

VIRTUAL FENCING BOOSTS  
GRAZING EFFICIENCY

CONSIDER THESE TIPS BEFORE  
BUYING A DRONE

PLAN CONSOLIDATES SHOP  
AND STORAGE BUILDINGS

powered  
by

DTN

APRIL | 2025

# Progressive FARMER



**PRECISION  
SPRAYING  
FEWER  
INPUTS  
BETTER  
RESULTS**

YOUR LAND | YOUR FARM | YOUR LIFE | DTNPF.COM



# APRIL 2025

VOL. 140 / NO. 4

*Serving Our Readers Since 1886*



PHOTO COURTESY OF VENCE

# 34

*Virtual fencing is a new technology available for cattle producers. Check out the comparison of four major brands.*

## ON THE COVER

Sense and act technology races beyond weeds to new precision frontiers.

PHOTO BY LARRY REICHENBERGER





# LENDERS LETTING YOU DOWN?

At ARM we blend the value of your crop, crop insurance coverage, and program payments to engineer an operating loan designed specifically for your operation. Get started today by **scanning the QR code** below or calling **866-326-3383**.

Learn more at **armlend.com**.



ARM is an equal opportunity provider. ©2025 Ag Resource Management. All rights reserved.



EDITOR IN CHIEF Gregg Hillyer

## MAGAZINE PRODUCTION

ART DIRECTOR Brent Warren

PRODUCTION MANAGER/EDITORIAL Barry Falkner

SENIOR COPY EDITOR Tara Trenary

## DIGITAL CONTENT

DTN/PF CONTENT MANAGER Anthony Greder

DTN/PF ASSOCIATE CONTENT MANAGER Elaine Shein

DTN DIGITAL MANAGER Chris Hill

## DTN CONTRIBUTING EDITORS

AG METEOROLOGIST John Baranick

SENIOR LIVESTOCK EDITOR Jennifer Carrico

SENIOR AG POLICY EDITOR Chris Clayton

SENIOR FARM BUSINESS EDITOR Katie Dehlinger

CROPS EDITOR Jason Jenkins

SENIOR MACHINERY EDITOR Dan Miller

LEAD ANALYST Rhett Montgomery

ENVIRONMENTAL EDITOR Todd Neeley

SOCIAL MEDIA AND YOUNG FARMERS EDITOR Susan Payne

SENIOR TECH EDITOR/PF PHOTO EDITOR Joel Reichenberger

FERTILIZER EDITOR Russ Quinn

SENIOR CROPS EDITOR Pamela Smith

LIVESTOCK ANALYST ShayLe Stewart

## CONTRIBUTING COLUMNISTS

TAX COLUMNIST Rod Mauszycki

VETERINARIAN ADVISER Ken McMillan

EQUIPMENT SPECIALIST Steve Thompson

FAMILY BUSINESS ADVISER Lance Woodbury

## SALES & ADVERTISING

PUBLISHER Matt Herman (612) 812-5833 [matt.herman@dtn.com](mailto:matt.herman@dtn.com)

SALES Steve Mellencamp (312) 485-0032 [steve.mellencamp@dtn.com](mailto:steve.mellencamp@dtn.com)

SALES Doug Marnell (806) 790-0456 [doug.marnell@dtn.com](mailto:doug.marnell@dtn.com)

SALES Jaymi Wegner (406) 321-0919 [jaymi.wegner@dtn.com](mailto:jaymi.wegner@dtn.com)

PRODUCTION MANAGER Tony Green (205) 414-4733 [tony.green@dtn.com](mailto:tony.green@dtn.com)

## MEDIA OPERATIONS & DIGITAL STRATEGY LEAD Jackie Cairnes

ADVERTISING OPERATIONS SPECIALIST Megan Meager

ADVERTISING OPERATIONS SPECIALIST Kacie Reuss

ADVERTISING OPERATIONS SPECIALIST Adrienne Ramage

CIRCULATION DIRECTOR Veronica Denson

BUSINESS ANALYST Pam Passen

ADVERTISING SUPPORT MANAGER Becky Granzow

## DTN CORPORATION

CHIEF EXECUTIVE OFFICER Patrick Schneidau

GENERAL MANAGER, AGRICULTURE Grey Montgomery

VICE PRESIDENT, CONTENT Rick Thornton

EDITOR IN CHIEF/DTN Greg Horstmeier

## EDITORIAL OFFICES

PO BOX 430033, Birmingham, AL 35243-0033

(205) 414-4700

## SUBSCRIBER CUSTOMER SERVICE

PO BOX 5074, Boone, IA 50950-0074; 1 (800) 292-2340

[www.dtnpf.com/marketing/custserv](http://www.dtnpf.com/marketing/custserv)

## MAILING LIST

We make a portion of our mailing list available to reputable firms.

If you would prefer that we not include your name, please call or write us.



## 12 PASTURE RENOVATION Intensive Grazing Plan Boosts Stocking Rate

## 16 COVER STORY Sharp Eye on Precision

## 22 FAMILY BUSINESS MATTERS Improve Communication In Your Family Business

## 24 AMERICA'S BEST SHOPS Bring It All Together

## 28 ASK THE MECHANIC Wobble Box Mystery

## 29 GRAIN SORGHUM Growers Reach the Summit

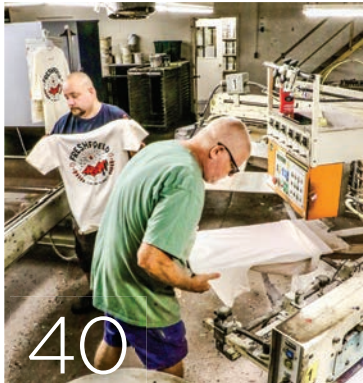
## 31 ASK THE VET Evaluate AI Synch Programs

## 32 TECHNOLOGY The Low-Down on Drones

## 34 CATTLELINK Virtual Fencing: A Rancher's New Best Friend

## 40 PARTNERSHIP Cotton of the Carolinas

## 44 GLOBAL AG Appetite for Locally Raised Food Grows



## IN EVERY ISSUE

4 WE'D LIKE TO MENTION

6 FIRST LOOK

15 LANDWATCH

23 HANDY DEVICES

46 RECIPES: HERE COMES THE SUN

48 CORNERSTONES: GOVERNMENT

## PRINTED IN THE USA

The Progressive Farmer, (ISSN 0033-0760), serving families who have a vital and shared interest in American agriculture and country living, is published monthly in January, February, March, April, May, August, September, October, November, December, and a combined June/July issue, which counts as two issues in an annual subscription. Additional double issues may be published, which count as two issues. "Copyright 2025, DTN/The Progressive Farmer. All rights reserved." The Progressive Farmer® is a trademark registered in the U.S. Patent and Trademark Office. Additional trademarks are Country Voices®, Pork Profit®, We'd Like To Mention®, Countryplace®, Country Place®, The Rural Sportsman®, Cornerstones™, FarmLife™. Periodicals postage paid at Birmingham, AL, and at additional mailing offices (USPS 447-300). General Editorial Office, PO BOX 430033, Birmingham, AL 35243-0033. Subscription rates in the U.S.: \$58.00 for three years, \$44.00 for two years, \$26.00 for one year. Outside the U.S.: \$33 per year. Single copy \$5.95.

Canada Post Publications Mail Agreement #40732015 GST #83187 6255 RT0001

TO CORRECT YOUR ADDRESS: Attach mailing address label from cover, along with your new address, including zip code. Send to The Progressive Farmer, PO BOX 5074, Boone, IA 50950-0074. Give six weeks' notice.

POSTMASTER: Send all UAA to CFS. (See DMM 707.4.12.5); NON-POSTAL AND MILITARY FACILITIES: The Progressive Farmer, PO BOX 5074, Boone, IA 50950-0074.

SUBSCRIBERS: If the Post Office alerts us that your magazine is undeliverable, we have no further obligation unless we receive a corrected address within two years.

MAILING LIST: We make a portion of our mailing list available to reputable firms. If you would prefer that we not include your name, please call or write us.



# How to Get Effective Weed Control, More Rotational Freedom in Cereal Grains

Across the Pacific Northwest (PNW), northern Plains and southern Plains, farmers are often caught up in a game of planting date roulette because of revolving weather patterns that sideline their efforts.

According to the Agricultural Weather Information Service (AWIS), a La Nina weather pattern that began in late fall 2024 was expected to continue until early spring 2025. This pattern favors more-frequent wet conditions with mostly below-normal temperatures for the PNW, and drier, warmer conditions for the southern Plains. It also typically means a colder-than-normal pattern with periods of snow for the northern Plains.

## Northern Plains

When farmers do get cereal grains planted in these regions, weed control will be a priority to maintain yield potential and profitability potential. In the northern Plains, kochia continues to be one of the most troublesome weeds and is followed by Russian thistle and lambsquarters. From a grass weed perspective, many farmers will once again get excellent activity on cheatgrass, wild oats and foxtail species with OpenSky® herbicide.



*A herbicide program created with reliable products targeting yield-limiting weeds and grasses can lead to more-resilient wheat stands, which can increase your farming profit potential.*

"Drilling cereal grains into northern Plains soils usually begins around the first or second week of April, so that means scouting for weeds will start around the second week of May," says Marcus Weatherhead, strategic account manager, Corteva Agriscience. "Growers are eager to include Tolvera herbicide in their herbicide programs to control those top three and other broadleaf weeds as well as several grass species in spring and winter wheat, durum and barley. A Group 6 and Group 27, Tolvera herbicide will also be a significant resistance management tool. Pixxaro EC herbicide with Arylex active will continue to be used on a lot of wheat acres, while OpenSky herbicide will be a reliable option for many farmers to control tough grass weed species."

## Pacific Northwest

Farming in the PNW has its own set of nuances. Irrigated and dryland acres attract various species of grasses and broadleaf weeds, including kochia, Russian thistle and dogfennel. Tolvera® herbicide, with the active ingredient tolpyralate, will provide activity on troublesome weeds in small grains, and the short rotation interval allows farmers to come back to potatoes, onions and other high-value crops popular in the PNW.

*As young stands of wheat begin emerging, farmers across the Pacific Northwest, northern Plains and southern Plains can turn to Tolvera® herbicide to help battle their No. 1 problematic broadleaf weed: kochia.*



Always pushing the edge of spring conditions, farmers should hold herbicide applications until the temperatures warm and weeds are big enough, and have enough surface area, to absorb and take in active ingredients.

"Both Tolvera herbicide and Quelex herbicide will provide excellent activity on weeds over both our irrigated and dryland acres," says Mark Pederson, territory manager, Corteva Agriscience. "The new active ingredient Tovera brings to the cereals market is a perfect fit for small grain acres, and I know dryland farmers will again lean on WideMatch herbicide too. It performed exceptionally well on cereal acres last year."

Pederson understands what farmers want to do from a crop rotation perspective. That will drive their decision to choose either Tolvera herbicide or WideMatch® herbicide. WideMatch herbicide delivers reliable activity on more than 60 postemergence broadleaf weeds, including wild buckwheat, and it will control weeds up to 8 inches in height. With a short rotation window for Tolvera herbicide, farmers can come back to sensitive commodities like pulse crops, soybeans and canola while benefiting from the novel active ingredients in Tolvera herbicide to help fight resistance. "We're also excited about Tarzec and Rezuvant herbicides for control of grasses," Pederson says.

## Southern Plains

The southern Plains is a diverse agricultural region where wheat is planted for various purposes, including for grain, silage and grazing and as a cover crop. In addition to the crop's many functions, weed spectrum and products used can vary equally as much. Rotational flexibility is more than just important, because cropping decisions can change multiple times as markets and weather fluctuate.

"Farmers in Oklahoma continue to choose products like PowerFlex HL and Rezuvant herbicides for the superior grass control, excellent crop safety and crop rotational flexibility," says Katie Verett, market development specialist, Corteva Agriscience. "Quelex herbicide continues to increase in popularity for the rotational flexibility, ease of use and broadleaf control with the new Arylex active for resistance management."

Kochia continues to be a predominant weed moving west across the southern Plains. Pixxaro® EC herbicide brings two active ingredients to bolster kochia control while being mindful of resistance and crop rotation options. When spring arrives, henbit, marestail, Russian thistle, mustards, cheatgrass, Italian ryegrass, wild oats and rescuegrass can increase the complexity of herbicide programs.

"The cereal herbicides portfolio from Corteva Agriscience offers many viable solutions no matter what weed challenges you face," Verett concludes.



**Log on to [Corteva.us/HerbicideSolutions](https://Corteva.us/HerbicideSolutions) or visit with your Corteva Agriscience sales representative to learn more about these and other crop protection solutions.**

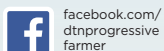
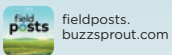


WE'D LIKE  
TO MENTION



Gregg Hillyer  
Editor in Chief

► Email Gregg Hillyer,  
[gregg.hillyer@dtm.com](mailto:gregg.hillyer@dtm.com)  
[dtm.com](http://dtm.com)



For customer service, please visit  
[www.dtnpf.com/marketing/custserv](http://www.dtnpf.com/marketing/custserv),  
or call 800-292-2340.

# Take Action During Uncertainty

Farmers have a long history of knowing how to tough it out during tough times.

They take necessary steps to protect their businesses and to fortify their financial foundations until better days arrive.

Jay Akridge, Purdue University ag economist, recently reviewed two articles in the *Harvard Business Review* that focused on leadership during uncertain times and why some companies find growth opportunities amid uncertainty. Akridge's takeaways provide valuable guidance and insight for farmers and ranchers, regardless of the scope of their operation and whether they are a team, one or many.

Let's start with volatility that piles up to the point of becoming potentially debilitating to the organization, in this case your farming operation, and the attributes you need to lean on to navigate unpredictability.

► **Create thick trust.** Counter unpredictability with your own predictability. Deliver on commitments. Approach decisions in a consistent way. This will allow you to move ahead with confidence despite ongoing fears of the unknown.

► **Inoculate your vision.** Lean on your business plan, mission statement or vision. While you may be whipsawed by external factors beyond your control, keep focused on where you are going. You will find a path through.

► **Increase honesty and transparency.** False hope such as you won't be affected by the current challenges is damaging. You must be honest with yourself.

► **Frame uncertainty as opportunity.** Focus your energy on making the most of chaotic times. A mindset concentrating on hunkering down, pulling back and waiting out challenging times is not a formula for success.

How can you find opportunity during uncertainty? Akridge gleaned this advice from the articles' authors.

► **Prioritize disruptive forces.** Uncertainty brings multiple challenging headwinds. The most successful firms (individuals) make choices and prioritize the most important of those headwinds as they develop their plans.

► **Drive disruption/embrace change.** Those who find growth in uncertain times tend to be the same ones who create disruption in their industry in "normal" times. They

are not afraid of major changes in their business model.

► **Learn and develop people/use data.**

Superior performers promoted (and expected) learning at every level of the organization, focusing on the professional development of their people—themselves included.

These leaders' "appetite for advice was 20 percentage points higher" than leaders of less successful companies. Data infused their decisions at much higher levels.

► **Prioritize pace over perfection.** You need the ability to take a punch during uncertain times (resilience), but you also need to be able to throw a punch. The most successful leaders focus on getting ahead of problems, not belaboring decisions, and on execution and follow-through rather than deep, strategic analysis to identify the "perfect path." "Let's wait this out" may seem like a more prudent response, but successful firms move forward even if the path is not smooth and straight.

► **Act, learn, act again.** Firms capitalizing on uncertainty had a penchant for action, not analysis—in part because the unknowable nature of uncertainty means no amount of analysis will get you to the right answer. Probe, test and respond; learn, try and determine what path may be best. Then, take action, learn from that action, refine/redirect/reload and act again.

Akridge stresses that making decisions in highly uncertain environments is different than navigating the normal ups and downs of a market. You need to dig deeply into the most fundamental factors affecting your business. Winning means embracing the inevitable change that uncertainty brings, putting data to work to better understand the uncertainty every day. Take action rather than sitting on your hands waiting for the proverbial storm to clear. Make decisions, learn quickly from those decisions and refine and refocus, as needed.

It's easy to lose heart during tough times. But, for the prepared, such times can strengthen your resolve and your resilience. //

  
EDITOR IN CHIEF



# protect your harvest

ATV/UTV



## SECURE YOUR RIDE WITH ATV/UTV INSURANCE

Attention, hardworking farmers! As you navigate through the vast fields and rugged terrains, your all-terrain vehicle (ATV) or utility task vehicle (UTV) becomes an indispensable companion in your daily operations. To ensure a prosperous harvest and safeguard your livelihood, investing in ATV/UTV insurance is not just a choice but a necessity.

## Why ATV/UTV insurance?

### Safeguard your investment

Your ATV/UTV is more than just a mode of transport; it's a crucial asset in your farming toolkit. Accidents happen, and repairing or replacing your ATV/UTV can be a significant financial burden. With the right insurance, you have options to protect your investment and continue your work without worrying about unexpected repair or replacement costs.

### Protection beyond accidents

Farm life is unpredictable, and so are the challenges you face. ATV/UTV insurance goes beyond accidents, offering comprehensive coverage against theft, vandalism, hitting an animal, fire, and some weather-related damage. Whether it's protecting your ATV/UTV from theft during the off-season or damage caused by unforeseen events, insurance can provide comprehensive coverage to keep you covered in many situations.

### Liability protection

In the unfortunate event that your ATV/UTV causes damage to someone else's property or results in an injury, liability coverage protects you financially in case you're held responsible for injuries or damages to others while riding. This ensures that you can focus on your farming activities without the stress of legal liabilities.

### Peace of mind for every season

Farming is a year-round endeavor, and your ATV/UTV plays a crucial role in every season. Whether it's plowing through snow in winter or navigating muddy fields in spring, knowing that your ATV/UTV is protected allows you to concentrate on what matters most—your crops.

ATV/UTV insurance isn't just about protecting a vehicle; it's about securing your means of livelihood. Don't let unforeseen events jeopardize your farming operations. Choose the peace of mind that comes with Progressive ATV/UTV insurance.

**PROGRESSIVE**

Progressive Casualty Ins. Co. and affiliates  
Coverages subject to policy terms and conditions.

Scan to get a quote  
in as little as 3 minutes

Go to [progressive.com](https://progressive.com)  
to learn more.





# What's on the Table?

Although we are still not close to a tax bill at the time of this writing in late February, some themes are emerging. Both the U.S. House and Senate have been discussing strategy on how to propose a tax bill. The House Ways and Means Committee released possible tax raisers to pay for an extension of the Tax Cuts and Jobs Act (TCJA) of 2017 and to reduce the deficit. Keep in mind things can and will change. But, let's take a look at what's floating around Washington, D.C.

➤ **Tariffs.** President Donald Trump already put out an executive order to impose tariffs on Canada, China and Mexico. After a temporary suspension, the Canada and Mexico tariffs went into effect on March 4. There is the possibility of additional tariffs on other countries, as well. Once in full effect, the average U.S. import tariff will be the highest rate in 45 years. As expected, countries have said they will respond with retaliatory tariffs on U.S. products. Tariffs aren't a direct tax on American taxpayers but may result in a higher cost of products bought (so they are an indirect tax).

➤ **Extension of the TCJA.** President Trump wants to extend his original tax cuts with possibly a few modifications. One modification generating some interest is the increase or outright elimination of the state and local taxes (SALT) cap for Schedule A itemized deductions.

➤ **Reducing the corporate income tax to 20 or 15%.** We have previously said that the use of a C corporation in farming is essentially dead. This could resurrect the use of corporations as an entity choice for farms.

➤ **Reestablish immediate expensing for research and development (R&D) costs.** This has been talked about for years and is very popular among both parties.

➤ **Elimination of taxes related to tips, overtime and Social Security.** Although this

might sound interesting, the cost associated with eliminating taxes on these items would add over \$1 trillion to the deficit. This is not likely to pass.

➤ **Elimination of the estate tax.** That is, eliminate estate tax altogether (not just its sunset clause). This is a double-edged sword. More than likely, that means no stepped-up basis on inherited assets. Or, worse yet, revisiting paying capital gains tax on inherited assets to get the step up. In my opinion, especially for farming, I hope they keep the estate tax and step-up basis, but increase the exemption amount.

➤ **Repeal the green energy tax credit.** President Trump isn't a huge fan of alternative energy, and repealing this credit would result in \$1.2 trillion in additional tax revenue over 10 years. This could affect solar and wind energy companies, and slow the expansion of leasing/buying

farmland for these ventures.

I think the most important thing to keep in mind is that to reduce the deficit and keep the TCJA, Congress will have to pass a tax bill that will raise revenue. So, expect some sort of tax increase in the coming years. ///



Potential tax changes are being discussed in Washington. While details remain uncertain, future legislation will likely aim to increase revenue and reduce the deficit.



**Rod Mauszycki**

*DTN Tax Columnist  
Rod Mauszycki, J.D., MBT, is a tax principal with CLA (CliftonLarsonAllen) in Minneapolis, Minnesota.*

➤ Read Rod's "Ask the Taxman" column at **ABOUT.DTNPF.COM/TAX**

➤ You may email Rod at **taxman@dtm.com**



## TOOLS FROM THE PAST

*This cast-iron item helped you to easily find an essential item when hooking up the buggy.  
What is it?*

**Answer:**

*This is a buggy whip holder. Screw it into the wall or wooden post to hold multiple buggy whips.*

# WHAT'S TRENDING @ DTNPF.COM



➤ A recent episode follows the journeys of farmers who found opportunity as the world was turned upside down during the COVID pandemic. Five years later, they have built thriving businesses focused on food products that make a connection to customers.



[HTTPS://FIELDPOSTS.BUZZSPROUT.COM](https://fieldposts.buzzsprout.com)



## UPCOMING WEBINARS

To register, visit [www.dtn.com/events](http://www.dtn.com/events)

**April 10: WASDE Report:** DTN Lead Market Analyst Rhett Montgomery provides in-depth analysis on the world supply and demand estimates, and provides commentary on what the numbers mean for commodity prices.

## BLOGS & COLUMNS



### AN URBAN'S RURAL VIEW

*Perspectives on national and international issues*

➤ **Urban C. Lehner**

DTN Editor Emeritus  
@urbanize

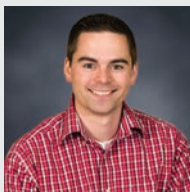


### CASH MARKET MOVES

*Observations on factors that affect grain prices*

➤ **Mary Kennedy**

DTN Basis Analyst  
@MaryCKenn



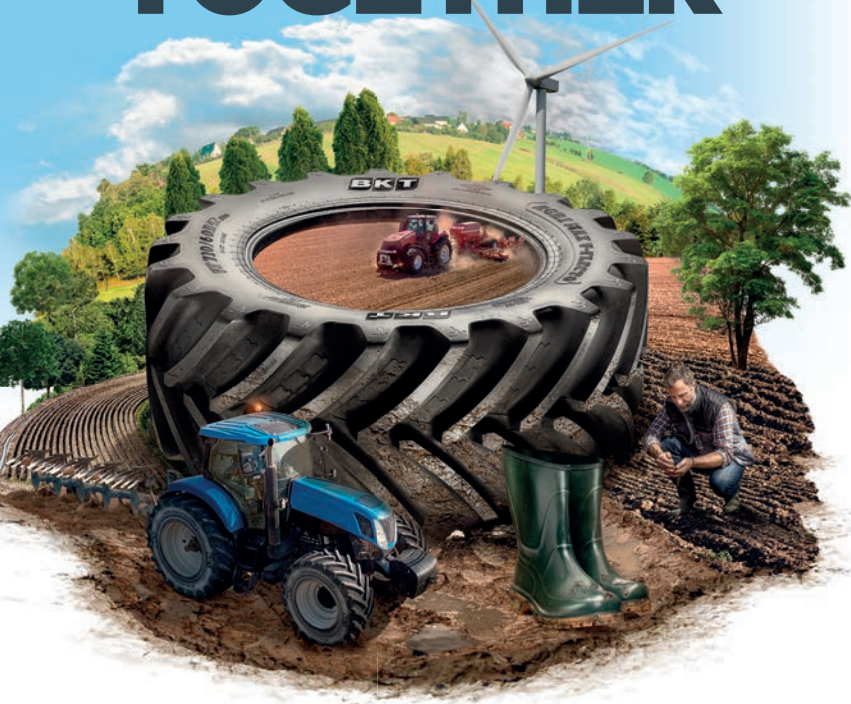
### AG WEATHER FORUM

*Detailed forecasts throughout the crop-growing season*

➤ **John Baranick**

DTN Ag Meteorologist  
[john.baranick@dtm.com](mailto:john.baranick@dtm.com)

# A LONG WAY TOGETHER



## AGRIMAX V-FLECTO

No matter how challenging your needs, AGRIMAX V-FLECTO is your best ally when it comes to soil tillage and haulage applications. The tire features excellent traction along with enhanced driving comfort both in the fields and on the road. With the exclusive VF technology, AGRIMAX V-FLECTO can carry very heavy loads with a lower inflating pressure even at high speeds providing reduced soil compaction, best self-cleaning properties as well as fuel economy.

AGRIMAX V-FLECTO is BKT's response in terms of both technology and performance for high-power tractors.



Discover the  
BKT Range



**GROWING TOGETHER**

[bkt-tires.com](https://www.bkt-tires.com)

BKT USA Inc.  
202 Montrose West Ave. Suite 240 - Copley, Ohio 44321  
Office: (+1) 330-836-1090



# Watch for New Crop Marketing Opportunities in 2025

Just like that, the first quarter of 2025 is in the books. Through the first three months of the calendar year and first seven months of the marketing year, the majority of the market's attention has remained absorbed in the 2024–25 crops, particularly with the intent of fine-tuning the volume of carryout stocks the market expects to have on hand by the end of August. This exercise, along with early-2025 events such as the February Agricultural Outlook Forum and late-March planting intentions data from USDA, all comes to a head in the May 12 “World Agricultural Supply and Demand Estimates” (WASDE) report in which USDA gives its first “official” look at 2025–26 balance sheets for U.S. row crops.

Although these May new-crop estimates carry a relatively low degree of confidence, which USDA fully acknowledges on pages 35 through 37 of the WASDE report, the projections do give the market a foundation on which subsequent weather risk premium through the growing season will be based. Weather will quickly take the driver's seat as the primary market factor over the next few months. And, sitting here in April, producers must begin preparing to take advantage of any weather-driven rallies the market might offer through the growing season.

At DTN, we stress the importance of seasonal price tendencies in sculpting a marketing plan. I am certain that most people reading this are aware of the May–July window and the higher price probability it holds. But, for those unaware, I will offer some statistics to illustrate. Looking back at price data since 1994, new-crop December corn futures hit their calendar-year high in the May–July window 15

out of 31 years. Adding March and April to that mix increases the figure to 22 out of 31 years. Over those years, the December corn board hit its calendar-year high only four times in the first quarter of the year. That would imply the odds are good that this year's high is not yet in for new-crop corn, further emphasizing the need for producers to be prepared to hedge when it arrives. Data for November soybean futures points to similar conclusions.

I also must take this opportunity to stress the importance of forward hedging. It is my opinion that whether it be in the form of an inexpensive put option offering a price floor or working with your local grain buyer on forward-contracting opportunities, it is of utmost importance to be proactive in your grain marketing strategy for this fall and beyond. A quick break-even analysis showed that forward-contracting corn in the May–July window increased the floor of potential returns above/below break even by 27% on average from 1994 through 2024. This study showed that selling in the spot market postharvest does increase potential for higher returns but with significantly higher downside risk. To be clear, I am all for leaving some bushels unpriced for a postharvest rally but recall my No. 3 marketing tip in my first ever column for *Progressive Farmer*: “Risk management is as much about avoiding the low as hitting the high.” Spreading out price risk is crucial in avoiding the low, while allowing for profit opportunities that ultimately keep the business going for another year. ///



**Rhett Montgomery**

Lead Analyst

► Read Rhett's blog at **ABOUT.**

**DTNPF.COM/**  
**MARKETS**

► You may email Rhett at **rhett.montgomery@dtn.com**



BRENT WARREN

# Low-Margin Management Tips



**Katie Dehlinger**

Senior Farm Business Editor

► Read Katie's business blog at  
[ABOUT.DTNPF.COM/BUSINESS](http://ABOUT.DTNPF.COM/BUSINESS)

**What are you doing to manage risk this year? The most common answer I got to that question this winter: Grow more corn.**

It's not hard to see why. There's red ink everywhere, but at least with corn, the insurance backstop is reasonable. The likelihood of bleeding out on soybeans is much higher in 2025, and after two years of losses, that's a risk with considerable complications.

The spring crop insurance projected price is \$4.70 per bushel for corn and \$10.54 per bushel for soybeans. Under an 80% revenue protection plan, it would take corn prices falling to \$3.76 per bushel or soybeans to \$8.44 per bushel to trigger a payment without a yield loss.

University of Illinois crop budget estimates show it will cost an average of \$4.60 to raise an acre of corn on highly productive, central-Illinois farmland, \$11.05 for soybeans.

Soybeans are way out of the money, and almost all of the financial risk falls to farmers.

Nick Paulson, agriculture economist at the University of Illinois, says farmers are generally in good financial shape following big incomes from 2020–2022, but, it's not just the three consecutive years of negative returns that concern him.

"It's the size of those negative returns. They can eat up a lot of liquidity, a lot of working capital, and change that strong financial position pretty quickly," Paulson says.

In low-margin years, University of Illinois ag economist Gary Schnitkey says there are four main areas farmers should consider carefully.

► **Be the low-cost producer.** High yields often come with high costs, and Schnitkey suggests running the numbers on things like tillage passages and nitrogen application rates to find cuts.

► **Reassess land rental strategies.** For some, that means assessing how much you can afford to pay in rent, while for others it means building a strategy to establish more relationships with potential landowners.

► **Consider your machinery.** Is it the right size for your acreage? Could you benefit from sharing with another operation? Or, is there a way it could earn additional income?

► **Don't sleep on government programs.** The choice between Agricultural Risk Coverage and Price Loss Coverage appears to heavily favor ARC-County. The deadline to enroll at your local Farm Service Agency office is April 15. ///



**TeeJet®**  
TECHNOLOGIES

**UNCERTAIN ABOUT WHICH  
NOZZLES WORK BEST FOR  
PULSE WIDTH MODULATION  
CONTROL SYSTEMS?**



**TEEJET HAS YOU COVERED!**

[www.teejet.com/pwm-nozzles](http://www.teejet.com/pwm-nozzles)

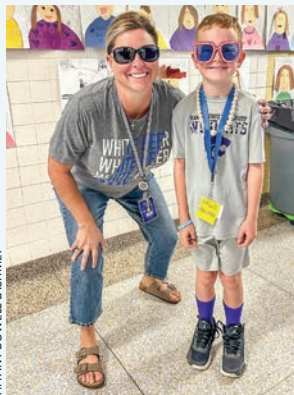


## Embrace the Different

BY Tiffany Dowell Lashmet

**Recently, my children were discussing teachers at school** when my son assured my daughter that she will like the third grade next year because of a specific teacher, Mrs. Fangman. “She likes the people who are different,” my son explained. That one sentence really stopped me in my tracks.

The difference my son referenced was the fact that he shows farm animals and other kids don’t, but the same concept can apply to so many scenarios. What a great role model this teacher is for my children. What a gift that they have someone at school who they know likes them, even though they might be different from the norm.



TIFFANY DOWELL LASHMET

The kids who have learning disabilities or those who are extremely shy or who others consider to be nerdy can find a place in her classroom. I think about kids who come from difficult family situations, enjoy uncommon hobbies or who might have different thoughts or beliefs than the other children at school. What a wonderful

thing it must be for them to know that at least one person in their life likes them for exactly who they are. I can’t help but think about what that simple encouragement to be themselves could do for a 9-year-old’s heart.

Then, I thought about the people in my life who are different and what a gift they have been to me. I have friends of all backgrounds. One collects taxidermy opossums. Another is a vegetarian who makes an exception for bacon. I have friends on completely opposite ends of the political spectrum. I have attended funerals of people who I loved in Jewish synagogues and Catholic churches, and gravesides with no preacher in sight.

I am also grateful for the people who like the slightly wacky or serious side of what makes me be me. Learning from the differences is worth embracing. ///



Tiffany Dowell Lashmet juggles family, farming, writing, livestock and a career in ag law from the Texas Panhandle. Follow her blog at [alwaysafarmkid.com](http://alwaysafarmkid.com) and on Instagram [@alwaysafarmkid](https://www.instagram.com/alwaysafarmkid) and X [@TiffDowell](https://www.x.com/TiffDowell).

## Mom Graduation

BY Katie Pratt

**Both of my farm kids graduate this May—my son with** his associate degree in agribusiness. He will finally farm without the interruption of school, which he has loathed since kindergarten. We are fortunate there is space for him to grow with the family’s farm.

My daughter will graduate from high school and pursue a degree in agriculture education at a premier university far, far away. We are genuinely excited about her next chapter despite the distance. Honestly, I am. We are, my farmer and I. Excited. Truly.

However, I’m having second thoughts, not about my kids’ next steps but about mine.

My kids and I have logged thousands of miles to and from school for practices, games or performances. We’ve sat in silence, laughed, argued, cried, strategized, sang with the windows down and the music loud. They never seemed to mind me tagging along. So, I drove, they talked, and preschool turned to high school in a blink.

For 17 years, I played the stereotypical role of involved mom. When the kids were little, I “stayed at home,” making me an available volunteer for school day functions. So, I organized eight years of pancake breakfast fundraisers, eight years of elementary school book fairs, served as a Sunday School teacher, 4-H Cloverbud leader and team mom for T-ball, baseball and softball. I inherited volunteer roles from other moms—concession stand operator, cross-country snack coordinator and musical promotions manager.

My personal identity is that of mom and cheerleader to my kids and so many others. Thankfully, I have nieces, nephews and friends’ children for whom I can cheer. I can’t yet envision a less congested calendar not ruled by school activities. But, I can see a bigger garden and more time swaying on the porch swing while listening to my daughter’s newest adventure and hoping my son slows long enough to sit beside me to share his latest farming dream. ///



CALLIE JO PHOTOGRAPHY



Katie Pratt writes and shares her love of agriculture from a north-central Illinois farm. Find her writing blog at [theillinoisfarmgirl.com](http://theillinoisfarmgirl.com)

# A Planned Strategy Fights Resistant Weeds



*Paid Advertorial*

Discovering weed escapes at harvest can be a yield loss nightmare, but the impact of these escapes starts much sooner. Yield loss starts with early emerging weeds that go unchecked. That's why it's important to have an effective and proactive herbicide plan in place to stop weeds before they have a chance to establish.

"It's important to get it right from the start," said Josh Putman, Technical Marketing Manager at BASF. "Preserving your corn yield potential starts early with a foundational pre-emerge herbicide program, like Surtain™ herbicide, and layer residual in post applications."

## Importance of a Strong Early-Season Weed Management Strategy

That foundational program needs to include a front-line, broad-spectrum herbicide. A wide window of application allows you the flexibility to control a variety of tough weeds that can rob you of precious yields.

"Starting clean and staying clean is crucial to preserving yield. Once corn emerges, it's important to choose an effective broad spectrum herbicide, like Status® herbicide, to control later-emerging weeds before they get out of control," said Putman.

Early-season weed control is important. The critical, weed-free period in corn is emergence (VE) stage to the six-leaf (V6) stage. Even a small six-inch weed can cause up to 7% yield loss in corn, if left uncontrolled.<sup>1</sup> Keeping fields clean to canopy closure allows your crop to maximize the nutrients in the soil, water and sunlight without weed competition, maximizing yields. By using a planned, early herbicide application, you can eliminate the weed competition and give your corn a chance to establish a healthy stand.

## Do Weed Control Right the First Time

"Getting a healthy, weed-free corn stand sets you up for the rest of the year," said Putman. "Early planning and proper herbicide applications are all key to managing weeds and preserving crop yields."

"Early planned applications are far more effective than late rescue treatments. Much of the damage has already been done at that point." By tackling weeds early, you are attacking them when they are at their weakest – before they emerge.

"As you're developing your plan, work with your BASF representative," said Putman. "They can help you build a program that includes a pre-emergent followed by a post-emergent product with strong residuals and uses different sites of action in herbicides to control resistance."

Switching up site of action and diversifying your weed management program is crucial to effectively control resistant weed species in the field. Focusing on this now will help to reduce the weed seed bank and preserve existing chemistries.

"Start by pairing a novel pre-emerge herbicide, like Surtain herbicide, that delivers strong residual control of broadleaf and grass weeds and follow it with an early-post application of Status plus Zidua® SC herbicides to manage weeds later into the growing season," said Putman.

## Best Use Practices Help Protect Your Investment

There are many factors that go into managing weeds. One example is choosing the right application rate for managing dense weed canopies and helping to mitigate resistance.

"Larger weeds may require higher application rates due to the increased number of growing points that need controlled," said Putman. "Herbicide resistance, especially HPPD-resistance, continues to grow across the country."

"In the case of resistance, spraying higher rates doesn't necessarily help control resistant biotypes," said Putman. "In fact, it might be escalating the problem."

Following the best use practices for a particular herbicide and rotating sites of action help us protect the product we have for future use.

## Status Herbicide Early-Post in Corn

Status herbicide has a unique combination of two sites of action – dicamba (group 4) and diflufenzopyr (group 19) for enhanced weed control and resistance management. The diflufenzopyr synergizes dicamba, which moves and locks the dicamba active ingredient at the growing points, resulting in fast knockdown. In addition, Status herbicide has proven crop safety so you can focus on killing weeds and not worry about damaging your corn.

Used as a front-line post application, Status herbicide takes down HPPD-resistant weeds effectively, minimizing the need for a rescue treatment. If you're battling HPPD- and/or glyphosate-resistant waterhemp and Palmer amaranth, Status herbicide provides powerful control without contributing to the overuse of group 27 herbicides. The addition of Zidua SC herbicide extends residual control late into the growing season.

## For More Information

BASF representatives are available to assist you with keeping your fields clean from start to finish. To learn more about how you can diversify your weed control program and prevent the spread of resistance, talk to your local BASF technical representative or retailer.

<sup>1</sup> Knezevic, S. (2015). *The critical period of weed control in corn*. CropWatch. <https://cropwatch.unl.edu/critical-period-weed-control-corn>

**Status®**  
Herbicide

**BASF**  
We create chemistry

**Always read and follow label directions.**

Status and Zidua are registered trademarks of BASF. Surtain is a trademark of BASF. © 2025 BASF Corporation. All rights reserved.





# Intensive Grazing Plan Boosts Stocking Rate

Tom and Mimi Sidwell have revitalized their semiarid New Mexico ranch by mimicking eons of natural prairie culture.

***Multiyear effort restores native grasses by removing brush, rotating pastures and installing watering system.***

When they bought the 7,000-acre JX Ranch in eastern New Mexico 21 years ago, Tom and Mimi Sidwell saw a semiarid rocky terrain that had practically no grass standing on the severely grazed property. The seller had told them he had been using a 58-acre-per-animal-unit stocking rate.

Today, despite five years into an extended drought, the Sidwells have nearly doubled the advertised stocking rate. They run a 100-head Angus/Corriente spring-calving cow herd, 100 yearlings and 60 to 70 calves throughout the year at a conservative 30 acres per head. Ten years ago, during better rainfall years, that stocking rate had increased to 1 animal unit per 27 acres.

The Sidwells' productivity boost is tied to improved grazing management, an extensive, low-labor watering

system and conservation efforts to cover acres of bare soil with productive native forage grasses. That involved bulldozing hundreds of acres of invasive brush to make room for grass stands that had been decimated by overgrazing in the past.

## > A LONG JOURNEY

"When we arrived, we knew we wanted to operate one herd," Tom explains, "but we needed to be able to make better use of the grass and, in turn, improve the diversity of the plants in our pastures."

That meant they needed to decrease the size of the seven existing pastures into manageable paddocks. It also meant being able to move water with the cattle as they rotated from paddock to paddock over short periods of time. "Water is always critical in our area, and most of our neighbors still haul water to their cattle," he points out.

Tom is an adherent to the methods of the Savory Institute, which seeks grazing management emulating the natural activities of large herds of herbivores, such





## Grass-Fed Beef Business

In step with the agronomic improvements to the JX Ranch, five years after receiving the ranch deed, the Sidwells also sidestepped the traditional cattle market. They began selling all their 100% grass-fed beef directly to consumers through Mimi's side of the business: JX Ranch Natural Beef ([www.leannaturalbeef.com](http://www.leannaturalbeef.com)).

"We say we quit being price-takers and became price-makers," Tom says, explaining the benefits of selling retail instead of taking chances on the cattle market, order buyers, feedlots and sale barn commissions.

Mimi operates the website for JX Natural Beef and uses a list of butchers across the state to market all the ranch's

yearling cattle, which usually weigh about 1,000 pounds at 17 months. In 2024, that included nearly 80 head sold mainly across New Mexico for primal cuts. Additional cattle go into her USDA-inspected retail market, which extends across most of the U.S. and is fueled by internet sales and word-of-mouth repeat local customers.



as bison or wildebeests. He has honed his systematic grazing rotations to leave each paddock undisturbed a minimum of 90 days before grazing resumes.

The ranch is now divided into 30 pastures—ranging from 80 to 1,000 acres—with miles of high-tensile electric fence and thousands of T-posts. The couple provides the only labor on the sprawling ranch, and the paddocks let them easily move cattle to new grass on horseback with only the help of their German shepherd.

"We can whistle them through the gates or holler at them, and they come running," Mimi says. "Usually, we can move them to new grass within 5 minutes."

## ➤ WATER SYSTEM

As they were clearing pastures of cedars and mesquite, the Sidwells also tackled building an extensive watering system for their planned intensively managed ranch. They built a main water line stretching nearly 5 miles through the lower pastures of the ranch (4,300 feet elevation) to those on the top of The Caprock (5,000 feet). The system is fed with six shallow wells pumping 1 to 1.5 gallons per minute. Each well feeds its own 9,000-gallon covered storage tank. Except for an electric submersible pump lifting the final push to the High Plains pastures, the system uses solar-powered pumps to keep stock tanks full. In all, the ranch has 100,000 gallons of water storage.

One problem the Sidwells noticed with their hot summers is that the water pumps were barely keeping up with evaporation in the stock tanks. They had heard about ranchers using shade balls—black plastic balls floated on the surface of water in stock tanks to fight evaporation. ➤





1



2



3

“We were loading some in our truck planning to experiment with them when we just decided to do every tank on the ranch,” Mimi recalls. “It amounted to about \$1,100 for each trough, but after we had some experience with them, Tom figured it saved us about 100,000 gallons of water per year. When your pumps are only producing about a gallon a minute, that makes a big difference.”

Judicious use of water and optimal harvest of forage has made the JX Ranch stand out in an area where traditional continual grazing methods allow cattle to spot-graze (overgrazing), which leads to bare soil and the succession of invasive species. The Sidwells’ intensive grazing forces uniform utilization of available forage by cattle over a short period before they are quickly moved on to new pastures. That practice favors the recovery of natural prairie forage species.

Over the years, the ranch’s pastures have returned to a diversity not seen when the Sidwells took over. Nearly all the bare soil present when they purchased the ranch in 2003 is now covered with forage.

“We did no seeding,” Tom explains. “The native grass seed is in the soil and will germinate when conditions are right under management. Overgrazing over a long period of time results in a monoculture of primarily blue grama grass and tobosa grass on heavier soils.

“However, there were other species of grasses within the canopy of mesquite brush and cholla cactus that were protected from past overgrazing practices,” he continues. “When we began managing the land under holistic management, the various species of grass protected from grazing began to establish along with germination of seed that has been in the soil for a long period of time.”

Tom says the grass seed still present will germinate when overgrazing ceases. Savory Institute’s experience shows the impact of a herd of livestock will prepare a seed bed, aerate the soil and break the capillary action of evaporation.

The process takes time because of the semiaridness of the ecosystem, but the grasses on the JX Ranch have established and survived under these conditions for thousands of years.

1. A system of solar-powered pumps provides stock water through an extensive pipeline on the 7,000-acre JX Ranch.

2. Thousands of floating shade balls provide a barrier to evaporation in stock tanks, which saves about 100,000 gallons of water a year.

3. Mimi Sidwell markets the beef from the couple’s Angus/Corriente cow herd directly to consumers and is active in daily ranch operations.

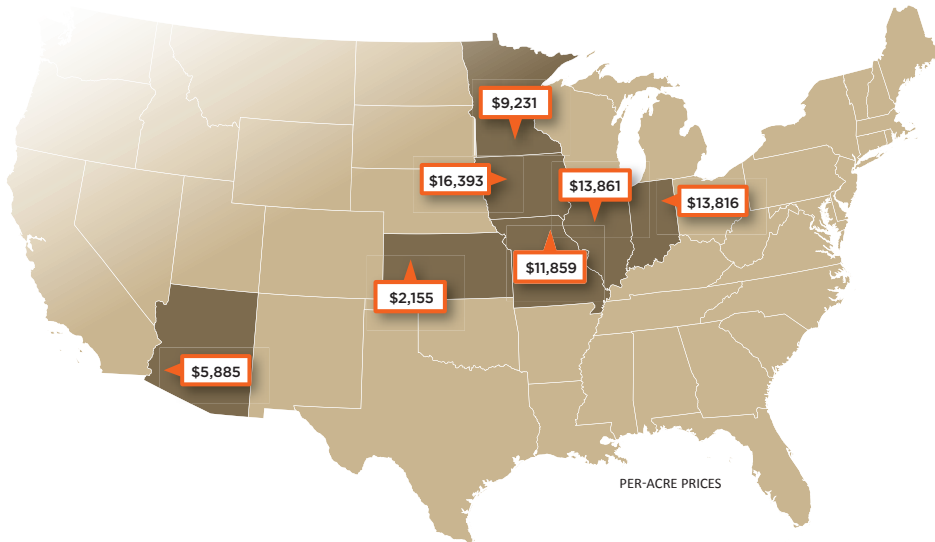
“At first there were very little native grass species surviving on the ranch,” Tom recalls. “But, our cattle are not allowed to overgraze any paddock with the rotation providing a minimum of 90 days of forage rest.” Today, the ranch has healthy stands of blue grama and tobosa. Other grasses that have returned and spread are plains bristlegass, Arizona cottontop and vine mesquite (a valuable forage plant, not the undesirable desert shrub), black and sideoats grama, along with Hall’s panicum.

The Sidwells plan for drought every year and monitor grass conditions in late fall using several formulas to determine stocking rates for the coming year. “And, in planning for drought, we’ve never been wrong,” Tom chuckles. Since 2019, however, drought has been no laughing matter to the area. Still, ample standing forage on the JX Ranch at the end of each year is proof the system is working.

“I’ve been using this management for 44 years,” Tom explains. “It began when I once worked for the Bureau of Land Management [BLM] and realized the prescribed grazing recommendations they used make little positive change.”

That’s when he spent time studying the writings of Allan Savory and participated in several of his educational workshops. “We’d all been missing the effect herds of animals themselves have on healing the land, especially with the right numbers per acre and the correct grazing period,” Tom explains. “When you start keeping cattle penned up in a single pasture for weeks or months at a time, the grass gets overgrazed and never gets a chance to replenish its nutrient stores. When I learned that, I quit the BLM and started managing ranches the way we do now at the JX.” ///

# Recent Farmland Sales



**COLORADO, Yuma County.** A mostly irrigated 209-acre farm sold in an online auction for \$1.23 million, or \$5,885 per acre. The farm includes two fields. The first is 157 acres, with 121 acres under center-pivot irrigation. Half of the field is planted to an alfalfa/grass mix that's 3 years old, while the other is a straight grass mix. The 36 acres of dryland corners are in millet stubble. Another 43 acres of grass are under wiper irrigation. **Contact:** Shannon Schlachter, National Land Realty; sschlachter@nationalland.com, 970-580-8111 [www.nationalland.com](http://www.nationalland.com)

**INDIANA, Whitley County.** Five tracts of cropland encompassing 190 acres sold at auction for \$2.625 million, or an average of \$13,816 per acre. Two of the tracts were billed as potential building sites. The first, a 10-acre lot, sold for an average of \$15,500, the highest of the auction. The second, a 4-acre lot, sold jointly with the adjacent 76-acre tract for \$13,750 per acre. A primarily tillable 60-acre parcel sold for \$12,833 per acre, while a 40-acre parcel sold for \$15,000 per acre. **Contact:** Drew Lamle, Schrader Real Estate and Auction Co. Inc; auctions@schraderauction.com, 800-451-2709 [www.schraderauction.com](http://www.schraderauction.com)

**ILLINOIS, McLean County.** A 101-acre farm sold in online auction for \$1.4 million, or \$13,861 per acre. Located 15 miles east of Bloomington, the property features two wind turbines and an improved, but older, pole building. The weighted productivity index is 127.9, and the farm's primary soils are Wyand silt loam, Saybrook silt loam and Drummer and Elpaso silty clay loams. **Contact:** Ross Perkins, Murray Wise Associates LLC; ross.perkins@mwallc.com, 800-607-6888 [www.murraywiseassociates.com](http://www.murraywiseassociates.com)

**IOWA, Clay County.** Two contiguous tracts totaling 152.5 acres sold at auction for \$2.5 million, or an average of \$16,393 per acre. In addition to a Corn Suitability Rating 2 (CSR2) of more than 95, the fields include extensive tile drainage. The land is located adjacent to the southern boundary of Royal, Iowa. **Contact:** Shane Brant, Midwest Land Management; shane@midwestlandmanagement.com, 712-262-3110 [www.midwestlandmanagement.com](http://www.midwestlandmanagement.com)

**KANSAS, Logan County.** A farm with 1,095 acres divided into five tracts sold at auction for \$2.36 million, or \$2,155 per acre. Four of the tracts are

in row-crop production, and one 180-acre parcel is enrolled in CRP. The buyer receives immediate possession of the open land and of land planted to wheat after harvest. Buyer will receive the landowner's one-third share of the wheat crop. The seller retains current oil production, but 50% of the mineral rights will revert to the buyer after production ceases. **Contact:** Donald Hazlett, Farm and Ranch Realty Inc.; frr@frrmail.com, 800-247-7863

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

**MINNESOTA, Blue Earth County.** A 143-acre field sold in a sealed bid sale for \$1.32 million, or \$9,231 per acre. The farm has high-quality soils and a tile drainage outlet to a county ditch. **Contact:** Jared Augustine, Hertz Real Estate Services; JaredA@Hertz.Ag, 507-246-0903 [www.hertz.ag](http://www.hertz.ag)

**MISSOURI, Shelby County.** Four tracts of farmland encompassing 312 acres sold at auction for \$3.7 million, or an average of \$11,859 per acre. Two of the fields were highly productive and tillable. The 100-acre, 96% tillable tract received 27 bids and sold for \$17,025 per acre. A similar 80-acre tract sold for \$11,350 per acre. The remaining tracts had fewer tillable acres and a larger share of trees and creekbeds. **Contact:** Scott Gander, Peoples Land Co.; anthony@peopleslandco.com, 660-676-1479 [www.peopleslandco.com](http://www.peopleslandco.com)

*These sales figures are provided by the sources and may not be exact because of rounding.*

Submit recent land sales to  
[landwatch@dtm.com](mailto:landwatch@dtm.com)

Find previous Landwatch listings at  
[www.dtnpf.com/agriculture/web/ag/magazine/your-land](http://www.dtnpf.com/agriculture/web/ag/magazine/your-land)





# Sharp Eye on Precision

*Sense and act technology brings targeted application, speed and more to the art of crop production.*

Palmer amaranth is the enemy on the Came farming operation. “It’s such a prolific seed producer. I believe I saw a report [that] Palmer has six-way resistance to the chemicals we are trying to use to combat it,” Kody Came says.

Came is a fifth-generation farmer from Salina, Kansas. The operation includes his dad, aunt, brother and a couple of younger cousins. Wheat, corn, soybeans and milo complement a 400-head cow/calf operation.

The Cames were in the market for a new sprayer, and their John Deere dealer found a hard-to-get See & Spray Ultimate model. It’s a two-tank machine—one tank for a residual herbicide, the other for targeted application.

Would the technology tackle Palmer? It did. “It took care of the Palmer amaranth,” Came says. “See & Spray worked really well for us.”

He had hoped See & Spray would save 33% of the nonresidual herbicide typically applied. “We actually saved closer to 66% of our chemical. That opened our eyes to what this technology was capable of,” Came adds.

More is on the way. Deere, with its Blue River Technology, Greeneye Technology, AGCO’s PTx and CNH (Case IH and New Holland) are deep into building new sense and act technologies with applications

Precision sprayers make thousands of decisions per second as they hunt weeds and soon correct new agronomic deficiencies on the go.



> By Dan Miller, @DMillerPF



beyond corn, soybeans and cotton to cereals and canola, sugar beets, potatoes, peanuts and blueberries.

## > BLINK OF AN EYE

The modern precision-spraying kit consists of cameras mounted to the sprayer boom with incredibly fast image processors. See & Spray needs all of 30 milliseconds to complete the imaging process (the average human blink of an eye lasts 100 milliseconds).



The key is ever-improving digital models. The value of precision spraying is in a system's model, the library of digital plant images that is more refined with every pass of the camera.

Nadav Bocher, CEO and cofounder of Greeneye Technology, sees the potential. "We're going to see high value from a machine with eyes (cameras) and a brain (processor) running through a field making thousands of decisions every second."

The sensing technologies represented by Greeneye's retrofit spraying system and others give farmers the ability to act precisely, in real time, by way of algorithms that will soon enable sense and act to also address nitrogen deficiencies, battle insects, blunt crop disease and manage weeds by species.

With its technology sold already in nine states to corn, soybean and, this year, cotton producers, Tel Aviv, Israel-based Greeneye will soon introduce Greeneye Plus. Plus unlocks savings from inputs beyond herbicides. Plus will optimize the application of fungicides and micronutrients before expanding to fertilizers.

Deere's See & Spray model has been tested against 1 million real-world acres. See & Spray technology saved farmers 8.3 million gallons of herbicide mix during the 2024 growing season, Deere says. On average, See & Spray customers saw an average of 59% herbicide mix savings.

"We've hit two milestones: building out a small-scale model to commercial trials and getting the technology into customers' hands and using it over a million acres in multiple states and multiple countries," says Josh Ladd, Deere's go-to-market manager for application.

Deere announced in late February that it is expanding its See & Spray Select technology for 2026 to include a variable-rate capability providing precision applications and product savings to fungicides, desiccants, preharvest products and more.

## > THE PAYBACK

Case IH is entering the sense and act space with SenseApply. "SenseApply is our very first step into the sense and act space in terms of crop application technologies," says Alex Caldwell, product marketing manager for application equipment, North America. SenseApply is a single, cab-mounted, multispectral camera.

Mounted to the roof of the Case IH Patriot sprayer and the Trident liquid/dry combination applicator, SenseApply offers green-on-brown spot-spraying and ➤



Kody Came

LARRY REICHENBERGER



a Base + Boost function that increases application rates through individual nozzles as they pass over areas of high weed pressure. SenseApply also has a live, variable-rate feature for applications such as burndown, nitrogen, harvest aid, plant growth regulators and fungicides. Trident can tap into the functions of SenseApply to apply nitrogen in dry or liquid form.

“I think growers are going to be extremely surprised with the utility and the payback and the price point with which this comes to the market,” Caldwell says. “Something we’re wanting to hammer home is this technology is theirs [the growers’] upon purchase. There are no annual subscriptions, no per-acre fees associated with this. The device is theirs. They can move SenseApply from machine to machine.”

SenseApply will be available for 2026.

Available in 2026 from New Holland (also a CNH brand with Case IH) is IntelliSense Sprayer Automation. A factory install with the Guardian Series front boom sprayers, IntelliSense Spray Automation has much the same capabilities as SenseApply, with applications for corn, soybeans, cotton, pulse crops and small grains.

Mapping weeds by species is on the horizon. “As the technology progresses, our customers are looking for weed maps with species identification that allows them to target specific weeds,” Deere’s Ladd explains.

Think about Palmer amaranth and all its seeds. A field can suffer for years. “[A species map] suggests different treatment [strategies],” says Blue River Technologies CEO Willy Pell. “You might send out a guy with a shovel. You might hit the field with a heavier dose of chemical. You will think about your treatment next year in a different way. You might track it from year to year to make sure you are decreasing its seed bank.”

## > GROUND ZERO

Blue River is arguably ground zero to the birth of precision technologies. Blue River opened its labs in 2011 with an idea to build autonomous lawn mowers. Cofounders Lee Redden and Jorge Heraud, Stanford-trained engineers with family

backgrounds in agriculture, shopped the concept around among potential customers. They found little interest.

They did find interest in smart implements with the precision and recall to sift, from a moving machine, desirable plants and plants that aren’t, and interest in implements performing at the level of individual plants, integrating computer vision with machine-learning technology.

Blue River’s LettuceBot was born in 2012.

In lettuce production, most young plants need to be removed, opening 10 inches of space between the remaining lettuce plants. Armed with 1 million lettuce images and quarter-inch accuracy, LettuceBot, a silver-colored box towed by a tractor, was soon thinning lettuce rows in Salinas Valley, California, and outside Yuma, Arizona, eventually capturing 10% of the market.

By 2017, Blue River launched See & Spray, the technology targeting individual weeds with a nonresidual herbicide. John Deere purchased Blue River that year for \$305 million. Deere revealed the technology to the tech world at the 2020 CES in Las Vegas. In 2021, Deere introduced See & Spray Select for control of weeds in fallow fields. A year later, Deere launched See & Spray Ultimate, a two-tank system for treating weeds with residual and nonresidual products in growing crops—corn, soybeans, cotton.

## > NO MORE. NO LESS.

“We saw this future,” Pell says, “every single plant gets what it needs. No more. No less. Farmers will use fewer inputs and get better results.”

“Successfully expanding into a new crop relies on training the system’s algorithms to manage the complexities of that crop,” Greeneye’s Bocher says. “That depends on two things: the quality and quantity of the data we collect. We gather data from a diverse range of scenarios, using it to build our learning models and train our algorithms.”

PTx Precision Planting’s newest precision spraying systems are SymphonyVision “Rate” and SymphonyVision “Spot.” They both use cameras to detect weed severity. SymphonyVision Rate sprays continuously, adjusting the application by weed severity. SymphonyVision Spot turns on ▶

*The trek to See & Spray began with backpackers collecting images that became the foundation for John Deere’s precision spray models.*



# At the Dawn of Sense and Act



Willy Pell

*Progressive Farmer* had the opportunity at the 2025 Consumer Electronics Show (CES), in Las Vegas, Nevada, to sit down with Willy Pell, CEO of Blue River Technology, to talk about the evolution of Blue River's LettuceBot sense and act technology, its acquisition by John Deere and the introduction of See & Spray. Today, See & Spray targets weeds. Tomorrow, the technology, Pell predicts, will be used for much more.

Here's the edited interview.

**PF:** See & Spray was first introduced to the farming market in 2021. Initially, Deere marketed this new machine-learning-based technology to small grains farmers who manage weed pressure on fallow acres as part of a regular rotation. Five years later, See & Spray technology detects weeds in green, growing crops—in corn, soybeans and cotton. How did we get here?

**Pell:** One of the things about machine-learning systems is that they improve with use. There is no book, no database that will show how every weed ever will appear at some time of the day or climate condition with all practices. With machine-learning systems, you look at the performance and then you look at the images that didn't perform as well to improve the model so that it hits the weed every single time and saves the most chemical every single time.

**PF:** How does the machine learn?

**Pell:** There is basically a level of confidence for every single pixel gathered by the cameras. How confident are we that this is a weed class? How confident are we that this is a crop class? You basically get confidence scores to determine the images uploaded to the model. But, we can't possibly upload all the images. So, onboard selection criteria

takes the images that most likely have the most value ... and the model improves.

**PF:** Blue River was working on this technology well before Deere purchased it for \$305 million in 2017. How did it begin?

**Pell:** Blue River started with a lettuce-thinning system called LettuceBot. The germination rates of [lettuce] seeds are quite poor. But, the seeds are cheap, so farmers overplant, and then they thin the plants. They do that with hoe crews. But, the crews would often strike the plants, expose the roots to disease and things like that. So, we made this incredibly precise system that would thin the lettuce. It would spray a heavy dose of fertilizer on the lettuce to be removed.

**PF:** Tell us about the technology at the time.

**Pell:** The best technology at the time was what were called support vector machines. It is old-school machine learning where engineers would hand-tune algorithms. So, I'm going to look at a lettuce plant. It has this many leaves and this many interior angles and this brightness of green. You could break it down with your own mind and your own intellect. That was the state of the art. Then, the deep learning revolution hit, and rather than engineers hand-tuning algorithms, you use data. It was a lot of data. It went from 1,000 training images to 100,000 training images to train a model to predict crops versus weeds accurately.

**PF:** Tell us about the time John Deere met Blue River and how it changed things for Blue River.

**Pell:** We saw this future ... every single plant gets what it needs. No more. No less. Farmers were going to use fewer inputs and get better results. It was a pretty easy decision to join forces [with Deere]. We went to self-propelled spraying ... operating in the full spectrums of daylight, fog, harsh shadows. We were going 6 mph with our pull-behind LettuceBot implement, now we were going 12 mph and, today, 15 mph. You used to have time to process a picture before you sprayed. On a self-propelled sprayer, you have about 30 milliseconds.

**PF:** What does it take to consistently model a weed?

**Pell:** The cameras are RGB sensors. They see very similarly to how you and I see. Anything

that would look different to you, any type of variation that makes it look different to you, it's going to look different to the model. We test the model against known images, and we score ourselves. Anything that is a less-than-good experience is outside the domain, and we expand the domain. We are perpetually expanding the domain.

**PF:** How often are you refining the model?

**Pell:** We can spin a model in about 36 hours. Testing procedures [require] another day or two after that.

**PF:** How specific is the model? Is there a Midwest model, a Southern model?

**Pell:** We started with very specific models for different regions. What we found was systems would perform better the more we merged models. Adding data from Brazil actually improves [performance] in the Midwest and vice versa.

**PF:** Today, See & Spray produces a weed map but not a weed species map.

**Pell:** Yes. It produces a map of where weeds are in the field. The obvious next step is species. It's in play. One hundred percent.

**PF:** This would be a highly valuable evolution.

**Pell:** Yes. Take Palmer amaranth, for example. It is more resistant [to chemical] treatment than others [weed species]. And, with Palmer and all its seeds, a field can suffer for years. A species map suggests different treatment strategies.

**PF:** Where does this go from here? Beyond treating weeds?

**Pell:** For the first time, farmers will have an actual sense of what their crop stand is after planting. Is it even? Is it uniform? All that correlates with the potential yield. You can drive certain decisions. Data can support a decision about inputs. Here's an example: A doctor cannot tell the gender of a person by their iris. But, an algorithm can. So, there is some subtle difference between a male and a female iris that is unknown to Western medicine, yet it is true. We let the data do the talking. If you need to ground truth an aphid infestation, is there a visual signature they make in a crop? Farmers will have [in season] actionable information. Machine learning gives us a clearer window into the production system.



nozzles in the presence of weeds and turns nozzles off when no weeds are present.

“Our AI models are being updated, and we’ll continue to be adding crops and regions,” says Jason Stoller, director of product engineering for Precision Planting. “Growers will be able to update software just like we load software updates today on the planter.”

## > SHARPEN THE PENCIL

Out in Kansas, the Cames saw the Deere precision sprayer model evolve in real time. In their first year with See & Spray, the Cames found it would not distinguish between velvetleaf and soybeans. “They looked too similar,” Kody Came says. “The machine hadn’t learned quite yet to be able to differentiate between the two, so it didn’t end up spraying those plants.”

Year 2 was different. The Deere model had evolved to catch the distinction between soybeans and velvetleaf. “I think it more speaks to the ability for this technology to consistently learn and adapt. I thought [the evolution] really spoke highly of the technology itself,” he says.

Came put a pencil to See & Spray technology on his farm. “It cost us \$3.33 an acre to run it,” he explains. “We saved \$2.52 an acre in chemical costs [in 2024], so it cost us \$0.81 to run that machine. I don’t know many pieces of equipment that you can run for \$0.81 an acre.” That cost includes Deere’s subscription fee, depreciation, fuel and interest on the machine.

“People have an issue with the subscription fee,” Came continues. “But, the way we look at it is that the subscription fee allows this software and machine learning to be updated and [allows] new and different things to be done with it. The subscription charge is more of an investment in the technology for its betterment.” ///

## Greeneye Technology: Greeneye

Greeneye Technology’s retrofit system transforms any sprayer into a day-and-night smart machine (with Greeneye’s lighting technology).

Greeneye’s dual-tank system allows farmers to spot-spray contact herbicides at an 87% reduction in product and broadcast residual herbicides. Greeneye is available this year for cotton. Greeneye also is introducing Greeneye Plus this year. Plus will expand Greeneye’s precision application capabilities to other products, beginning with fungicides and micronutrients. By applying these inputs only to the rows, crop managers can reduce applications by 30 to 40%, Greeneye says.



## John Deere: See & Spray

See & Spray technology targets individual weeds in corn, soybeans and cotton, plus weeds growing in fallow fields. New for 2026 are precision applications and product savings of fungicide, desiccant, preharvest products and others. John Deere offers See & Spray in three configurations:

> **See & Spray Premium** converts a sprayer into a single-tank precision target sprayer. Premium is available as a factory install or Precision Upgrade for market year 2018, newer R Series and 400/600 Series, and select new John Deere and Hagie sprayers.

> **See & Spray Ultimate** is a two-tank system that can reduce nonresidual herbicide use by more than two-thirds. Two tanks combat herbicide resistance by using two independent tank mixes in one pass.

> **See & Spray Select** was first released to treat fallow fields. It can reduce herbicide applications by 77%. New for See & Spray Select in 2026, Deere is introducing a variable-rate capability, providing precision application and product savings to fungicide, desiccant, preharvest products and others.



## PTx Precision Planting: SymphonyVision

SymphonyVision is the follow-on technology to Precision Planting’s SymphonyNozzle, a pulse-width modulation system (PWM) giving independent rate and pressure control to each nozzle across the boom.

SymphonyVision uses cameras to adjust applications based on weed severity and comes in two versions:

> **SymphonyVision “Rate”** detects weed severity, adjusting the rate of each nozzle automatically while continuously spraying. Precision Planting recommends placing its “Rate” cameras every 10 feet on the boom.

> **SymphonyVision “Spot”** uses cameras to detect weed severity to adjust the rate of each nozzle automatically when weeds are present while turning off nozzles when they aren’t. Suggested camera spacing is 5 feet.



### PTX Trimble: WeedSeeker 2

WeedSeeker 2 is a day-and-night spot-spray solution. Using optical sensors (not cameras) and advanced processing, WeedSeeker 2 detects and eliminates weeds. Each nozzle is connected to one sensor. This is a green-on-brown-only system. PTX Trimble says WeedSeeker 2 can reduce applied chemicals by up 90%.



Cash IH SenseApply



New Holland IntelliSense

### Case IH | New Holland

Case IH is launching SenseApply technology for 2026. SenseApply is a live variable-rate application solution that consists of a single cab-mounted camera system with a range of application solutions. The selective spray solution offers green-on-brown spot-spraying and a Base + Boost function that boosts rates from individual nozzles as they pass over high weed pressure. SenseApply also has a live variable-rate feature for applications such as burndown, nitrogen, harvest aid, plant growth regulators and fungicides. New Holland launched a similar product called IntelliSense Sprayer Automation.



## DELIVER YOUR INVESTMENT QUICKLY AND SAFELY



**SEED PRO®**  
BULK BOX CARRIER



**SEED RUNNER®**  
BULK TANK TENDER

Deliver your high-value seed investment quickly and safely during the narrow planting window with a patented **Seed Runner®** or **Seed Pro®** seed tender!

The Seed Runner features tank capacities of 500, 400, 375 and 275 seed units, while the Seed Pro can carry four or two bulk 50-seed-unit boxes. The exclusively designed rubber conveyor belt features molded cleats for the longest life, and you can choose from 24', 21' or 18' conveyor lengths to easily fill your planter. The bottom line: You'll protect your high-value seed investment and keep your planter running longer with an Unverferth seed tender.



GET SAFE, EFFICIENT SEED DELIVERY.  
Visit [UMequip.com](http://UMequip.com) or see  
your nearest dealer today.

**INNOVATING  
THE FUTURE OF  
AGRICULTURE**

**SEED HANDLING**

UNVERFERTH MFG. CO., INC.  
P.O. BOX 357, KALIDA, OH 45853  
UNVERFERTH.COM • 419.532.3121



# Improve Communication In Your Family Business

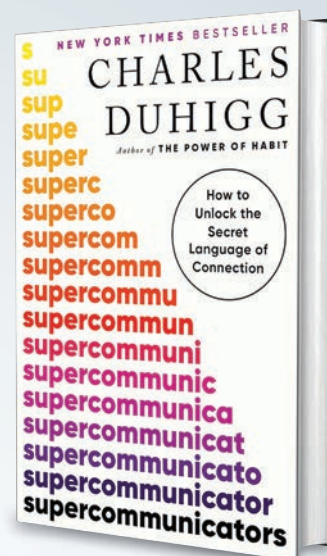
**O**n almost every family farm or ranch I know, a recurring frustration revolves around communication. Despite a rich history, people frequently miscommunicate or misunderstand one another. They assume that everyone else knows certain pieces of information or that we shouldn't have to waste time in meetings. But, to put it bluntly, I've never met a family business suffering from too much communication.

Charles Duhigg, in his 2024 book “Supercommunicators,” takes an in-depth look at why people are great at communicating. While reading, I thought of the conversational challenges in family businesses and how many family members can benefit from taking a fresh look at how they talk with, and listen to, others. Here are some tips to help conversations go better.

➤ **Recognize the three conversations.** When you are talking with someone, three different types of conversations can occur. The first kind of conversation is practical, using what Duhigg refers to as a “decision-making mindset.” It happens when we are making decisions or plans, or solving a specific problem. An example might be a conversation planning out the day or the week on the farm, or a meeting with the accountant to talk about tax issues or estate planning.

The second kind of conversation is about how people feel and uses an “emotional mindset.” If you've ever tried to solve a problem for someone when all that person wants is for you to understand how he or she feels, you understand the distinction. There isn't a decision to be made; it's more of a chance to express or hear how someone is experiencing life. Discussing someone's beliefs, memories or opinions tends to elicit emotional conversations.

The third conversation uses a “social mindset” and is focused on belonging and identity. Examples might include talking about your identity as a farmer to someone on a plane or gossiping about in-laws or other family members (which isn't necessarily healthy but is an example of a belonging-based conversation). Identifying who you know in common or discussing regional, political or sports-related similarities or differences are all examples of identity-based conversations.



Duhigg suggests good communication occurs when people are having the same type of conversation. Problems arise, however, when people are not having the same kind of discussion but think they are. To help you align, here are several best practices of supercommunicators.

➤ **Ask questions.** The best communicators ask questions and are curious and sincere about the answers people give. When someone asks you a good question, you sense they are interested in you, and the experience of talking to them is a positive experience. You almost lose track of time in giving your answer.

➤ **Notice emotions.** The best communicators notice how the other person is feeling. They might even name it: “You sound angry” or “Are you sad about that?” When people sense how you feel and show they understand that feeling, you feel deeply heard. If you happen to name the wrong emotion, don't worry. They will correct you without even thinking about it, and it will still register that you are listening deeply.

➤ **Confirm what you see and hear.** Summarizing what the other person says then asking if you've got it right demonstrates that you are listening. If both parties are doing this, it makes conversations go great. It facilitates “matching” between participants, which is a core scientific principle suggesting good communication is occurring.

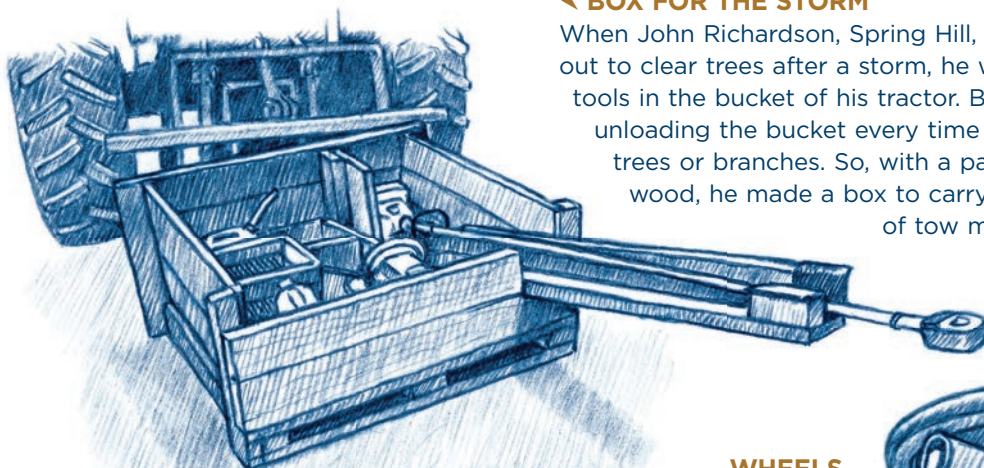
As you think about an upcoming discussion, what type of conversation do you want to have? Ask questions, notice emotions and summarize the other person's words and feelings. We can all become better communicators, and doing so will make our family businesses immeasurably better. ///



Email Lance Woodbury at [lance.woodbury@pinionglobal.com](mailto:lance.woodbury@pinionglobal.com)

# Handy Devices

*Easy-to-build ideas make your work easier.*

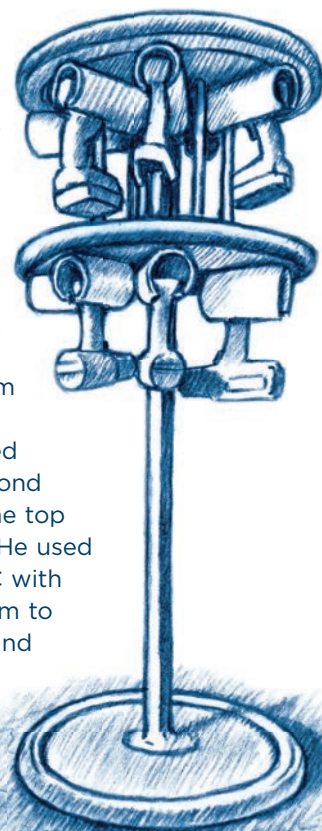


## ◀ BOX FOR THE STORM

When John Richardson, Spring Hill, Tennessee, headed out to clear trees after a storm, he would put all of his tools in the bucket of his tractor. But, he got tired of unloading the bucket every time he needed to push trees or branches. So, with a pallet and scrap wood, he made a box to carry his tools. A pair of tow motor hooks allows him to lift the box from the back of his tractor.

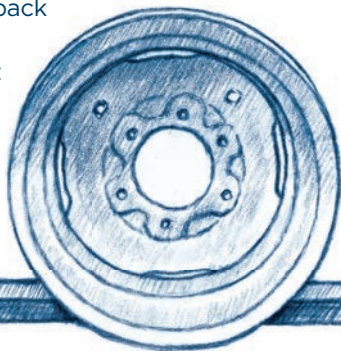
## WHEELS OF TOOLS ▶

Paul Schroeder, Fergus Falls, Minnesota, used three grain press wheels to build a power tool holder. A length of ready rod runs from the bottom wheel of the stand to the top. He welded a hub under the second wheel. This allows the top two wheels to spin. He used 3-inch diameter PVC with notches cut into them to hold the tools in a kind of holster. Each wheel holds eight tools.



## ROLLIN' ALONG ▼

Glenn Dill, Tremont, Illinois, found an efficient—and easy—way to paint rims. Depending on the width of the barrel (the space inside the rim), Dill lays out a length of board to match it—for example, a 2 x 4 or a 2 x 6 that matches that narrowest part of the barrel. As he paints the rim, he rolls it back and forth, the board guiding it in place as it moves.



**CASH FOR YOUR IDEAS:** Share with us your project ideas, and we'll pay you \$400 upon publication. To submit a Handy Device, please send a complete explanation of your idea and clear photographs or detailed drawings. We'd like to see a video, too, but that's optional. If you've published your idea on social media (X, Instagram, Facebook), send us the link. With each entry, include your name, address and telephone number. Send Handy Device entries to: [dan.miller@dtm.com](mailto:dan.miller@dtm.com). Sorry, but we cannot acknowledge submissions or return photographs, drawings or documentation.





> Story By **Dan Miller**, @DMillerPF  
Photos By **Mark Moore**

# Bring It All Together

**M**ark Glessner, Glessner Farms, at Swayzee, Indiana, has been raising up over five years a collection of Morton Buildings—expanding and consolidating space to bring his equipment and trucks from farther-flung storage areas.

The corn and soybean farmer recently completed his main shop, 100 x 170 feet and 28 feet tall to the rafters. Nearby are a pair of 81- x 300-foot enclosed cold storage buildings with gravel and recycled asphalt floors, and a new office space with a garage-style configuration, which will one day be connected to the shop by a service door. That office building is 42 x 60 feet.

Glessner runs a typical lineup of equipment for a Midwest corn and soybean farmer. He also owns semitrucks to move his grain. “I had equipment in more than one spot, so I consolidated it—I wanted to get it all into one spot,” he says. “But, believe it or not, I still rent another place about 6 miles away.”

He utilizes his newer buildings well, he says. “They [Morton] build a fine building. Not cheap. But, you don’t get a good building cheaply.” His own home is a Morton Building, built in 2012.

The Morton shop is a hybrid building with steel trusses and wooden columns, no center posts. The rafters are arched, creating 28 feet of clear space from the floor. Glessner wanted high overhead clearance to better fit his maintenance and repair needs. He added Morton’s acoustic package to muffle sound and vibration.

“It’s really nice, and I would have made it bigger, another 30 feet to make it 200 feet long,” Glessner says. “But, I would have been into the neighbor’s property by then.” As it sits, it is a gigantic, 2,500-square-foot-sized improvement over the still-standing 60- x 75-foot Quonset-style shop he put up in 1978.



Mark Glessner put up several buildings to bring most of his maintenance work to one location.





Mark Glessner did a lot of building all at once to bring his maintenance and storage facilities together in one place. Below is his 100- x 170-foot shop with an attached office (see the well-used pool table, top right). It replaced an old Quonset-style shop he put up in 1978. Glessner also raised a pair of enclosed 81- x 300-foot cold storage buildings. He has one regret: He says he should have made the shop 30 feet longer. Glessner and his wife, Jill, (right)



## >>> The Need To Expand

"We just ran out of room," Glessner says. "I have a little International combine out there that will tell that story, because that was a big combine for its time. Now, it's half the size of a big John Deere. It's kind of mind-boggling when you look at [it]. I mean, wow, that's what we used to farm with."

The shop has two overhead doors. On the east is one that's 35 x 18 feet wide. On the south wall is a door that's 30 x 18 feet wide. "I didn't want gigantic doors, because they are a waste of wall space. But, it's big enough to get 12-row heads off inside." Or, he can pull a semi into the shop through one door and drive out the other.

Winter heat comes by way of two liquid propane gas, radiant heaters. "The heat just falls over you," Glessner says. He figures winter heating consumes about 2,000 gallons of propane. "It's not terrible," he admits.

High Bay LEDs light the shop. "I wouldn't put anything else in. They run on a tenth of the juice as the old ones. They are very energy efficient," he says. Some of the LEDs spill 50,000 lumens of light onto the shop floor, and they have thousands of hours of lifespan. "The shop is well-lighted," he says.

Glessner brought 200-amp service to the shop (supplemental generators are available) with outlets run all around the wall, the wire enclosed in conduit. ➤





From up high, Glessner's cold storage buildings, maintenance shop and office. Note how he left space around his buildings to move supplies and equipment.

There are no runs of compressed air lines mounted to the walls. Glessner says they disrupt shop functions. "You'd be chasing air lines all over the

shop," he says. Instead, he moves compressors around the shop on a forklift.

More, he does not use as much compressed air as he once did. "Cordless tools, impacts and those kinds of things are such an improvement over what they used to be, it's really hard to believe. I've got a Milwaukee out there that can easily change semi tires, tractor duals. We have a big battery-charging rack with 30 batteries on it. Batteries last much longer than they used to. They will build arm strength, though," he laughs. "But, you don't have to worry about dragging a hose around."

The best thing about the shop? "The best thing I like is that it has two wash bays in it, one in front of each door" Glessner says. "It is nice. We can clean semis and combines inside. It's not such a cold job anymore."

What can you say about the office? Home-like features, such as a kitchen. But, also entertainment. A pool table (for him) and an electronic bowling machine (for his wife, Jill). He laughs at this. "We like to play pool, make some side money." You will put down a \$100 to play, he adds.







Look around. Rainwater is drained away from the shop through buried PVC tiles. The overhead door is 18 x 35 feet. The shop is heated by radiant heat. And, a homemade storage caddy.



The office will eventually connect to the shop through a service door. The framing is already there for it.

And, those 300-foot-long cold storage buildings? “We started at 200 feet. But, then I told the salesman, ‘I’m only going to do this once. So, let’s stretch them out to 300,’ and the price was going up, so we did two.”

Last piece of advice. And, it also will make the salesman happy, he says. “Always build a little bigger. Given the sheer size of equipment, take what you think would be good and double it.” //



## RIP COMPACTION CONDITION YOUR SEEDBED



**RIPPER-STRIPPER®**  
TILLAGE TOOL



**RIPPER-BEDDER**  
TILLAGE TOOL

The **Ripper-Stripper®** tillage tool is the most customizable strip-till machine available. Choose from a lead coupler that clears a path for the shank or a cover crop roller with an 11"-diameter drum that crimps and deflects residue away from the row. The deep-till shanks with shark-fin points and wear bars rip through compaction from 9" to 18" deep. Plus, you can choose from a wide variety of attachments to complete the tillage pass.

The **Ripper-Bedder** tillage tool is ideal for bedded crops, such as peanuts and cotton. The deep-till shanks with shark-fin points and wear bars rip through compaction from 9" to 18" deep. Choose from a disc bedder or economical lister attachment to create the ideal seedbed. Add an optional bed shaper for crisp, level seedbeds.



SEE HOW YOU CAN RIP COMPACTION  
AND CONDITION YOUR SEEDBED.

Visit [UMequip.com](http://UMequip.com) or see  
your nearest dealer today.

**INNOVATING  
THE FUTURE OF  
AGRICULTURE**

**SEEDBED TILLAGE**

UNVERFERTH MFG. CO., INC.  
P.O. BOX 357, KALIDA, OH 45853  
UNVERFERTH.COM • 419.532.3121



# Wobble Box Mystery

*I have a 488 New Holland haybine that we use for cutting hybrid sudan hay. It does a great job of cutting and crimping this cane-type of hay, no matter how tall and rank it sometimes gets. Plus, the reel will pick the hay up if it gets down. Because it only cuts 9 feet 3 inches and can lay the hay flat by lowering the swath gate, the drydown time is short in the Texas heat.*

*However, the machine has developed a problem of knocking out the bushing in the sickle head. I have replaced the lower bearing (see photo below), but the bushing still fails after about 50 acres of cutting. There is no play in the remainder of the wobble drive. Do you have any tips on how to fix this haybine bushing "failure opportunity"?*

**Steve:**  
I agree that the New

Holland haybine really handles the cane-type crops such as hybrid sudan very well.

We use two of these cutters in hybrid sudan on our own farm. The wobble box must have no areas of play, or it will knock out bushings and break the cutter drive cap screw.

The bottom bearing that fits in the pivot plate must have no play in the sickle drive, and there must be no wear on the bottom plate stub where the bearing runs.

If all of this is in order, then you probably have wear in the bushing where the cap screw fits. This is a very hard, heat-treated bushing, but it will eventually be worn on older machines and cause your problem. It is very tight in the arm drive, and it has a lip on it to secure it in the correct place. Also, aftermarket bushings that fit in the sickle head have been known to fail more quickly than the CNH bushings. During reassembly, always use grade No. 8 bolts with fine thread and lock nuts in the bushing. One last point that is very important is to tighten the three cap screws that secure the bottom plate before you install the lock collar on the bottom bearing.



Have a mechanical problem you can't resolve? Email Steve Thompson at [askthemechaniccolumn@gmail.com](mailto:askthemechaniccolumn@gmail.com)

Please include your contact information and phone number.

## Old-School Valves

*I have an old 1939 8N Ford tractor, and I am overhauling the engine. I am relatively new at this engine overhaul game and in need of help with the first thing that I found. The valve lifters have no adjustment for the valves, and the valves are flat on the end next to the lifters. How do I go about adjusting the valves? I see in the manual that the block must be ground to make a new seat for the valves, so I'm guessing I will need to set the new valves.*

**Steve:** Your tractor has the original valves in it that came from the factory in the early N models. The only way to set these valves is to grind off the end of the valve stem until you have the proper valve clearance between the lifter and the valve. Be sure and measure twice and grind once. The good news is that there are replacement valve lifters that can be adjusted. The new lifter design was an update for this engine. You will also need to replace valves for this conversion. The old "mushroom" valves are rarely seen these days because most engines have been overhauled and updated. The very latest models came with adjustable lifters and rotating valves. ///

## DANGER CHAIN SAW IN USE

With spring here, it may be the time to break out the chain saw. But, beware and aware. Misused, these can be dangerous little beasts. A cut from a chain saw requires more than 100 stitches on average.

Here are safety tips for chain saw use. Always keep your hands on both handles. Don't reach. Keep the saw in close. Always be aware of your footing. Have a clear escape route. Always engage the chain break or turn off the saw before moving to a new location. Never cut while standing on a ladder. Never cut alone. However, keep anyone with you at least 10 feet from where you are cutting (farther if you're cutting a tree down). Always buy the recommended safety equipment and wear every piece of it during every use (see photo above).



PHOTO COURTESY OF BOMBARDIER RECREATIONAL PRODUCTS INC.

# Growers Reach the Summit

## Texas Panhandle farm takes top honors in National Sorghum Producers Yield Contest.

**K**enny Rathjen is no stranger to yield contests. In fact, entering them is part of the annual routine for him and his father, Richard. Yet, while they have achieved recognition several times through the years, the overall top spot in a national contest had eluded the Rathjens—until now.

K&M Farms, operated by Kenny Rathjen and his farming partner, Monte Simerly, in Dalhart, Texas, earned the Bin Buster Award for producing the year's highest-yielding entry at 240.01 bushels per acre (bpa) in the 2024 National Sorghum Producers Yield Contest.

Organized by National Sorghum Producers (NSP) since 1985, the yield contest initially began as a means of increasing membership and educating producers on new management techniques, explains Tim Lust, the organization's CEO.

"I want to congratulate all of the 2024 National Sorghum Yield Contest winners on their incredible achievements," Lust said in a statement to DTN/*Progressive Farmer*. "It's exciting to see growers like Kenny Rathjen, this year's Bin Buster with 240.01 bushels per acre, set the bar so high. These results are a testament to the hard work and innovative practices that strengthen the sorghum industry each year. I'm proud of what these farmers have accomplished."

NSP also inducted a new member into its Hall of Fame when the organization gathered at the Commodity Classic in early March in Denver. Joel Spring, Appanoose County, Iowa, placed first in the food grade sorghum category for the third time, earning himself the distinction.

### ➤ PANHANDLE PROWESS

The winning entry was grown under pivot irrigation in a 50-acre field. Rathjen planted Pioneer 85P75, a 114-day red sorghum hybrid that's characterized as offering excellent top-yield potential in both high-yield and tougher dryland environments. Rathjen notes that in 2021, another farming partner, Tom Vogel, earned

first place in the Irrigated Western category with the hybrid, finishing third overall.

"It's one that we've used in the past," he says. "It really shines with big water, and on this particular circle, that's what we have. Big water."

The sorghum followed wheatlage in a double-crop rotation. The field received 12 tons of manure before the wheat crop was planted. After the wheatlage was harvested, the wheat stubble was double-disked.

"We planted right into that on May 25 at a population of 75,000 seeds per acre on 30-inch rows. It was a very nice seedbed," Rathjen points out. "We treat our sorghum like our corn. In addition to the carryover we had from the manure, we dribbled 28-0-0-5 out the back and watered it in. We have a liquid coulter rig, and we put an additional 45 gallons [per acre] through it. We fertigated with 10 gallons at three different times."

Spider mites, grasshoppers and head worms (corn earworm, fall armyworm and sorghum webworm) are the primary pests for sorghum in the region. Rathjen applied Dimilin 2L on June 12 and Steward EC on Aug. 7 to control any infestations. In addition, he applied fungicide twice. A half-rate of Trivapro went on July 26, followed by Absolute Maxx, which was applied with Steward EC on Aug. 7.

"The fungicide really helped keep the plants healthy. I mean, the stay-green on it was just incredible," he says. "It really added to test weight."

### ➤ YIELD BOOSTER DECISION

However, it was a herbicide application that Rathjen made on July 5 that he thinks contributed greatly to his yield, even though it had the neighbors wondering if he'd made a mistake.

"The old-timers who grew wheat would burn it (with herbicide) because it yields better. We've done something similar with soybeans; you'll get a shorter, bushier plant with more pods," he explains. "We were ➤



➤ *Kenny Rathjen (left) and Monte Simerly earned top honors in the 2024 National Sorghum Producers Yield Contest with a yield of 240 bushels per acre.*

PHOTO COURTESY OF KENNY RATHJEN

LANCE MURPHEY





getting a few weeds in this milo, so after talking to my agronomist, we decided to smoke it, even though the crop was looking beautiful.”

The combination of herbicides—including Huskie, Medal EC, WeedMaster, atrazine and chelated iron, along with a little ammonium sulfate and an adjuvant—had the desired effect.

“It looked ugly for a few days, but then we poured the water to it, and within a week, it started to green up,” Rathjen explains, adding that the crop received 16 inches of irrigation during the season, supplemented by 6 inches

of rainfall. “It didn’t get quite as tall, but we just had all kind of tillers full of grain. It was unreal. I know that’s what gave us our yield.”

While he plans to enjoy his recent accolade, Rathjen already has an eye toward 2025.

“We’ve got an 80-acre circle that I want to split-plant in 15-inch rows,” he explains. “I want to try and beat the world record [245.86 bushels set in 2020]. That’s my goal. I really like growing milo. If you’ve got water and a little help from Mother Nature, you can grow big yields.” ///

## 2024 NATIONAL SORGHUM PRODUCERS YIELD CONTEST WINNERS

### IRRIGATED WESTERN CATEGORY

**First Place:** K&M Farms

Dallam County, Texas

Variety: Pioneer 85P75

Yield: 240.01 bpa

**Second Place:** Darrol Miller Farm Inc.

Comanche County, Kansas

Variety: Dekalb DKS44-07

Yield: 226.18 bpa

**Third Place:** Ormiston Farms

Seward County, Kansas

Variety: Pioneer 85P75

Yield: 185.17 bpa

### DRYLAND-TILLAGE WESTERN CATEGORY

**First Place:** Stewart Family Farms LLC

Washington County, Kansas

Variety: Pioneer 84G62

Yield: 183.05 bpa

**Second Place:** Matthew J. Bloss

Pawnee County, Nebraska

Variety: Pioneer 84P72

Yield: 131.88 bpa

**Third Place:** Roger and Marilyn

Fischer

Texas County, Oklahoma

Variety: Pioneer 86P20

Yield: 108.78 bpa

### DRYLAND-TILLAGE EASTERN CATEGORY

**First Place:** Jeffrey Barlieb

Warren County, New Jersey

Variety: Pioneer 85P58

Yield: 225.18 bpa

**Second Place:** Galt Porter

Mercer County, Missouri

Variety: Pioneer 84G62

Yield: 223.68 bpa

**Third Place:** Williams Bros Farms LLC

Clark County, Illinois

Variety: Dekalb DKS38-16

Yield: 199.48 bpa

### DRYLAND NO-TILL WESTERN CATEGORY

**First Place:** Dylan Knoll

Charles Mix County, South Dakota

Variety: Pioneer 88P71

Yield: 192.05 bpa

**Second Place:** David Knoll

Charles Mix County, South Dakota

Variety: Pioneer 89Y79

Yield: 188.65 bpa

**Third Place:** Alma Ag Supply LLC

Harlan County, Nebraska

Variety: Pioneer 85Y88

Yield: 183.10 bpa

### DRYLAND NO-TILL EASTERN CATEGORY

**First Place:** Billy H Bowers

Farm Trust

Davidson County, North Carolina

Variety: Pioneer 84G62

Yield: 209.73 bpa

**Second Place:** HRB Farming

Partnership, Ben Beetsma

Livingston County, Missouri

Variety: Dekalb DKS54-07

Yield: 195.49 bpa

**Third Place:** Santino “Sam” Santini Jr.

Warren County, New Jersey

Variety: Pioneer 85P58

Yield: 181.49 bpa

### IRRIGATED EASTERN CATEGORY

**First Place:** Chris Santini

Warren County, New Jersey

Variety: Pioneer 85P58

Yield: 190.35 bpa

**Second Place:** Robert Santini

Hunterdon County, New Jersey

Variety: Pioneer 85P58

Yield: 176.39 bpa

**Third Place:** Howie D

Fulton County, Pennsylvania

Variety: Pioneer 85P75

Yield: 156.73 bpa

### FOOD GRADE CATEGORY

**First Place:** JnL Farms

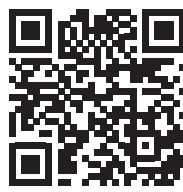
Appanoose County, Iowa

Variety: Richardson G37

Yield: 158.94 bpa

Scan QR code for a complete list of national, state and county yield contest winners. Or, visit [sorghumgrowers.com/yieldcontest](https://sorghumgrowers.com/yieldcontest)

See Full Results



# Evaluate AI Synch Programs

Email Dr. Ken McMillan  
at [vet@dtm.com](mailto:vet@dtm.com)



**Q** We are getting ready for breeding season and wanted to AI (artificially inseminate) some of our cows. There are so many

programs out there. Is there anything new and better you would recommend? Do any of the programs lead to better pregnancy rates?

**A** **DR. McMILLAN:** I asked a friend, Len Holliman, who has worked for Select Sires for at least 30 years, this question, and this is a summary of his comments with my additions inserted.

There are lots of studies on pregnancy rates with various protocols, but in my experience, 60% is what I see. Cows will normally be mid- to upper 60s, upper 70s being the extreme.

Use heat-detection aids; I prefer Estrotest. For heifers, I like the split-time option and tend to get results into the mid-60s. With this protocol, an Eazi-Breed CIDR (controlled internal drug release) is inserted on Day 0 and removed on Day 14. On Day 30, the heifers receive prostaglandin (Lutalyse, Estrumate, etc.) and are bred on detected heat from Day 30 to 33. All nonresponders are given GnRH (gonadotropin-releasing hormone) such as Cystorelin or Factrel at 72 plus or minus two hours and bred.

I think the 7 & 7 Synch protocol helps shorten postpartum for a cow and may give a slight bump in response to cows that are not in optimal condition. It also seems to be better for eared cattle. With the 7 & 7 protocol, cows have a CIDR inserted and a prostaglandin injection on Day 0. On Day 7, they are given GnRH. On Day 14, the CIDR is removed, and they are given another prostaglandin injection. Then all cattle are bred at 54 plus or minus two hours and given another GnRH at the time of breeding.

Each operation needs to work with its veterinarian, semen

Please contact your veterinarian with questions pertaining to the health of your herd. Every operation is unique, and the information in this column does not pertain to all situations. This is not intended as medical advice but is purely for informational purposes. These are only my thoughts and general guidelines. Please get with your veterinarian and together develop the best program for your herd.



## BEEF COW PROTOCOLS

2025

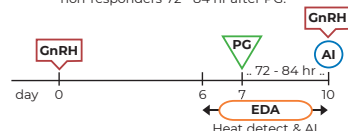
For additional synchronization protocols visit [BeefRepro.org](http://BeefRepro.org)

### HEAT DETECTION & TAI

For best results perform AI  $12 \pm 2$  hr after detection of estrus. Use of estrus detection aids (EDA) is highly recommended.

#### Select Synch & TAI

Heat detect & AI days 6 to 10 and TAI with GnRH all non-responders 72 - 84 hr after PG.



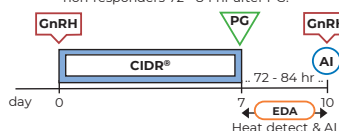
#### PG 6-day CIDR® & TAI

Heat detect & AI days 0 to 3. Insert CIDR with GnRH to non-responders, heat detect & AI days 9 to 12. TAI with GnRH non-responders 72 - 84 hr after PG and CIDR removal. Protocol may be used in heifers.



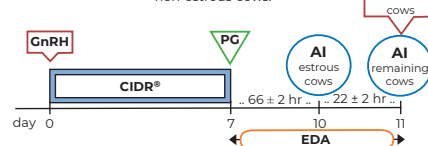
#### Select Synch+CIDR® & TAI

Heat detect & AI days 7 to 10 and TAI with GnRH all non-responders 72 - 84 hr after PG.



#### 7-day CO-Synch+CIDR® & Split-TAI

Perform first TAI  $66 \pm 2$  hr after PG in estrous cows. Second TAI with GnRH only in non-estrous cows.

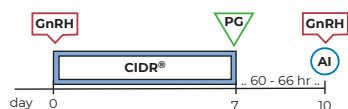


### FIXED-TIME AI

Time for Fixed-time AI (TAI) should be considered as the approximate average time of insemination based on the number of females to inseminate, labor, and facilities.

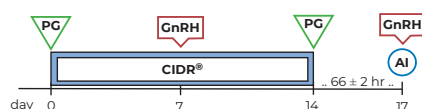
#### 7-day CO-Synch+CIDR®

Perform TAI with GnRH at 60 to 66 hr after PG.



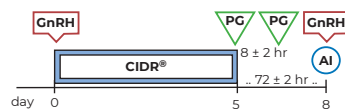
#### 7&7 Synch

Perform TAI with GnRH at  $66 \pm 2$  hr after CIDR removal.



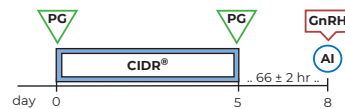
#### 5-day CO-Synch+CIDR®

Perform TAI with GnRH at  $72 \pm 2$  hr after CIDR removal. Two injections of PG  $8 \pm 2$  hr apart are required for this protocol.



#### Bos indicus PG 5-day+CIDR®

Perform TAI with GnRH at  $66 \pm 2$  hr after CIDR removal.



**EDA** Aervoe™, AIPaint™, Detect-her™, Estrotest™, Kamar™, Mark-her™, Paintstik™, Quick Shot™, Tell Tail™, Twist-Stik™

**GnRH** Cystorelin®, Factrel®, Fertagyl®, OvaCyst®, GONABreed®

**PG** estroPLAN®, Estrumate®, Lutalyse®, Lutalyse® HighCon®, ProstaMate®, SYNCHSURE™

These protocol sheets were assembled by the **Beef Reproduction Task Force**. Programs are intended to promote sustainable food production systems by the beef industry through sound reproductive management practices for replacement heifers and postpartum cows. The Beef Reproduction Task Force recommends working with a licensed veterinarian for proper use and application of all reproductive hormones. **Approved 11-19-2024**. [www.beefrepro.org](http://www.beefrepro.org)



SCAN

supplier and AI technician, if needed, to decide what program is best. Cattle must be in good body condition and on a positive plane of nutrition. Protocols must be followed precisely, and a good AI technique is essential. Also, realize these numbers are based on the skills of someone who breeds thousands of cattle every year. ///



# The **LOW-DOWN** On Drones

It's not uncommon to hear the signature buzz of a drone in the countryside. Drone spraying has steadily increased in popularity for both farmers and commercial applicators, but are they a good fit for everyone?

Brady Holst, Augusta, Illinois, started spraying with drones in 2020 and never looked back. Holst farms corn, soybeans and wheat, spraying his acres with both a self-propelled sprayer and two DJI Agras T30 drones. The drones predominately spray fungicide on smaller or awkwardly shaped fields. Holst says herbicide and insecticide application on larger, square fields still works best with a ground sprayer.

If you have been considering purchasing a drone or hiring a custom drone applicator, Holst offers some sound advice before making a decision.

**> Know spray coverage and accuracy.** The question Holst gets most often is about spray coverage. He says 2 gallons of fungicide in a drone provides the same coverage as 10 gallons with a ground sprayer. The downforce from blades acts to both lift the drone and push pesticides to the crops, providing excellent coverage with a small amount of product. When hiring a custom drone applicator, Holst recommends asking about spray width accuracy. Although his



*Brady Holst, Augusta, Illinois, farmer, has been spraying his fungicide acres with drones since 2020 and says it's been a game changer for his farm.*

drone advertises a 30-foot spray width, the coverage is closer to a 20-foot span.

**> Consider operator tech-savviness.** Holst recommends researching different drone companies and controller

setups to match the device to the operator's tech expertise. His biggest learning curves in the beginning were learning how to run the remote controller and how to set up field layouts. Fortunately, field maps can be uploaded to the drone where spray spacing, direction and outlines are saved and recorded via controller. From there, Holst says he's developed a system of knowing when and where to launch, fill and refill the drones.

**> Think about spray timing and conditions.** Holst purchased his first drone as a backup for when fields were too wet for ground spraying, or geography wasn't ideal for a spray plane. He says being able to spray fungicide as soon as he needs to, regardless of weather or geography, has resulted in considerable yield increases. His neighbors have taken notice, too, hiring Holst to spray smaller, last-minute patches when they get in a pinch.

**> Understand drones aren't a launch-it-and-leave-it technology (yet).** Holst's DJI Agras T30 can spray 20



acres an hour, or 40 acres an hour with two drones. Each spray tank holds 8 gallons and sprays 2 gallons per hour. The drone can do 4 acres, or roughly five minutes, at a time before refills and battery swaps are needed.

➤ **Recognize technology advances and depreciation.**

Holst purchased his DJI Agras T30 plus batteries two year ago for around \$30,000. Today, the DJI Agras T50 is nearly the same price but twice as fast, while the T30 sells for around \$15,000. Although his T30 still works well, Holst says it's frustrating to know he could pay the same price today for better technology.

➤ **Look into licensing and certification.** To fly a spray drone, the operator must have a drone pilot's license. Testing is administered by the Federal Aviation Administration (FAA), and Holst says getting licensed was more of a process than he anticipated. The steps to become a certified drone pilot are available on the FAA website. In Illinois where Holst lives, state law also requires all pesticide applicators to obtain a commercial pesticide applicator license.

➤ **Be mindful of security concerns.** All drones are banned on military bases since they are always recording photo and video. For farmers looking to spray fields near cities or sensitive areas, FAA airspace

restrictions could be an issue. Holst hasn't had any trouble with security concerns where he's flying but says it's always a good practice to communicate with neighbors when flying a drone.

➤ **And finally, calculate ROI.** Compared to pricey ground sprayers, Holst thought \$30,000 was a worthwhile investment. When first looking to purchase a drone, he calculated that the drone would pay for itself in five years if it sprayed half of his corn fungicide acres. Instead, the drone paid for itself the first year since fields were too wet for ground application, and spray planes couldn't reach corners with trees and small fields. For that reason, Holst says, spray drones will always have a place on his farm. ///

## FOR MORE INFORMATION

Federal Aviation Administration  
[www.faa.gov/uas](http://www.faa.gov/uas)

Listen to an Illinois Extension podcast about drones and other recent ag technology  
<https://tinyurl.com/3cvrfwu8>



## BUILD THE PERFECT SEEDBED



PERFECTA®  
MODEL 14

You'll save time and money by tilling, leveling and conditioning in a single pass with the Perfecta® field cultivator. This versatile tool is available in working widths from 3' 6" to 39' 6" and is ideal for row crops, orchards, vineyards and arena grooming. The lead S-tines cultivate from 2" to 6" deep, while the tool-free adjustable leveling bar knocks down ridges and breaks clods. Trailing soil conditioning options include a Rolling Harrow® single basket, double basket or drum roller to make a ready-to-plant seedbed.



SEEDBED TILLAGE



BUILD THE PERFECT  
ONE-PASS SEEDBED.

➤ Visit [UMequip.com](http://UMequip.com) or see  
your nearest dealer today.

INNOVATING  
THE FUTURE OF  
AGRICULTURE

UNVERFERTH MFG. CO., INC.  
P.O. BOX 357, KALIDA, OH 45853 • [UNVERFERTH.COM](http://UNVERFERTH.COM) • 419.532.3121





# VIRTUAL FENCING:

## A Rancher's New Best Friend

*Technology eliminates most permanent fences while providing grazing management flexibility.*

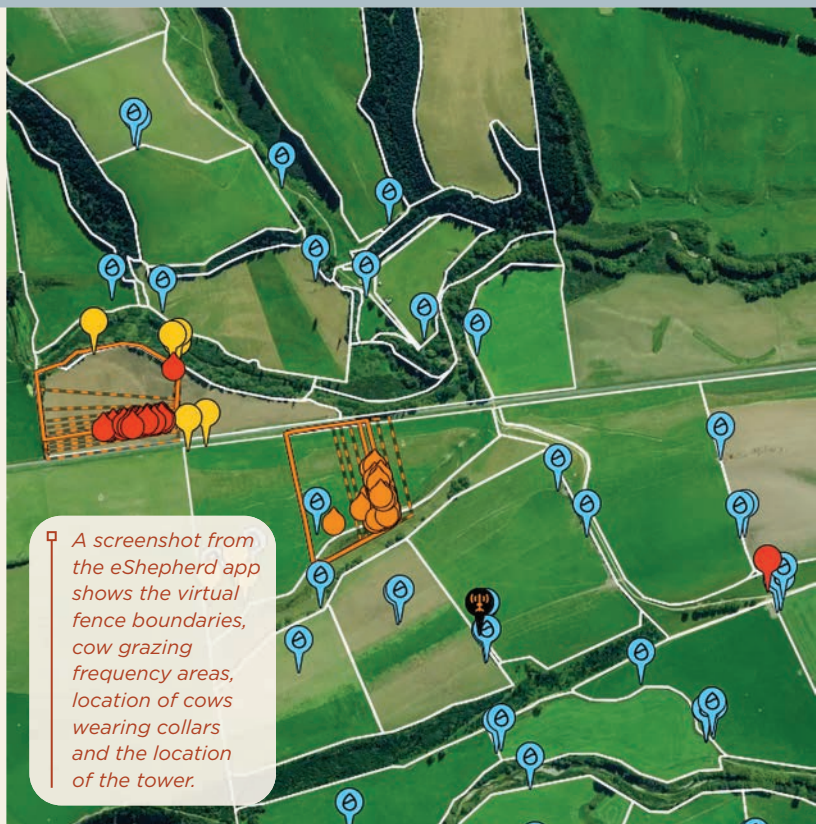


Gallagher eShepherd

Each company with virtual fencing has different collars, apps and communication connections such as towers.

Imagine being able to train a cow to stay within an invisible fence just like dogs have been trained to do for many years. Virtual fencing (VF) has now made it to the cattle industry and is possible by using a collar transmitter similar to what's used on man's best friend. This technology is now a rancher's best friend for use to rotationally graze, have cows out on recovering land or just graze grass more efficiently without building a physical fence.

Several options are available from companies to help transform grazing practices without limiting cows to a certain area. A physical fence is recommended for the very outside perimeter, but designing a grazing plan within that area can change based on needs. Each of the companies that



A screenshot from the eShepherd app shows the virtual fence boundaries, cow grazing frequency areas, location of cows wearing collars and the location of the tower.

provide a virtual-fencing option stress the importance of flexibility, efficiency and sustainability, while enhancing grazing management. These systems use either GPS or cellular service to show the producer where the cattle are in the paddock.

Tucker Brown, R.A. Brown Ranch, in Throckmorton, Texas, started using VF out of necessity after a wildfire destroyed fencing on their ranch in 2023. "This virtual fence allows us to be more efficient with the land that we have," Brown says. They will continue to utilize it across their ranch to better manage rangeland.

All the VF options available allow a cattle producer to define the boundaries of the virtual paddock/pasture through software on a computer or smart device provided by the company. The use of global positioning systems or cellular service communicates with the collars worn by the cattle. After a training period, cattle learn the audio sound telling them they are nearing the virtual fence boundary. If the boundary is crossed, the animal will receive a pulse similar to an electric fence.

Four primary companies have been identified as providing the VF system to cattle producers across the U.S. and, in several cases, around the world. All four have similar features, software and required equipment. Each company will meet with producers to advise what will work best on their operation.

Following is a Q&A with the companies. Responses were supplied by each and were edited for clarity.



Gallagher eShepherd



## Q What special features does your system have?

**Gallagher eShepherd:** eShepherd has been available in the U.S. and Canada for 12 months. It has been designed for beef cattle but works just as well in dairy situations. eShepherd is solar-powered with an exceptional battery life. The width of the virtual line on the ground has just been reduced to 6 feet, so virtual paddocks can be small and intricate. eShepherd neckbands can connect directly to cellular providers like Verizon or AT&T, or base stations can be used to extend signal where pastures are more remote.

eShepherd neckbands are built tough to withstand submersion in water, impact from concrete troughs, steel hay feeders and grumpy bulls. The web and mobile app software is not complicated. The eShepherd VF solution is incredibly versatile and able to contain four or 400 animals on flat or mountainous terrain, in extensive or very intensive grazing situations.

eShepherd is easy to use, giving producers full control over grazing areas from anywhere. It is efficient in reducing fencing costs, saving labor and enabling rotational, strip or bale grazing. Producers can easily move

livestock remotely, improve forage utilization and reduce overgrazing. Livestock can be traced and monitored in real time, providing data on each animal's location and movement, and detecting potential health or grazing issues. Customers are matched up with a customer success professional for help and answering questions.

**Halter:** Halter's focus is effortless grazing, both for the cow and the rancher. Halter is centered on the welfare of the animal to make sure the solar-powered collar is comfortable, and the cow gets the most from her grazing experience. The system's app is easy for ranchers to use so they can set up virtual fences from anywhere and at any time.

Cows are guided using two primary cues, sound and vibration, where sounds act as warnings for a virtual boundary. Halter has created "cowgorithms" where the system customizes the strength and frequency of the secondary cue—a low-energy pulse—to each ➤



### NEW! MINERAL FEEDERS

**AmeriAg**  
AS TOUGH AS YOUR LIVESTOCK  
Saves Mineral, Saves Money



HAND FREE  
FLY CONTROL



INSECTICIDE  
STRIPS

- Bull & Spill Proof
- Weather Proof
- Ex Large Capacity
- Portable
- Calf Friendly
- Economical



**NEW QUAD FEEDER**

See in Action at [ameriag.com](http://ameriag.com)

**650 LB CAPACITY**

U.S. Patent # 9,380,761 # 9,918,451 Canadian Patent # 2752991 and other U.S. & International Patents Pending



**WWW.AMERIAG.COM**  
1-877-551-4916



Farmer-designed Waterers




- Low/no traffic - OK
- No heat - OK
- No concrete - OK
- Open drinking area

- Bull-tough
- Buried system
- Easy plumbing access
- Bison, cattle, horses, sheep

**Made in USA**  
since 1997

### SEE COBETT AT

**iHeart Outdoor Living Show Cedar Rapids, IA • Apr. 11 - 13**

**Four State Farm Show Pittsburg, KS • May 9 - 11**

**Iowa State Fair Des Moines, IA • Aug. 7 - 17**

**Farm Progress Show Decatur, IL • Aug. 26 - 28**

**[www.cobett.com](http://www.cobett.com) • 888-699-4722**





individual animal's tolerance and determination to push boundaries. Most cows only need the lowest energy pulse to be effectively contained. There are multiple layers of product safeguards that protect animal welfare and prevent animals from experiencing excessive pulses.

Animal performance is important, as well, especially to accomplish growth rate goals. One aspect is using Halter for creep grazing, where uncollared calves graze ahead of cows to get the best grass first, which can help improve growth and weaning rates.

Halter is 100% focused on VF and herding, which means extra customer service is available. The company works hard to understand the needs of the ranch and the geographic characteristics that make it unique. Once the system is installed and running to suit the ranch's needs, customer service continues.

**Nofence:** Nofence's technology relies on GPS collars that communicate with the Nofence app through cellular networks, without needing to install a base station. Designed for herds of up to 200 animals (with a minimum order requirement of five collars), Nofence offers a mobile VF solution and is the only company that sells collars for cattle, sheep and goats. Nofence primarily sells its product for beef cattle, but it can be used for nonmilking dairy cows.

Nofence has a containment rate reaching 99.3%. The training process takes five to 10 days depending on variables like the breed and age, and requires each animal to interact 20 times with the virtual boundary. When an animal approaches the virtual boundary, it receives an escalating acoustic warning. If the animal ignores the sound, a brief electrical pulse is delivered as a last resort. The electric pulse—half the intensity of a traditional electric fence—is effective in guiding the animal away from the boundary but does not negatively impact animal welfare.

The collars transmit data about animal movements, health and behavior to the Nofence app. If an animal does not move for four hours, the farmer will receive a push notification through the app, signaling potential health issues or that the animal may be stuck. If an animal crosses the virtual boundary, the app sends a

push notification, and the farmer can track its location. The system's continuous monitoring provides real-time feedback, allowing farmers to promptly address potential issues, ensuring better animal welfare.

Each collar is equipped with a rechargeable battery, which can be charged either through a solar panel or a power supply.

**Vence:** Vence is revolutionizing livestock and land management with an industry-leading VF system. The system is designed to support the goals of each rancher through individualized support. Each rancher is assigned a dedicated member of the Rancher Success Team, composed of range-management experts, who guide them through onboarding to monitoring virtual fences and consulting. This team conducts regular reviews to deliver tailored recommendations for each ranch's grazing-management plans, ensuring each rancher's specific needs are met.

## Q What equipment is needed for use?

**Gallagher eShepherd:** eShepherd neckbands are GPS-enabled via a cellular connection. For producers managing livestock in areas of limited cell service or on public lands with limited cell connection, base stations are also available and connect with the neckbands, communicating data to the producer's app or desktop application.

There are essentially two pieces of eShepherd equipment. The neckband or collar is the wearable device that hangs beneath the animal's neck, suspended by chains with a flexible rubber top strap and designed to break should an intense scratch result in being tangled in a tree branch.

There is also a base station (sometimes called a tower) used to extend communications out over a more remote rangeland site. The base stations have solar panels and remain remotely powered with support from a 12-volt battery.

A squeeze chute, cell phone, computer, some cellular coverage and a lot less portable fencing is about all the equipment you'll need.

**Halter:** The equipment used for a Halter system is a central communications tower placed on the ranch, the collars worn by the cows that connect remotely to the tower and the app used by the customer to control the system. The number of towers needed to support the system depends on multiple factors including size of the grazing areas, typography, etc.

**Nofence:** A smartphone is needed to download the Nofence app, which will communicate with the Nofence collars purchased by the producer.

**Vence:** Vence utilizes a series of base stations, CattleRider collars and the HerdManager software to create virtual fences, control animal movement and manage grazing. The solar-powered base stations are strategically placed around the ranch and contain batteries that allow them to operate independently. Each animal in the herd is fitted with a CattleRider collar that contains a GPS transceiver that tracks its position and a radio frequency (RF) transceiver that communicates with the base stations. The stainless-steel components and locking carabiners of the collar ensure durability and quick installation.

The collar uses a series of audible beeps and pulses to create cues for behavioral changes in the animal. Ranchers access the HerdManager system from a tablet or computer to create and recreate the boundaries of virtual fences, and track the individual locations of each animal.

## **Q** Are software updates included with the system?

**Gallagher eShepherd:** Yes, software updates are included to ensure optimal system performance and security. Updates are typically managed remotely and do not require additional hardware changes.

**Halter:** Yes, the system is updatable in the field. As new innovations and improvements are made, they can then be sent to all collars in the field (which update usually within 24 hours). Software upgrades roll out regularly, from pasture-management refinements to animal-management upgrades.

**Nofence:** All our software improvements are available to our existing customers.

**Vence:** Yes, software updates are included with the system. Our Rancher Success Team will reach out to ranchers in advance to inform them of the scheduled update and provide insight into what changes they might expect.

## **Q** What is the battery life of the cow remotes?

**Gallagher eShepherd:** One major advantage of eShepherd is battery life. The type of battery and the technology we use to conserve power ensure that each unit lasts up to seven years. A neckband could fit on a heifer and could stay on her for many years with no need to replace batteries.

Beyond longevity, the devices are built to withstand tough ranching conditions—even if they get knocked into water troughs or dropped in mud, they keep working. Winter performance is also exceeding expectations, with customers in South Dakota and Canada using VF with snow on the ground.

**Halter:** Halter batteries are solar-powered. Collars have a five-year warranty, but they are expected to last much longer.

**Nofence:** Nofence has improved robustness of battery lifetime as part of its investments in further increasing its product quality. Nofence is confident that the battery of its cattle collars will last from six to 12 months depending on the location and usage patterns, while it can vary from three to nine months for small ruminants.

**Vence:** Vence's CattleRider collars utilize high-density, MIL-SPEC (military specifications) batteries that are designed to withstand drastic temperature changes and rugged conditions. The average battery life is three months to a year, depending on the use case. In high-intensity grazing programs, the battery life may be less than in standard grazing conditions. When upgrades are needed, the Rancher Success Team will work with each rancher to return nonfunctioning collars and quickly ship new collars back.

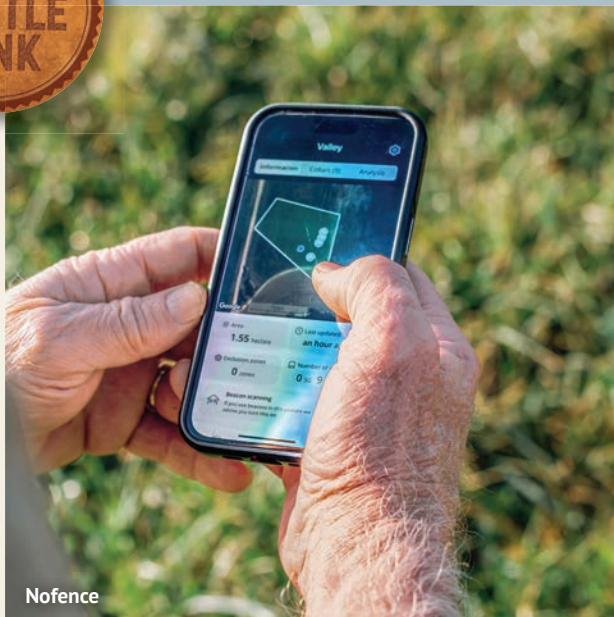
## **Q** How big of an area can be covered by your system?

**Gallagher eShepherd:** The system is highly scalable, capable of covering small paddocks to thousands of acres. Because the eShepherd system is GPS-enabled, ranchers can receive data, track and move ➤



Nofence





their herd to different paddocks, as needed. Ranchers who have limited cellular connection can use eShepherd base stations, which cover up to a 4-mile radius. Multiple base stations can be used to extend coverage for larger operations.

**Halter:** Coverage is primarily dependent on the ranch's terrain. For example, in a flat area such as Kansas, a single tower can cover hundreds of square miles. In a mountainous area like western Colorado, the range would be lower. Advanced software modeling and machine-learning techniques is used to optimize tower placement and ensure tower costs are kept as low as possible.

**Nofence:** The Nofence system relies on cellular connectivity which the sales team tests with the customers. Usually, if farmers can send a WhatsApp message where the animals are located, the connectivity should work. The virtual fence will work anyhow, but if connectivity lags, there can be a delay in receiving the information through the app.

**Vence:** The Vence system utilizes LoRaWAN (Long Range Wide Area Network) technology and is built to cover vast rangelands. Solar-powered base stations are strategically



placed around the ranch to leverage available cell service and create a network that allows the CattleRider collars to communicate freely over remote areas. On average, the base stations will cover an area of 7,000 to 10,000 acres, depending on the terrain. Vence's Rancher Success Team will work with ranchers to determine how the system will best fit their goals and locations.

## Q What is the cost?

**Gallagher eShepherd:** The company offers price breaks based on the number of cattle. For example, a rancher who wants 350 neckbands will pay \$250 per neckband, remembering that it's a long-lived product with a three-year warranty.

**Halter:** Each ranch is unique, and Halter will assess each ranch's needs, opportunities and challenges to help ranchers understand the value of implementing the system. Halter's pricing includes a one-time infrastructure investment starting at \$4,500, with an annual subscription of less than \$7 per head per month. This includes solar-powered VF collars and 24/7 support without ongoing battery costs and time-consuming replacements.

**Nofence:** Pricing for the Nofence subscriptions is based on the number of collars purchased. Actual complete cattle collars are \$289 each. These come with a five-year warranty covering any faults that impact the normal use. For the first 12 months, the subscription is \$56 per collar with 49 collars or less and \$42 per collar for 50 collars or more. Each month after the first year is \$6.50 per collar in use per month for 49 collars or less and \$4.50 per collar in use per month for 50 collars or more. The subscription price is in addition to the collar cost. Other equipment is available from the company.

**Vence:** Each base station costs around \$10,000. Each collar is sold on a subscription basis of \$40 per year, which covers the collar, software and technical support. The battery for each collar is \$10. Anyone interested in the Vence VF system should visit the website and fill out a contact form for more information on pricing. The Vence team will reach out to have a personal conversation about each ranch's unique needs and cost. Vence can also help connect ranchers with potential cost-share and grant opportunities to support their goals. ///

### FOR MORE INFORMATION

Gallagher eShepherd: [www.eShepherd.com](http://www.eShepherd.com)

Halter: [www.halterhq.com/en-us](http://www.halterhq.com/en-us)

Nofence: [www.nofence.co/us](http://www.nofence.co/us)

Vence: [vence.io](http://vence.io)

# PF DIGITAL EDITION

## DIRECTIONS

### Here's a New Way To Read *Progressive Farmer*

Your *Progressive Farmer* subscription now includes a digital e-edition. In addition to the magazine you receive by mail, you can also read each month's issue on your computer or mobile device.

Enjoy a seamless reading experience built for your browser.

- **Offline Reading:** Download issues to read them whenever and wherever you want, even without an internet connection
- **Bookmark:** Bookmark articles to read later
- **Text View:** Toggle to responsive view for an easy reading experience

### GET STARTED HERE

 [www.dtn.com/PFMagazine](http://www.dtn.com/PFMagazine)

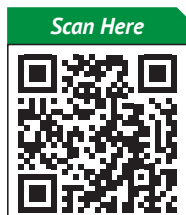
### On your computer

- Go to [www.dtn.com/PFMagazine](http://www.dtn.com/PFMagazine)
- Enter the e-mail address associated with your account, or enter the subscriber number found on your mailing label.

your account number	#BXNRCBK***5-DIGIT	50315	your expiration date
	#MAG001352042/2*49	SEP10	
	YOUR NAME HERE	102	
	1901 BELL AVENUE	DV	
	DES MOINES	IA 50315-1099	

### On your mobile phone

- Download the *Progressive Farmer* magazine app from the Apple iOS App Store or Google Play Store.
- Enter the e-mail address associated with your account, or enter the subscriber number found on your mailing label.





# Cotton of the Carolinas

*A stubborn clothing maker partners with North Carolina farmers for a transparent, all-American apparel supply chain.*

North Carolina's Eric Henry has been swimming against the current for more than 40 years to run a U.S. cotton clothing manufacturing and design label using cotton grown sustainably in the region. In the process, he's established relationships with farmer-suppliers whose operations Henry touts via QR codes on the clothing labels.

The journey for Henry in the textile business began in 1978, when he cofounded a T-shirt company while still a student studying agriculture at North Carolina State University.

"I was looking for a way to make some bucks," says Henry, who, 47 years later, still runs TS Designs along with its retail brand, Solid State Clothing, in Burlington, North Carolina. "There are lots of T-shirts on campuses. I didn't know about shirts or screen printing, but I saw a business opportunity."

Along with then partner Tom Sineath (the "TS" of TS Designs), the company thrived. They had more than 120 employees during the 1980s and were printing shirts for Nike, Adidas and The Gap, among others. "We were Nike's third biggest screen printer," Henry explains.

## > A BIG CHANGE

Then, the North American Free Trade Agreement (NAFTA) became law in 1994. NAFTA opened trade between the U.S., Canada and Mexico. Within a few years, TS Designs had only 12 employees.



Eric Henry uses regionally-produced cotton for client shirts as well as their own designs.

DES KELLER

“The brands could not get out of the country quick enough,” Henry recalls.

But, Henry and Sineath never gave up, based in part on their interest in agriculture, sustainable farming and a future for the business that relies on enough consumer interest to buy a local product with a transparent supply chain. (Henry bought out his partner seven years ago, but Sineath remains a contract employee for special projects).

“I realized then there was more to the business than the bottom line,” Henry says. “What we could do is create high quality and be environmentally responsible.”

## > NORTH CAROLINA GROWN

Enter farmers Ronnie Burleson and son, Andrew, of Richfield, North Carolina. They have been working with Henry for 17 years, selling him a small portion of the cotton they grow on their 4,300-acre farm in the state’s central-Piedmont region. Henry had initially approached them about being a supplier.

“Eric’s worked hard to put all the pieces together by trying to do everything in North Carolina,” Andrew says. “He’s not just about the bottom line, he’s trying to support jobs here.”

To be sure, the Burlesons will only sell about 40 bales to Henry per year out of the 5,000 to 6,000 they produce. But, they like the connection created between themselves and the eventual consumer. A scan of the QR code imprinted on the label of a TS Designs T-shirt will take you online, where you can see a photo of the Burlesons, the gin nearby where the cotton was processed, the spinner that turned the cotton to thread and the TS Designs shop where white T-shirts are dyed and imprinted.

The Burlesons do receive a premium (they declined to disclose the amount) for the cotton they sell to TS Designs, but it wouldn’t be considered eye-popping. “This is definitely a better product,” he says of TS Designs’ T-shirt brand, Cotton of the Carolinas. “The premium isn’t a drastic difference from a market price. I do think we’re creating value, and this takes time, and this is worth something.”

In addition to the proximity to his printing and dying facility, the

*“What we could do is create high quality and be environmentally responsible.”*

—Eric Henry

Burlesons could offer Henry a long history of sustainable farming. Ronnie’s father, Thurman, began using no-till in the 1960s. “My dad was trying to keep the topsoil in the fields and not at the creek,” Ronnie says. To this day, the farm’s official name is Thurman Burleson and Sons Farms.

Initially, Henry broached the subject of the cotton being grown organically. “That didn’t work for us in our

operation or our rotations,” Andrew explains.

“We imported organic cotton yarn for a time,” Henry says. “We got a nice piece of paper with it, but we didn’t know the farmer or the source of the cotton, and honestly, we didn’t trust it.” In the end, Henry most wanted reliable cotton suppliers in the region who were operating sustainably.

## > COTTON RETURNS TO REGION

In the Burlesons, he had found a family that was instrumental in bringing cotton farming back to the state’s Piedmont region in the 1990s. The family, along with 27 other area farmers, established Rolling Hills Gin at New London in 1996. The gin is one of the entities highlighted as part of the shirt’s supply chain through a QR code printed in the neck label of the Cotton of the Carolinas and Solid State Clothing’s T-shirts.

Like Henry, the Burlesons have negotiated their own obstacles in business. Cotton-growing had been abandoned in the region by 1960, in large part due to the boll weevil. The family turned to growing grain and managed to get through the 1980s economic downturn. >



PHOTO PROVIDED BY TS DESIGNS; PHOTO BY ALEX MANESS



“We had survived the ‘80s money crunch,” Ronnie says, “but we didn’t have any money.” In 1991, cotton prices were high compared to grain, he adds. “My brother (Dennis) and I decided that we know cotton can be grown here, so we were going to try. I was 40 years old and had never been in a cotton field,” Ronnie says. The Boll Weevil Eradication Program had begun in North Carolina in 1987, and by 1991, the pest was not a factor.

They grew about 300 acres in 1991 and ratcheted up over time. They now grow more than 2,200 acres of cotton. Within a few years of their return to the crop, several other farmers expressed a desire to grow cotton, too. The increased interest led to the formation of Rolling Hills Gin. Prior to that, the Burlesons had to truck their cotton to a gin 90 miles away.

## > INDUSTRY CHANGES

Textile mills have been on the decline since the middle of the past century. Employment in the business peaked in 1948, according to the U.S. Bureau of Labor Statistics, with 1.3 million jobs. In the 1980s and ‘90s, as discount chains like Walmart and Kmart began demanding lower prices, manufacturers looked overseas to reduce costs.

NAFTA caused a large shift in manufacturing jobs to Mexico (and later to other countries like Vietnam and Bangladesh) because of lower labor costs. It increased overall trade of textile goods within North America but caused U.S. companies to outsource garment assembly to

Mexico while still producing yarns and fabrics domestically.

A second hit came in 2001 when China was admitted to the World Trade Organization (WTO). That created markets for Chinese products. Exports from China overseas—and to the U.S.—surged by factors of more than 1,000%.

“The industry has always chased cheap labor,” says Gregg Woodcock, executive director of the American Association of Textile Chemists and Colorists (AATCC). The industry moved from England to New England in the late 1700s then shifted to the Mid-Atlantic states and the Deep South in the 1800s, then out of the U.S. in the 1900s.

“The textile industry will come back to the U.S. when the labor is the cheapest again,” Woodcock explains. “The U.S.’s Southern states have the perfect climate for growing cotton. You can make the raw material here, and the supply chain can be efficiently built around that; but it only works if the cost is low.”



■ Ronnie and Andrew Burleson grow cotton used in TS Designs’ Cotton of the Carolinas T-shirts.  
PHOTO PROVIDED BY TS DESIGNS

Producing clothing “sustainably” in the U.S. is a great goal, Woodcock says, but the market for the vast majority of people is price sensitive. Someone might be able to buy a \$200 shirt because they support the idea of domestic sustainability, but many more people seek a shirt that’s close to \$5.

In 2024, there were about 100 U.S. textile mills processing the least amount of cotton here in 139 years. There were still about 163,000 people employed in the U.S. textile mill industry in 2023. Cotton exports declined last year for the fourth year in a row.

The future is unpredictable, and the Burlesons know change is inevitable. “We’re always looking for the next thing,” Andrew says, “but just keeping our heads above water is a full-time job.”

Going forward, Henry says their company will continue to focus on natural fiber products as well as their own natural dyes made from material such as black walnuts. Many synthetic dyes are made overseas and are fossil fuel-based. He feels they are well-positioned in a consumer market that is more concerned about microplastics in materials—including polyester fibers.

“We do like that more people are getting excited about ‘Made in the USA,’” he says. ///

## FOR MORE INFORMATION

[www.tsdesigns.com/cotton-of-the-carolinas](http://www.tsdesigns.com/cotton-of-the-carolinas)

# New Blood Flow Breakthrough Helps Men Enjoy Strong, Long-Lasting Intimacy – At Any Age

*A new discovery that supports nitric oxide production and healthy blood flow gives men across the country new hope for a satisfying bedroom performance*

After age 40, it's common knowledge that performance begins to decline in many men. However, a new potency formula is showing that any healthy man can now enjoy strong, long-lasting, and frequent performance at any age.

This doctor-designed protocol, created by leading anti-aging expert Dr. Al Sears, is celebrating its highly effective 5th generation formula, which is already helping men support a healthy performance and libido.

When Dr. Sears released the first pill — Primal Max Black — it quickly became a trusted men's performance helper, promoting bedroom fun across America.

It worked by supporting healthy testosterone levels. However, Dr. Sears knows from almost 30 years in private practice that testosterone isn't the only performance challenge men face. That's why his dual strategy includes attention to blood flow because no amount of testosterone will replace the need for healthy blood flow for successful intimacy.

And this second formula became Primal Max Red.

## **SUPPORTING THE MECHANISMS IS AS IMPORTANT AS SUPPORTING THE HORMONES**

While Primal Max Black helped maintain optimal testosterone, Primal Max Red tackles a lesser-known challenge.

Truth is, we ignore the importance of blood flow and circulation for supporting a man's sex life. Because without blood flow, nothing happens.

Luckily, a Nobel prize-winning scientist discovered a means to help support performance, strength, and confidence by supporting vital blood flow, which is essential for a satisfying performance.

Using this landmark Nobel Prize as its basis, Primal Max Red supports healthy blood flow by using a key ingredient to support nitric oxide production. Nitric oxide is the molecule that allows blood vessels to relax and expand, thereby increasing blood flow.

Al Sears MD, who has authored over 500 scientific papers and has appeared on more than 50 media outlets including ABC News, CNN, ESPN, and many more says, "Supporting optimal blood flow is an essential component of maintaining sexual health as men age. Then, once we optimized it and had a great deal of success, we set out to see if we could do even better."

Conventional nitric oxide supplements are limited to smaller doses of key ingredients because everything must fit into small capsules. But Dr. Sears followed the science and introduced a revolutionary new powder version of his Primal Max Red formula.

This new powder formulation enabled him to include bigger doses of the key nutrients, which matched the doses used in published clinical studies. Not only is the formula more effective because it uses proven doses, it also means you get a delicious drink instead of more and more pills.

## **HEALTHY BLOOD FLOW DELIVERS SATISFYING RESULTS**

Primal Max Red is the best way to maintain an active life.



**IMMEDIATE GAME CHANGER FOR AMERICAN MEN:** Doctors are now recommending Primal Max Red for its ability to support the vital but overlooked need for healthy blood flow during intimacy.

It works by supporting blood flow and the production of nitric oxide.

This critical support is the reason men across the country are enjoying a full and satisfying performance at any age. Because testosterone is not the only factor men need to consider.

Primal Max Red effectively promotes healthy blood flow that men can use to support intimacy in the bedroom. The unique and powerful blend of ingredients in Primal Max Red supports the kind of sexual health and performance men are looking for.

"There was a time when supporting healthy blood flow for men was impossible," Dr. Sears said. "But science and technology have come a long way in recent years. And now, with the creation of nitric oxide-supporting Primal Max Red, men can feel more confident and more in control while they enjoy intimacy at any age."

Now for men across America, it's much easier to support peak performance as they get older.

## **HOW TO GET PRIMAL MAX RED ALONG WITH COMPLEMENTARY BOTTLES OF PRIMAL MAX BLACK**

To secure the new Primal Max Red formula, readers should contact the Primal Max Red Health Hotline at **1-800-764-0927** and use promo code **PPMAX3252** within 48 hours. And to cut down on the cost for customers, it can only be purchased directly from the company.

## **READERS ALSO GET AN EXTRA BONUS SUPPLY OF PRIMAL MAX BLACK**

Every order of Primal Max Red gets a matching supply of Dr. Sears' testosterone formula Primal Max Black for no additional charge.

All orders are backed by a 100% money-back guarantee. If any user is not satisfied, just send back the bottle(s) or any unused product within 90 days from the purchase date, and you'll get all your money back.





# Appetite for Locally Raised Food Grows

*More consumers want to know where their food comes from. European countries such as Switzerland are at the forefront of the movement.*

**S**o, do you really care about where your food comes from? For most people, it's not top of mind, but there's a growing slice of society that's paying more attention to where it sources food.

That movement is no more evident than in the Entlebuch region of scenic central Switzerland. It's a jaw-dropping area just under 100,000 acres located at the foot of the Alps that can reach an altitude of 7,000 feet. Here, like in many Swiss regions, farmers are accustomed to producing and using their own locally grown labels.

But, to better help farmers market their regional products, there's a formal regional certification program called regio.garantie. "That assures products are from local farms and businesses," says chairman of the association Das Beste der Region Andreas Wyss, who has been involved with helping develop label guidelines.

Andreas Wyss says Swiss consumers know where products come from because government certification labels are attached to the packaging.



There's also a Suisse Garantie label to show it's produced in Switzerland.

Each region has its own special identity, as well. For example, the Entlebuch region label also reads Echt Entlebuch (Genuine Entlebuch).

Since the creation of the certification program in 2017, almost 10,000 products from more than 2,300 producers across Switzerland have received the locally produced seals.

"We've found that consumers value our regional products even more than organic, and every year, our locally grown market increases about 10% throughout the country," Wyss explains. "Now, all of our big retailers have a variety of certified locally grown labels on their shelves."

## > WHAT CONSUMERS SAY

Here in the U.S., the amount of locally grown foods runs about 2 to 3% of the total food consumed, according to USDA. And, that number continues to expand.

In The Packer's Fresh Trends 2024 consumer survey, more than half of



□ Throughout scenic Switzerland, consumers embrace buying certified local farm products.

respondents said they made a “conscious effort” to buy locally or regionally grown produce. In addition, it showed that younger consumers are more likely to say they make

an effort to buy local, and 34% of all consumers said knowing the stories and background of produce growers was “very important.” Not surprisingly, higher-income groups are more likely to buy locally, according to The Packer, a newspaper and website covering the fresh produce industry.

Just north of the U.S. border, Food Secure Canada claims that local food has now moved from a foodie movement to become an established mainstream idea.

And, abroad, there’s been brisk growth in locally grown and sourced food for many years. In fact, about one in four consumers cite the “regionality” of products among the most important criteria when purchasing food, according to a 21-country survey from Statista Consumer Insights. The survey also points to Swiss and Austrian shoppers as being the most likely to turn to local products.

U.S. consumer Sarah Musty, Richfield, Minnesota, says she values knowing where and how her food purchases are grown and raised. “I want to buy things locally and know that it’s not all coming from some giant farm,” the occupational therapist says.

During the pandemic, she found a farm co-op about 50 miles away to supply her family’s weekly fruit and vegetable needs, and it delivered right to her door. “I feel like it’s fresher and better quality than what I get at the grocery store, and I like that we’re supporting our local farmers,” she says.

## ➤ SWISS FARMERS BUY IN

Das Beste der Region is one of four major super-regional organizations with 16 subregions such as Echt Entlebuch that have adopted the certification program. Rules require that 80% of raw materials must come from that region, and a minimum of two-thirds of the added value of products must be generated within the area. If that’s met, the products then qualify for the regio.garantie stamp of approval.

The subregions such as Echt Entlebuch are defined by postal codes so that origin of the raw materials and added value can be traced back at any time.

Dairy, cheese and meat make up a large portion of the certified Echt Entlebuch

□ Occupational therapist Sarah Musty prefers buying local if she can. “I like knowing that what we get is fresh and not have to worry about how long something has been sitting on a grocery store shelf.”



brand, but other products like flour, pasta, tea and honey also can be included if they meet the specifications. About 30% of products labeled Echt Entlebuch come from cheese and milk products, 20% from meat and meat products.

□ Dual-purpose cattle breeds, like these Hérens, provide both milk and meat for local certification.

## ➤ CERTIFICATION PAYS

“Two years ago, a study showed that every certified liter of milk sold added 4 to 5 cents more per liter than selling on the open market,” Wyss explains. “Also, farmers have found a 45% higher price for their eggs, 30% more for fruits and vegetables, and a 25% higher price for meat products when sold with the Echt Entlebuch label.” All products marketed with the label have to be recertified every two years.

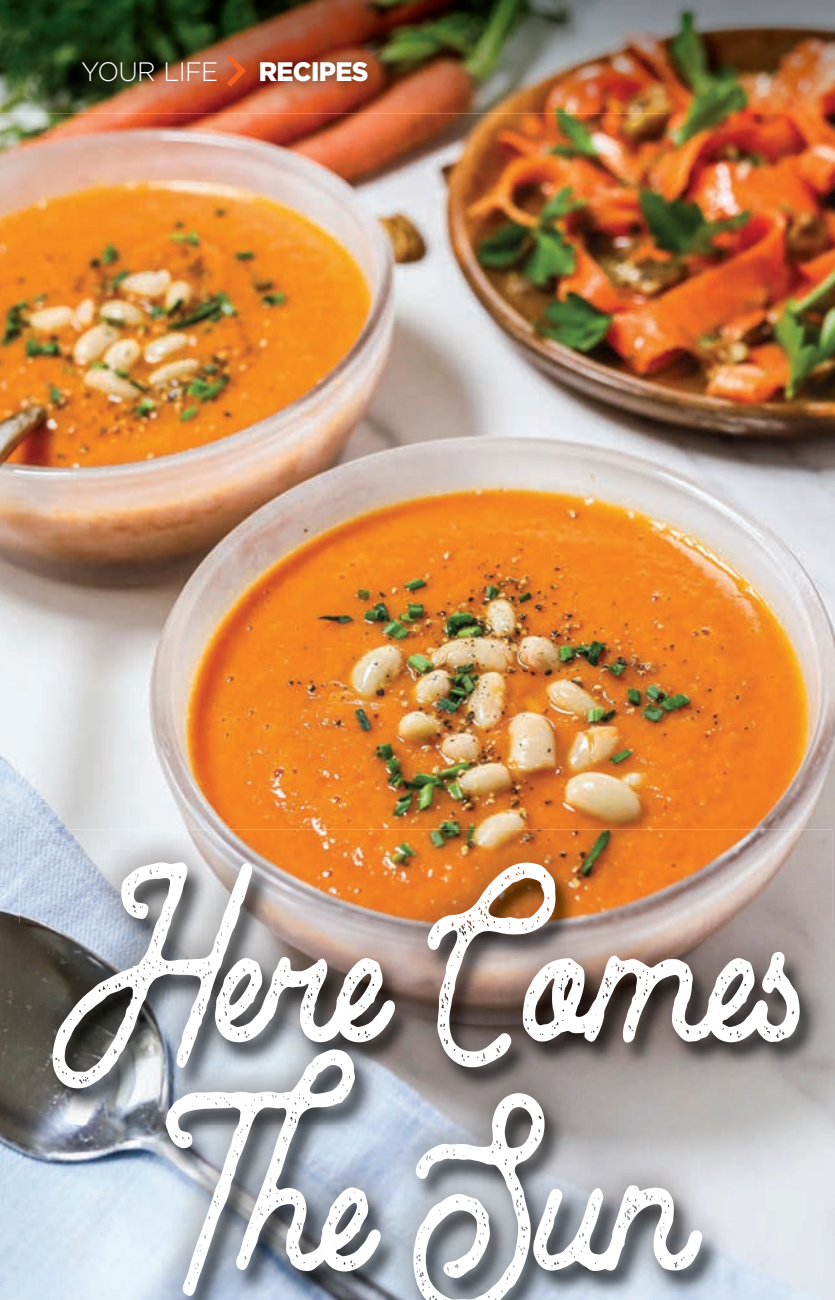
Consumers seem to embrace the certification program, too, and are willing to pay more for local. “Our research shows that about 50 to 60% of Swiss consumers can afford the higher prices and can pay 1 to 2% more without struggling,” he adds.

Farmers and other members along the value chain pay to belong to the Echt Entlebuch label. However, Wyss says farmers only pay half, and government pays the other half. Price varies, but in general, farmers pay 500 Swiss francs (\$550 U.S.) a year plus a bit more based on volume.

“We believe that people in Switzerland, and maybe around the world, long for more knowledge of where products are from” Wyss says. “It’s a trend here that I think will continue to grow; plus, it’s strongly supported by our government.” ///







# Here Comes The Sun

## CREAMY WHITE BEAN & TOMATO SOUP

*With a chill still in the air, enjoy this light but fulfilling meal to help usher in the warmer days of spring.*

TOTAL TIME: 45 MINUTES

SERVES: 4

1½ tablespoons extra-virgin olive oil  
1 yellow onion, diced  
Salt and pepper to taste  
2 garlic cloves, chopped  
2 carrots, peeled and chopped  
1 (28-ounce) can whole tomatoes

1 tablespoon apple cider vinegar  
½ teaspoon dried thyme  
2 cups vegetable broth  
1 (15.5-ounce) can cannellini beans, rinsed

1. Heat oil in a large pot over medium-low heat. Add onion; season with salt and pepper. Cook until onion is soft (about 5 minutes); add garlic and carrots.
2. Add tomatoes to pot; cook 10 minutes or until tomatoes begin to soften. Use a wooden spoon to break tomatoes apart as they cook.
3. Add vinegar, thyme, broth and white beans; simmer 20 minutes, stirring occasionally.
4. Carefully transfer the mixture into a blender, working in batches, if necessary. Blend soup to desired consistency; season with salt and pepper. If soup is too thick, add a little more broth or water.
5. Pour blended soup back into pot; season to taste and serve.

## SHAVED CARROT SALAD WITH PECANS

*Get your taste buds ready for fresh spring veggies with this lively, crunchy dish.*

TOTAL TIME: 10 MINUTES

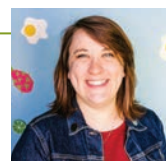
SERVES: 4

- 1 pound large carrots, peeled
- 2 tablespoons extra-virgin olive oil
- 1 tablespoon freshly squeezed lemon juice
- 2 teaspoons Dijon mustard
- 1 teaspoon honey
- ½ teaspoon kosher salt
- ¼ teaspoon freshly ground black pepper
- 2 tablespoons chopped fresh parsley, dill or other fresh herbs
- ¼ cup chopped pecans



1. Using a vegetable peeler, carefully make flat, horizontal strips from the peeled carrots to make ribbons; set aside.
2. In a large bowl, combine olive oil, lemon juice, Dijon mustard, honey, salt, pepper and herbs; whisk until smooth and emulsified.
3. Toss carrots in dressing; allow to sit 5 minutes or until slightly softened. Toss with chopped pecans and any extra herbs, if desired. ///

Recipes and Photos By  
**Rachel Johnson**  
On Instagram  
**@racheltherecipe**



Replace Your John Deere Gauge Arms

## COMPLETE COYOTE GAUGE ARM

- Newly Cast & Designed Gauge Arm by COYOTE MACHINING, LLC
- Built Heavier
- Avoid True V Hub Loss Designed to Prevent the Wheel from Dropping Too Far
- Housed for Clamp-On Accessories
- A Double & Single Bearing = 3 Rows of Bearings
- Bolt-On Wear Plate
- Shim Kit Included
- Maintenance Free
- No More Greasing



*Will Outlast All Other Gauge Arms on the Market, Even Those From Down Under*



**COYOTE MACHINING, LLC**

72796 Ave. 353 • Hamlet, NE 69040

**308-414-0159**

info@coyotemachining.com

www.coyotemachining.com

# Progressive FARMER

## MARKETPLACE

Buyers Guide

Over 276,000 subscribers  
receive these ads!

**Request a quote today!**

Contact Jaymi Wegner

406-321-0919

Jaymi.Wegner@dtm.com

MARKETPLACE Over 276,000 Subscribers Receive These Ads!

**Make hay  
your way.**



**Tailored solutions  
for your farm.**

THE BALE ACCUMULATOR SYSTEM



Grabber



Tie Grabber



Bale Squeeze



Visit [nordenmfg.com](http://nordenmfg.com) or call  
877-296-5851 for more information  
and to find a dealer near you.



## STEEL FARM BUILDINGS

MADE IN THE  
**USA**

**25  
YEAR  
WARRANTY**



**100% USABLE SPACE**  
No Posts • No Beams • No Trusses

### IDEAL FOR

- Hay & Grain
- Equipment
- Workshops

### CLEARANCE MODELS

<b>25 x 40</b>	<b>45 x 80</b>
<b>30 x 50</b>	<b>50 x 100</b>
<b>40 x 60</b>	<b>60 x 140</b>



**EASY TO ERECT**  
**NO HEAVY EQUIPMENT NEEDED**

**1-800-480-2458**

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





# Government

*“A hated government does not long survive.”*

—Seneca



In the final analysis, a democratic government represents the sum total of the courage and the integrity of its individuals. It cannot be better than they are.

**ELEANOR ROOSEVELT**

I know now why confusion in government is not only tolerated but encouraged. I have learned. A confused people can make no clear demands.

**JOHN STEINBECK**

The history of liberty is the history of the limitations on the power of the government.

**WOODROW WILSON**

The punishment suffered by the wise who refuse to take part in the government, is to live under the government of bad men.

**PLATO**

Local government is the foundation of democracy, if it fails, democracy will fail.

**ROBERT W. FLACK**

Good government is no substitute for self-government.

**MAHATMA GANDHI**

Under government ownership corruption can flourish just as rankly as under private ownership.

**THEODORE ROOSEVELT**

For the kingdom is the LORD'S: and he is the governor among the nations.

**PSALMS 22:28**

Government's first duty is to protect the people, not run their lives.

**RONALD REAGAN**

That government is best which governs least.

**HENRY DAVID THOREAU**

There is good government when those who are near are happy, and when those who are far away desire to come.

**CONFUCIUS**

The future holds little hope for any government where the present holds no hope for the people.

**LYNDON JOHNSON**

For, if liberty and equality, as some persons suppose, are chiefly to be found in a democracy, they will be attained when all persons alike share in the government to the utmost.

**ARISTOTLE**

A government that robs Peter to pay Paul can always depend on the support of Paul.

**GEORGE BERNARD SHAW**

It is the duty of the patriot to protect his country from its government.

**THOMAS PAINE**

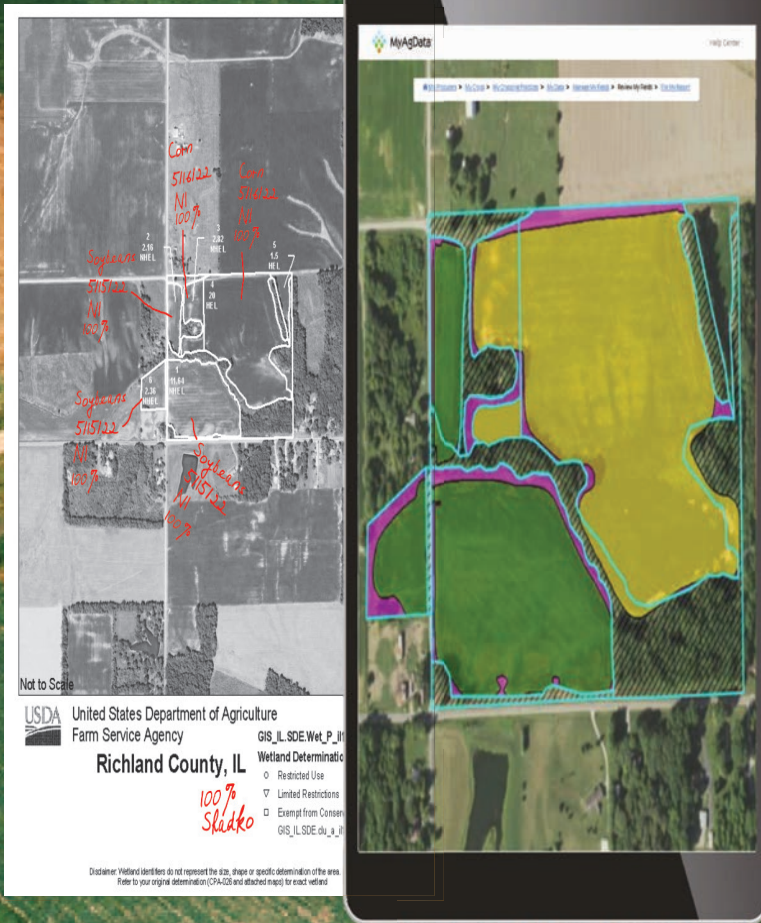


# Crop Acreage Reports Just Got A Lot Easier For Spring 2025!

**Electronically submit  
your crop acreage report  
once to both USDA FSA  
and Crop Insurance for  
Spring 2025 Season.**

**Increase APH.  
Save Money on Crop  
Insurance.  
Convenient and Efficient.**

Use your Precision Ag  
Data or Common Land  
Units - the Farmer  
decides!





# FIRST SHIFT

# SHIFT GEARS

## Protection during work and play

Get coverage that goes beyond your homeowners' policy with comprehensive UTV insurance to protect your off-road vehicle, belongings, accessories and more – no matter where you ride.

1-800-PROGRESSIVE / PROGRESSIVE.COM

**PROGRESSIVE**

Quote UTV  
insurance in  
as little as  
3 minutes



Progressive Casualty Insurance Co. & affiliates. Prices vary based on how you buy. Custom accessories coverage included with the purchase of comprehensive and collision coverage. Protection for personal belongings offered with optional Carried Contents coverage. Coverage subject to policy terms and conditions.