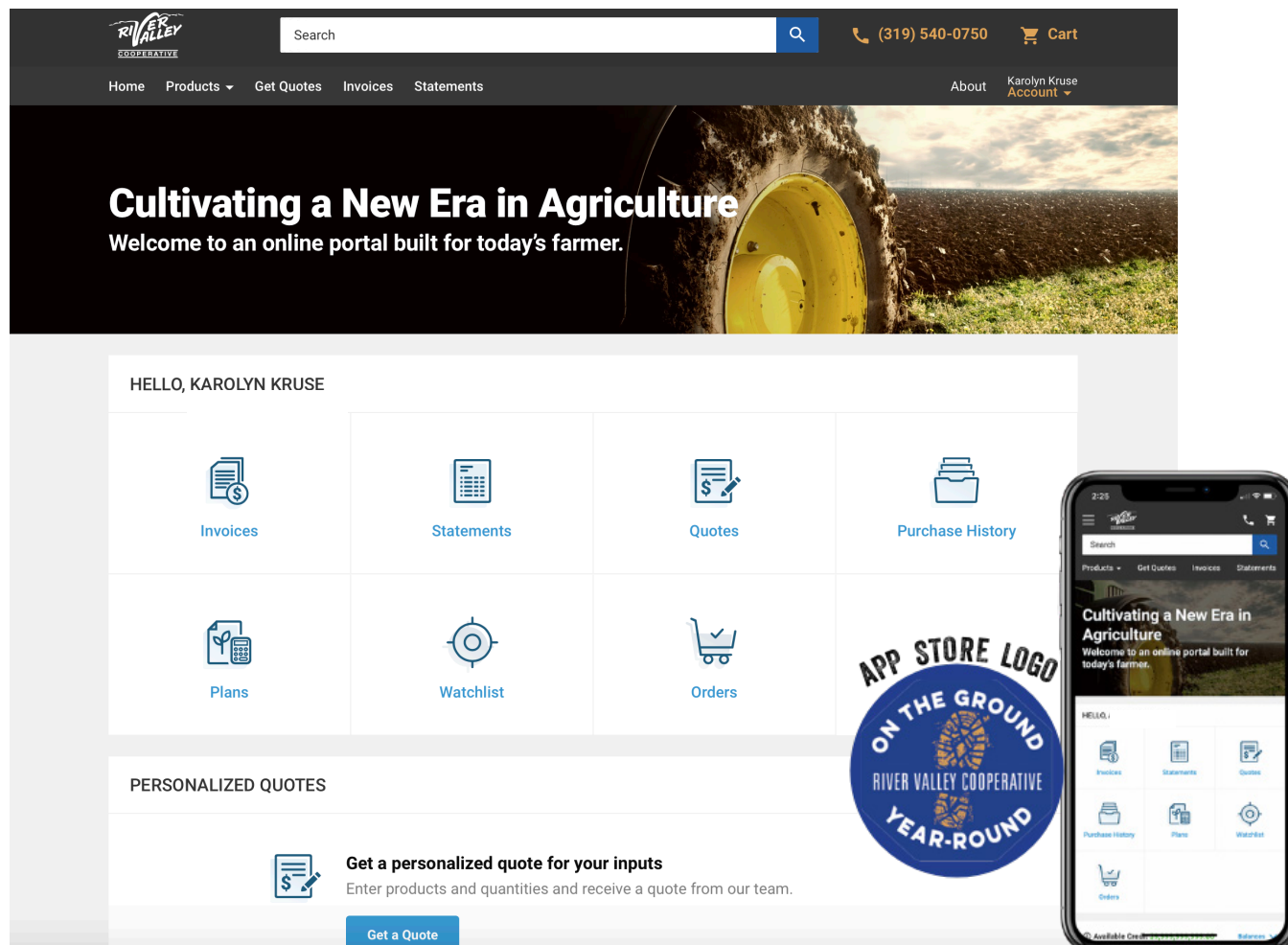
"Since introducing the Grower Portal earlier this year, we've seen the positive impact this technology can have on improving the connectivity between growers and their trusted advisors," said Alexander Reichert, co-founder, and CEO of AgVend. "Built upon our best-in-class Grower Portals, the new Ecosystem unlocks the same seamless omnichannel experience for agribusinesses whose products and services are used by ag retailers and their customers to successfully run their respective operations."

In 2020, due in part to the impact of COVID-19, the adoption of digital technology among growers significantly increased. This trend extended to ag retail as growers and their advisors sought digital tools that complement their long-standing relationships.

The initial integration took place this past December with River Valley Cooperative's financial services provider, Cooperative Finance



River Valley Cooperative's Grower Portal App is available for free from the Google Play Store and Apple App Store. The portal can also be accessed online via a computer.



Association (CFA).

“We know that trust and experience are part of the foundation of doing business in agriculture, and that’s critically important in all facets of managing farm operations – especially financing,” said Reichert. “We are pleased to partner with CFA, an organization with deep ag roots and an appreciation for innovative solutions that deliver value for both retailers and their growers.”

For the past 75 years, CFA has offered a range of financial services

to its members and implemented online tools that enable greater levels of collaboration and transparency. CFA provides over \$1 billion of loan commitments to more than 150 cooperatives and their customers.

“We’ve witnessed a significant change in the agriculture marketplace in recent decades, but the current pace of technology adoption is truly remarkable. Now more than ever, our cooperative members and their grower customers want to use financial lending and credit management

tools online,” said Ross Johnson, CEO for CFA. “We feel confident that this partnership with AgVend will help ensure ag retailers and growers can access the products they need, from anywhere and at any time.”

AgVend plans to announce new integrations over the next 12 months. These integrations will include grain in the early summer of 2021, followed closely by energy and feed tools, truly giving customers access to the ‘Whole Acre’ within their Grower Portal.

# NUTRIENT TIPS FOR TOP YIELDS

Providing exceptional agronomy products, service for growers

Dustin Hoeft, Agronomy Business Manager

Agronomy customers often want to know what other growers are doing, how they can grow more bushels and ways they incorporate new practices to raise the bar on their own farm.

Setting yield goals and maximizing profitability is top of mind for every producer this time of year. Agronomy customers often want to know what other growers are doing, how they can grow more bushels and ways they incorporate new practices to raise the bar on their own farm.

First, I think it is important to quickly review the basics of what it takes nutritionally to grow a great crop.

The chart to the right shows what is generally required to grow 230 bushels an acre of corn and 62 bushels an acre of soybeans. Having enough of the macro nutrients nitrogen, phosphorous, and potassium is an essential foundation to growing a great crop; we all know that. But do you know if your crop will get enough of the other nutrients listed on the chart?

Let's focus on zinc. Zinc is essential for root development, growth hormone production, and also influences ear size and kernel depth in corn. There are different types of zinc that can be used to meet the needs of the crop. Which type or formulation is the best?

Citri-Che Zinc 10% is chelated with EDTA and citric acid to increase nutrient availability and nutrient efficiency to

## Nutrition Needed for 230 Bushel Corn

Nutrient	Required to Produce	Removed With Grain	Harvest Index
	lbs/acre		%
N	256	148	58
P2O5	101	80	79
K2O	180	58	32
S	23	13	57
Zn (oz)	7.1	4.4	62
B (oz)	1.2	0.3	23

## Nutrition Needed for 62 Bushel Soybeans

Nutrient	Required to Produce	Removed With Grain	Harvest Index
	lbs/acre		%
N	271	194	72
P2O5	50	39	78
K2O	180	75	42
S	19	11	57
Zn (oz)	7.9	2.1	27
B (oz)	5.9	1.8	36





plants. This product can be applied with starter mixes at planting, pre-emergence, or side-dressed with UAN at a minimum of one quart per acre. Application with your planter starter system or pre-emerge with herbicide is recommended. As a chelated product, you can be assured that you are using a stable product. Chelation prevents the product from getting tied up, which ultimately makes this product more available when and where it should be. Chelation also increases tank mix compatibility with other starter fertilizers, ATS, and UAN. At one quart per acre, Citri-Che Zinc 10% supplies a little over four ounces of zinc per acre, replacing what the prior year's crop removed.

Citri-Che Zinc 10% is available at all our agronomy locations this spring, including our 24/7 locations. If it is not already part of your nutrient plan for this spring, talk to your agronomy account manager to make sure it is included in your nutrient strategy.

Ascend SL, a plant growth regulator (PGR), is another beneficial addition to your spring nutrient plan. This is not a new product to your cooperative; in fact, some of you have probably already used it for many years now with your starter mix. There are many PGRs out there to use in the market, but we believe Ascend SL is the best. Data proves that corn yield

alone can improve by over five bushels!

Ascend SL contains three different PGRs that aid in providing vigorous early germination and emergence, larger roots, larger leaves, and wider stems.

- Cytokinin promotes cell division and leaf expansion
- Gibberellic acid stimulates cell division and elongation of leaves and stems
- Indolebutyric acid stimulates root formation and development and increases cell elongation

As mentioned earlier, Ascend SL has been used with starters for a few years now, but what if you don't have a starter system on your planter? Ascend SL can be applied foliar during your post emerge herbicide application to corn and soybeans to give your crop a big boost.

There are several yield-enhancing products that your agronomy account manager can help you incorporate into your tried and true practices to help maximize profit on your farm while taking full advantage of these seven-year highs that have recently been seen in the grain markets.

## EFFECTS OF ASCEND® TREATMENT

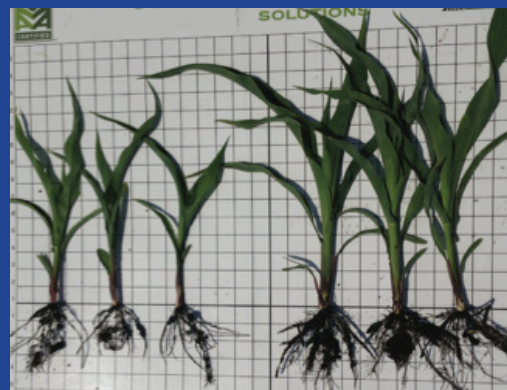
Plants treated with Ascend® plant growth regulator can visibly outperform untreated plants at multiple growth stages.

### GERMINATION



L: 0-34-0 + Citri-Che® Zinc 10% + Ascend®  
R: 0-34-0 + Citri-Che® Zinc 10%

### V4 TO V5



L: 10-34-0 + Citri-Che® Zinc 10%  
R: 10-34-0 + Citri-Che® Zinc 10% + Ascend®

### FULL MATURITY



L: 10-34-0 + Citri-Che® Zinc 10% + Ascend®  
R: 10-34-0 + Citri-Che® Zinc 10%

# DRIVE PROFITABILITY WITH FIELD FORECASTING

The Field Forecasting Tool is your go-to guide for in-season decision-making

## Matt VanSloten, Precision Ag Specialist

As we begin to prepare for another growing season, we must ask ourselves what we have learned about the last. So, what did we discover from our 2020 R7 Field Forecasting Tool results? We collected three tissue samples at two growth stages throughout the 2020 growing season. The first sample was taken during the V5-V6 stage, or what I like to call the “junior high” corn stage. We begin to see some rapid plant growth resulting in some awkward-looking plants. As the plant transitions, it is relying on root absorption for much of its nutrient uptake.

Any problems that may have occurred during planting will begin to surface. While this is an awkward stage for the corn plant, it provides one of the first opportunities to understand the plant’s health and any nutrient deficiencies that it may have.

Figure 1 represents our findings. The black data line in the green area indicates adequate levels for this stage of the crop. Yellow points show responsiveness to treatment, while points in the red signal a deficiency.

Our samples did not indicate that any nutrient levels were deficient at the time of testing. Nitrogen was shown to be in the responsive zone; however, all other nutrients were adequate in the sampling. The data represents over 190 tissue samples that were taken during this stage of growth. Composite soil samples were also collected at the time of sampling to provide a control of ‘average field conditions.’

The results from the soil sample can be seen in Figure 2 - “Average Values from Soil Test.” The mean phosphorous test value was determined to be roughly 30 parts per million, a great target level. Potassium was slightly low at 180 parts per million. Ideally, potassium levels would be in the range of 200-223 to not limit crop growth. The average pH of 6.98 is a neutral environment for our plants.

Cumulative Early Tissue Results for FFT

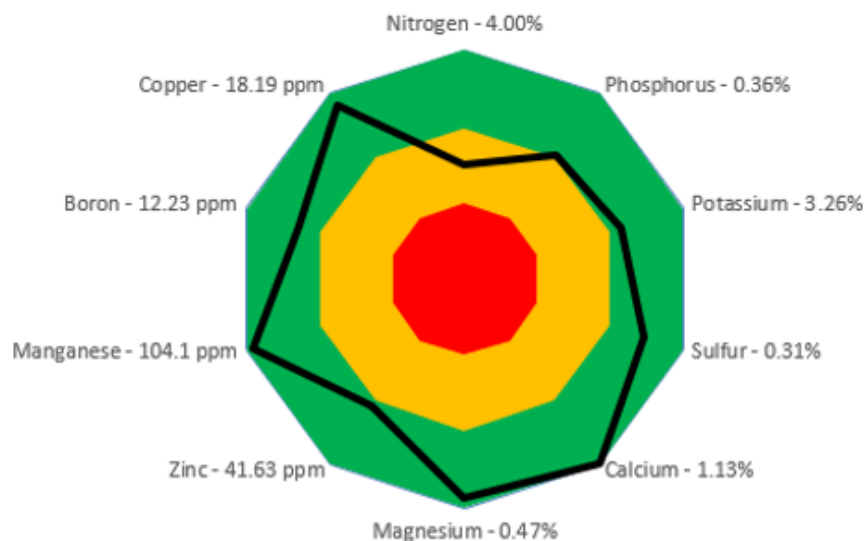


Figure 1.

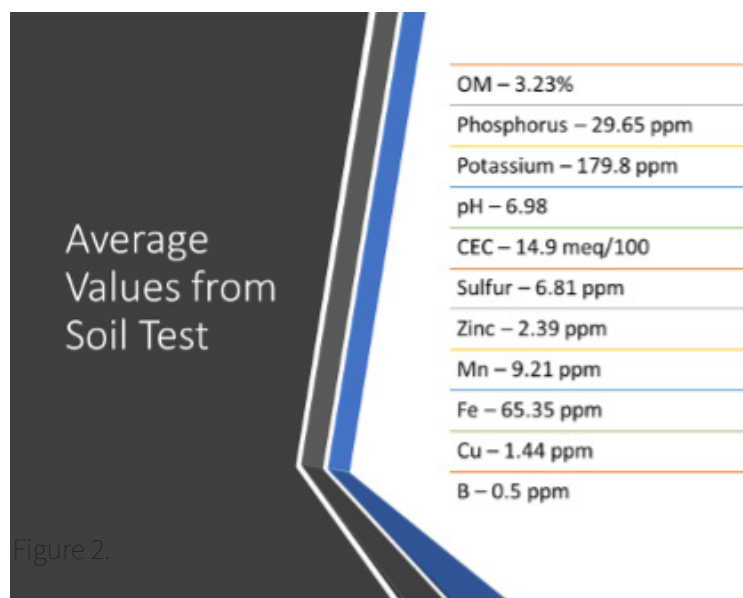


Figure 2.



## Soil Test Results

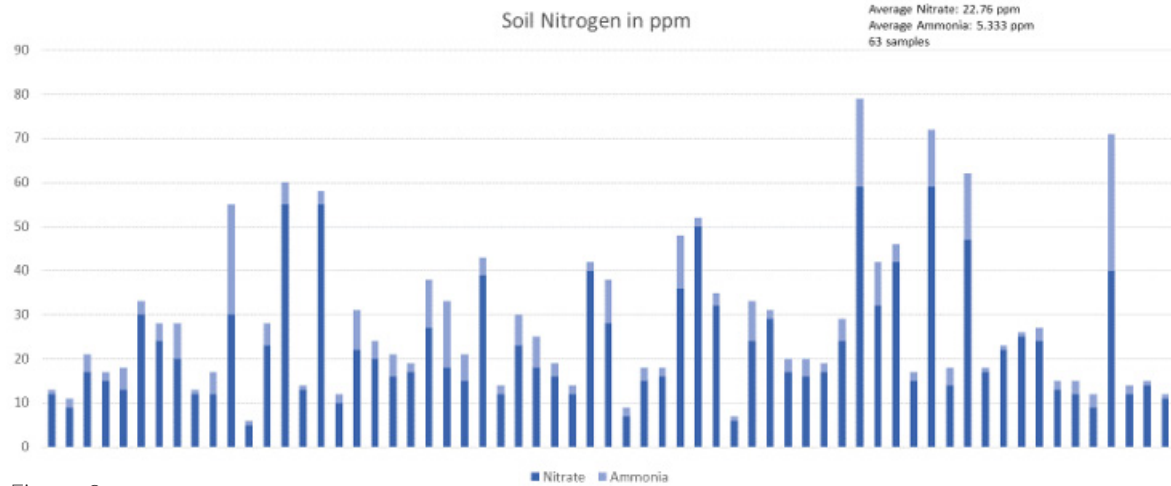


Figure 3.

Nitrate and ammonium tests were also conducted on the soil sample. We saw our tissue samples showing that we were responsive to nitrogen, but the soil samples tell a different story when looking at the average. Figure 3 shows variations from field to field. The average nitrate was 22.76. A late spring nitrate test that shows values between 20 and 25 will provide adequate amounts to finish out the season.

The ammonium value shows that we had nearly five parts per million tied up in the ammonium form. This form of nitrogen may eventually be transferred over into the nitrate form. These numbers show that although plant tissue was showing a deficiency, there are adequate amounts available.

The second growth stage tissue samples were collected during V15, so there was an opportunity to correct potential deficiencies in a late-season pass. The goal was to avoid any major stresses right before it reached the reproductive stage. Figure 4 shows that tissue results are falling within the deficient and responsive areas. One possible cause of the change could be attributed to plants experiencing rapid growth, causing the plant to outpace its uptake.

What was the result at the end of the season? This model's unique capability is its ability to predict potential yield or biomass accumulation throughout the season, and yield estimation is our best way to comprehend the tool's accuracy. At the end of the year, the model predicted an average yield of 219 bushels per acre across the River Valley Cooperative territory. The average of tissue samples tested resulted in 209 bushels per acre. With a mere difference of only 9.6 bushels, the Field Forecasting Tool closely estimated the yield. With an error of 6.7%, it closely modeled the actual yield. Results also included some of the wind-damaged fields caused by the derecho that swept through the area last August.

River Valley Cooperative will offer the Field Forecasting Tool again this crop season. If you are interested in learning more about this beneficial tool and the cost-saving applications it could bring to your operation, please contact your local account manager or precision ag staff. We are here to discuss the benefits the Field Forecasting Tool can have on your operation.

### Cumulative V15 Tissue Results for FFT

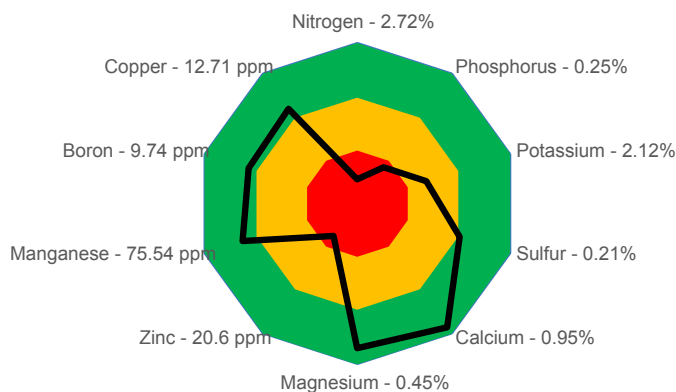


Figure 4.



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## WHAT DOES IT MEAN? AFI, CFA®, JDF, CORTEVA TRUCHOICE®

### Chris Green, Ag Finance Director

River Valley Cooperative has made a major push in helping farmers secure financing and discounts for the 2021 crop year.

- Advance for Inputs Powered by Cooperative Finance Association (AFI or CFA) is River Valley's 0% offering until 12-31-2021. This program is for customers who buy seed, fertilizer and chemicals, and sell their grain through River Valley Cooperative.
- JDF is John Deere Financial. Through JDF, with the help of BASF, Valent, and Bayer, chemicals can be financed at 0% until November-December 2021.
- TruChoice® is Corteva's financing and 10% or 5% discount prepay program. River Valley is glad to help farmers maximize their discounts when using Corteva products.

River Valley Coop has increased customer usage in each one of these programs. Applying for these programs is easy! Contact an agronomist or me for help or an application.

For CFA customers, the most common comment after the application is "that's it?" Yes! All of these programs are designed to make borrowing as easy as possible. Sign up today, tomorrow, this summer, but please sign up!

Do you want to minimize costs/interest and maximize discounts? I encourage you to take advantage of these programs that your cooperative provides.

If you have any questions about any of the programs, please contact your account manager or me.

### CHRIS GREEN

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