# MOMENTUM

### The Next Revolution in Agriculture

See Story on Page 6

→ James Wilson is harnessing the power of his family's farm data to boost yield, efficiency and profitability



Stronger Together

Summer 2016

6

# WORK DEMANDS POWER

If you're in charge of getting the job done, power matters. And nothing says power like BOSS Performance Diesel™. BOSS is proven to help diesel engines run cleaner and stronger, with increased fuel economy.

### Take Charge.



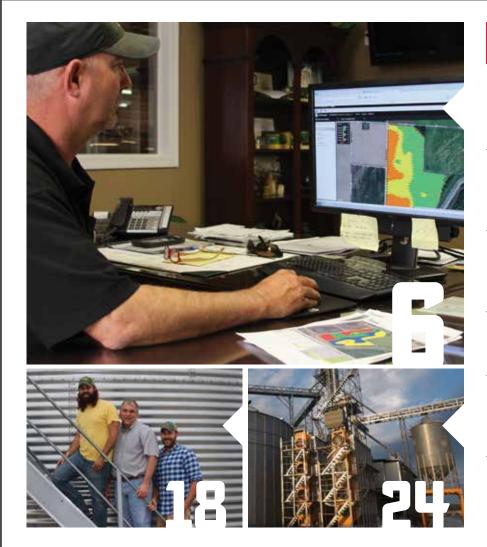




Learn more at www.bossperformancediesel.com.



#### SUMMER 2016 • VOL. 1 NO. 3



### **FEATURES**

6 **Big Data: The Next Revolution in Agriculture** 

**2016 MFA Foundation Scholarship Winners** 

12 **Farm Economy Continues to Tighten** 

> 18 Worth the Risk

22 Advocating for Agriculture

24 It Pays to Upgrade **Grain Dryers** 

### **DEPARTMENTS**

Letter from the President ......4 The Painful Process of Staying Relevant

Spotlight.....5 *Meeting the Needs of Arkansas* **Poultry Producers** 

The Big Picture ......16 Propane-Powered Mowers Cut Grass, Emissions and Upkeep Costs

Market Commentary ......26 The Rebalancing Act

From the Board ......28 Focused on Safety

Acquisitions ......29 Acquisitions Improve Operating *Efficiency and Solidify Trade Territory* 

APM Enhances Profitability for Independent C-Store Owners

News Briefs ......32

Wholesale Load Division Provides Transport-Sized Deliveries to Customers

Giving Back......34 MFA Oil Foundation Helps Christian Academy Build New Classrooms

Products ......35 Advantages of Low-Viscosity Motor Oils

### The Painful Process of Staying Relevant

How often in your life have you had a rewarding accomplishment come easily? In my experience, the answer is almost never. In this ultracompetitive world we live in, great things don't just happen. It takes hard work, focus and tremendous effort to achieve meaningful results.

MFA Oil is currently in the process of a major upgrade to our business management software that will allow the company to improve in many areas, including our service to customers. That may sound fairly simple, but trust me, it's not.

This new system provides dramatic enhancements to our operations, enabling us to improve our efficiency and better serve you. For example, we will soon be able to consolidate statements for customers with multiple accounts into a single statement. We'll also be able to offer customers tank monitoring services where you won't need to call us for fuel. We'll know when you need fuel, and we'll schedule a delivery to make sure you don't run out. It's all part of our overall plan of making it easier to do business with us.

While the new system offers many benefits, it's a big change for our employees. Learning something new that's dramatically different can be stressful, but we are working with our employees to train them so they can continue to offer customers an excellent service experience. So far we've completed 75 percent of the transition, and our folks have done amazingly well.

Not long ago I heard Rick Warren, Christian author of A Purpose Driven Life, speak on the topic of change and relevance. One particular quote resonated with me: "When the speed of change outside an organization is faster than the speed of change inside the organization, the organization becomes irrelevant."



Unfortunately for MFA Oil, there was a period of time when we were not keeping up with the pace of change around us. We had some serious catching up to do, but I'm pleased to report we have not only caught up, we will soon be on the cutting edge. The new system is a big part of that, but we've also invested in modern facilities and new equipment that have allowed us to step up our performance and service to customers.

Yes, staying relevant can be taxing and expensive. But we're committed to being a great company, and it's our job to take the necessary steps to make sure we stay that way.

Cooperatively,

Mark Fenner President and CEO



### ON THE COVER:

James Wilson is one of many farmers using agricultural big data to boost farm efficiency. *Photo by Jody Bryson.* 



Summer 2016 • Vol. 1 No. 3

This magazine comes to you courtesy of MFA Oil Company, a farmer-owned cooperative providing energy solutions to customers for more than 85 years. We deliver high-quality propane, fuels and lubricants to farmers and other customers across an 11-state region stretching from North Carolina to Utah. *Momentum* is an information service for farm families published by MFA Oil.

*Momentum* is published four times annually.

For address corrections, story ideas or other inquiries, email editor@mfaoil.com.

www.Facebook.com/MFAOil www.Twitter.com/MFAOil

Address: One Ray Young Drive Columbia, MO 65201

> President and CEO Mark Fenner

Vice President of Sales & Marketing Jon Ihler

Manager of Marketing Services Ashley Bower

> Editor/Writer Adam Buckallew

Graphic Designer Kristin Branscom

Board of Directors Benny Farrell (Chairman), Ralph Schallert (Vice Chairman), Floyd Buckman, Kevin Buckstead, Ronald Felten, Marion Kertz, Joey Massey, Wayne Wright

> ©2016 MFA Oil Company www.mfaoil.com

## Meeting the Needs of Arkansas Poultry Producers

Poultry is big business in Arkansas. Nearly 6,000 Arkansas farms produce some type of poultry, including broilers, turkeys and egg-laying hens. Poultry is the state's top agricultural product, accounting for \$4.47 billion in cash receipts or 44.3 percent of the total for all agricultural sales in Arkansas.

By far the largest segment of the Arkansas poultry industry, broilers are raised in 53 of the state's 75 counties. As of 2013, Arkansas was the third-largest broiler producer in the nation with almost 1 billion broilers produced or the equivalent of 6 billion pounds of meat annually. Arkansas ranks as the third-largest turkey producing state, raising 29 million gobblers per year, and is also in the top 10 states for egg production.

Most of these farms rely on propane to keep their barns warm enough for poultry production. Jeff Goodwin, MFA Oil district manager for the Mid-South, says proper heating is especially critical for chicks.

"When a broiler farm is expecting a delivery from the hatchery, propane supply is top of mind because they need to keep the chicks at temperatures of at least 90 degrees for the first seven to 10 days," Goodwin says. "If the chicks get too cold, it can result in poor growth, reduced feeding efficiency and susceptibility to disease."

It takes a lot of propane to heat a chicken house, which can be as long as two football fields. Even maturing chickens must be kept at temperatures in the high 70s. MFA Oil is working with an increasing number of poultry farms in central and northeast Arkansas to supply the propane needed to keep their flocks warm and growing.

"We've seen a real uptick in business related to poultry production near our propane plants in the Lonoke and Paragould (Arkansas) areas," Goodwin says. "Propane is reliable and relatively affordable, so it makes for a good heating source. When you combine that with the patronage farmers can earn on their propane purchases, it makes a lot of sense for growers to buy from MFA Oil."

### "WHEN A BROILER FARM IS EXPECTING A DELIVERY FROM THE HATCHERY, PROPANE SUPPLY IS TOP OF MIND BECAUSE THEY NEED TO KEEP THE CHICKS AT TEMPERATURES OF AT LEAST 90 DEGREES FOR THE FIRST SEVEN TO 10 DAYS." - JEFF GOODWIN

The increased demand in propane generated by poultry producers in the region has resulted in an additional 1 million gallons of propane sales for MFA Oil annually. Goodwin says the new



Top: MFA Oil has added a bulk propane storage site in Griffithville, Ark., to accommodate increasing demand from poultry customers. Bottom: Broiler barns are kept at temperatures of at least 90 degrees Fahrenheit to promote growth in chicks. MFA Oil keeps poultry producers well supplied with propane to keep their flocks growing.

poultry customers are also benefitting the company beyond the propane they use.

"We've gotten a lot of referrals from the poultry growers we work with and that has allowed us expand our trade territory," Goodwin says. "People see our trucks going up and down the road to service the chicken and turkey barns and that's helped us pick up new residential and commercial accounts."

Each poultry barn requires about 1,500 gallons of propane storage, which usually means at least two to three propane tanks per building. MFA Oil is adding a bulk propane storage facility in Griffithville, Ark., to cover the needs of its poultry customers in central Arkansas. Goodwin says the company is also planning to build additional storage somewhere in northeast Arkansas.



### THE NEXT REVOLUTION IN AGRICULTURE

By Adam Buckallew Photos by Jody Bryson and Adam Buckallew



Thanks to precision agriculture and advancements in equipment and computing technology, farmers are building a treasure trove of production information. The wealth of data generated by precision agriculture technology has enormous potential, but it's what farmers do with this information that matters. If properly analyzed, farm data can reveal patterns, trends and insights capable of helping farmers become more efficient with their land and resources.

Many in agriculture believe ag data will be the thing that sparks the next wave of progress in farming.

In an October 2015 statement to the U.S. House of Representatives Committee on Agriculture, Missouri Farm Bureau President Blake Hurst testified, "It is extremely likely that the big data movement – and the innovative technologies and analytics it yields – could lead to at least as much change in agriculture as the Green Revolution and the adoption of biotechnology. Farmers are reporting higher yields, fewer inputs, more efficiency and, importantly, higher profits thanks to technology."

### UNLOCKING THE POWER OF AG DATA

Len Nall understands the value that can be found in analyzing his farm's data. So much so that's he's invested heavily in precision agriculture technology in his tractors, sprayers, combines and cotton pickers to make sure his farm's data is effectively captured.

Nall has 18 tractors that he and his partners at Delta Farms use on their 16,000 acres of farmland they manage in and around Lake City, Ark. They've spent \$25,000 per tractor to equip them with ultra-precise RTK satellite navigation technology that is accurate within a half-inch in any direction.

"We need pin-point precision in our tractors' auto-steer programming because we use a lot of furrow-irrigated raised beds," Nall says. "The accuracy the RTK guidance technology provides is beneficial for our yield maps and input applications as well because of its exactness. We get highly detailed maps and reports that we use to better manage our farming operation."



As precision agriculture technology has progressed, the data it generates has become increasingly valuable to farmers. Nall has been stockpiling data generated from his farm's fields of corn, soybeans, rice and cotton for several years. The data is used to create yield maps – georeferenced data sets that record crop production and other characteristics. Yield maps provide an easy way for farmers to review past crop performance and identify problematic areas in fields that call for different management tactics.

"We're now capable of doing a lot of things with our data that's just recently become possible, like variable-rate fertilizer applications and planting prescriptions," Nall says. "That's where the real value from this technology shines."

Nall works with a consultant who helps him map his soils and their variability. The consultant uses equipment with sensors that are placed two feet apart and pulled through fields to measure electrical conductivity. This generates a report that quickly and accurately identifies soil types and characterizes other differences such as pH, organic matter and topographical information. This data gives Nall a good idea of how well his fertility program is performing and where he may need to tweak it to improve nutrient efficiency.

### GETTING THE MOST OUT OF EVERY ACRE

James Wilson manages Hartung Brothers Farms, a family farming operation in Macon, Mo. He has been collecting yield data on their farmland since 1998. Wilson's yield maps show him where he's doing well and spots in fields that have issues. Like Nall, Wilson conducts soil tests to determine fertility needs. The tests are conducted using 2.5-acre grid patterns to

"WE'RE NOW CAPABLE OF DOING A LOT OF THINGS WITH OUR DATA THAT'S JUST RECENTLY BECOME POSSIBLE, LIKE VARIABLE-RATE FERTILIZER APPLICATIONS AND PLANTING PRESCRIPTIONS." - LEN NALL ensure good spatial representation of fields is obtained to form a nutrient map.

"We take the yield maps and overlay them with our nutrient maps to develop our plan for each field," Wilson says. "This gives us the information we need to create variable fertility prescriptions that fit the needs of each zone."

Customizing his fertilization plan for specific areas allows Wilson to reduce his input costs across his family's 1,300 acres of farmland.

"We've seen a big difference in our fertilizer expenses by moving from a flat rate fertility application to a variable-rate plan," Wilson says. "That helps us avoid putting fertilizer on sections of fields that don't need it and makes sure the areas that might need more than others get the right amount. This reduces over-fertilization expenses, and those savings can add up in a hurry."

This spring Wilson added variable-rate seeding to his farming practices.

"We're using our knowledge of the soil types, topography and long-term yield





history of each field to adjust the amount of seed we place on specific points within each field," Wilson says. "This allows us to increase or decrease seed populations when needed to optimize our yield and get the most out of each field."

Wilson says using a variable rate for fertility and planting improves his farm's performance, efficiency and profits.

"Every field has its own unique conditions, and you have to match your plans accordingly," Wilson says. "We have a mix of river bottom and hilly farmland. Our strategy in the river bottoms is different than the hilly ground. The variable-rate approach allows us to tailor our plans to give us the best chance at maximizing yield and consistency across all of our acres."

### **CONVENIENCE OF THE CLOUD**

The insights farmers can glean from their data is only worthwhile if it is accurate. That is why collecting correct yield data and other information from the field is vital to any farmers interested in putting big data to work on their operations. Nall typically checks harvest totals in his grain bins in comparison with the yield data his combines transmit from the field to see how it correlates. He says it is usually close, but the equipment occasionally needs to be recalibrated to improve accuracy.

The setup of farm sensors and the software used to analyze the data can be tricky. Scott Shearer, a professor and chair of the Department of Food, Agricultural and Biological Engineering at Ohio State University, advises working with technical experts who are knowledgeable about the specific farm machinery and technology a farmer intends to use. Once the equipment and programs are ready for use, many are now capable of beaming data directly to cloud-based computing systems that store the information for farmers.

"Connectivity to the cloud has made it much easier for farmers to take full advantage of the data they are generating," Shearer says. "Auto-syncing data from the field greatly improves the chances that the data will be properly recorded and used by farmers." Opposite page: Len Nall of Delta Farms uses yield maps and soil data to formulate his variable-rate fertilizer applications and planting prescriptions. Above: James Wilson of Hartung Brothers Farms carries his iPad with him to review farm data and to take notes as he scouts crops. Wilson says analyzing his family's farm data and applying the insights he gains from it has helped him push yields higher and increase profitability of the farm.

Wilson says the immediate access to his yield maps, variable-rate plans and the rest of his farm data via the Internet is a great advantage. Some of his equipment is set up to automatically transmit from the field to the cloud, but he still has some machinery that records its data on a portable memory device that must be downloaded before it is ready to be integrated with the rest of his information.

Wilson appreciates the convenience of the automatic data transfers, noting, "It saves a lot of worry. I think you're going to see a lot of farms start managing their data like this. It really makes the process so much quicker and easier."

### **DECIPHERING THE DATA**

Although precision agriculture has been providing an unprecedented amount of data to farmers for many years, not all farmers know what to do with the data once they have it. Wilson understands how this could discourage some farmers who are looking for answers from their data.

"I could spend hours looking through all the data we generate on our farm," Wilson says. "There's so much information out there that it can become overwhelming. It's taken us several years to work up to the level we are at now."

Similarly, Nall concedes it is not always easy to see how to best take advantage of the vast streams of data.

"We have 18 guys who work for us, and none of them know how to manage the data," Nall says. "I do most of that on my own right now, but it can be difficult to interpret. We work with consultants to help us create and adjust our variablerate prescriptions. We may have to look at hiring someone to manage our data at some point in the future."

Though Wilson also manages the majority of his data on his own, he sees the value of working with advisers to aid in his data analysis and the development of variablerate prescriptions.

### "THE VARIABLE-RATE APPROACH ALLOWS US TO TAILOR OUR PLANS TO GIVE US THE BEST CHANCE AT MAXIMIZING YIELD AND CONSISTENCY ACROSS ALL OF OUR ACRES." - JAMES WILSON

"It's important to find ways to take advantage of all the resources we have at our disposal," Wilson says. "Analyzing our farm's data and applying the insights we learn from it has without a doubt helped us push yields higher and increase our overall profitability."

### DATA-DRIVEN TOOLS

There are many ways farmers can use their data beyond seeding and fertility prescriptions. Technology now exists that allows farmers to view real-time data on their crops, soils, equipment and weather



instantly via smart phones and tablets. This enables farmers like Nall to keep tabs on his fields and equipment from anywhere. Whether he's using infrared satellite imaging to review crop growth or is checking on harvest progress, the data is right at his fingertips.

"The technology has made it much easier to manage our farmland in many different ways," Nall says. "I can get a good feel for how well seed varieties are performing without even setting foot in a field. My system will also show me where all of our tractors are and what they're doing at any given time."

The precision of Nall's RTK GPS systems in his equipment allows his machinery to interact in clever ways. His sprayers have automatic section control capabilities that can prevent unnecessary applications by detecting areas of fields that have already been sprayed or those that are not meant for production. The shared data between equipment is also helpful to Nall during harvest.

"Our combines and tractors will sync up to match their speeds and directional heading, which helps prevent mistakes during harvest," Nall says.

Though he has found many ways his data can boost productivity and efficiency on the farm, Nall believes he and most farmers have only scratched the surface when it comes to taking full advantage of the true power of farm data.

"We've got so much technology, and we're still in the learning phase with much of it," Nall says. "There are lots of things that make more sense now than they did a few years ago, but we know there's more we could be doing. The data is there, and we know it's valuable. We just need to put it to better use." **M** 

## 

JACOB ABEL - MARTHASVILLE, MO JORDAN ALLEN – NEW MADRID, MO CONNER ANDERSON - STRAFFORD, MO CONNER ANDERSON - STRAFFORD, ANNE ANIBAL - CARTHAGE, MO TERRI ATTEBERRY - CONWAY, MO MOIRA AUXIER - ST. JOSEPH, MO KYLER BARNES - COOTER, MO WILLARD BARNETT - COLLINS, MO ALEXIS BARTON – BOSS, MO DESORRE BEACH – PARAGOULD, AR ALEXIS BARTON - BOSS, MO DESORRE BEACH - PARAGOULD, AR ERIN BEDWELL - CAMPBELL, MO REID BEEMAN - OLPF, KS BONNI BEERY - OTTAWA, KS BREANN BENNETT - EAGLEVILLE, MO SARAH BENTLEY - MARSHALL, MO ARIANNA BERHORST - CANTON, MO EMILY BINDER - SALISBURY, MO PAIGE BIRK - CAPE GIRARDEA, MO BAILEY BISHOP - ELDIDGE, MO KENDRA BLAIR - STIGLER, OK BENJAMIN BLANK - RICHLAND, MO MARIA BLAIR - STIGLER, OK BENJAMIN BLANK - RICHLAND, MO MARIA BLAIR - STIGLER, OK BENJAMIN BLANK - RICHLAND, MO MARIA BLAIR - STIGLER, OK BENJAMIN BLANK - RICHLAND, MO ALEXANDER BOEDEKER - ELSBERRY, MO BRIDGET BRENNECKE - RUSSELLVILLE, MO JACOB BREWSTER - STE GENEVIEVE, MO ELLISON BRUNKHORST - CONCORDIA, MO WHITNEY BUYANT - VINITA, OK SHELBY BURNWORTH - GARDEN CITY, MO TYLER BUSKER - FAYETTE, MO COLLIN BYRD - BOURSON, MO CODY CAMERON - PURDY, MO MICHAELA CARROLL - DEEPWATER, MO ALI CHAMBERIN - HUGHESVILLE, MO WILL CLARK - FREDERICKTOWN, MO SILAS COFER - IRONTON, MO SILAS COFER - IRONTON, MO SETH CLINE – ALBANY, MO SILAS COFER – IRONTON, MO GAVIN COLEMAN – OSCEOLA, MO KAMA COLLIER – BENTON, MO MCKENZIE CONLEY – ROGERSVILLE, MO LOGAN CONWAY – SALEM, MO JAKOB CORDELL – SKIDMORE, MO TORI CORDIA – LONEDELL, MO PAIGE COTTRELL – STEELVILLE, MO PAIGE COTTRELL – STEELVILLE, MO PAIGE COTTRELL - STEELVILLE, MO BAILEY COYER - SWEET SPIRIOS, MO KYLE CRAFT - BUTLER, MO LUKE CRAWFORD - AMSTERDAM, MO WILLIAM CRAWFORD - AUXVASSE, MO MAGGIE CRIDER - EMINENCE, MO COLE CRUSE - BRUNSWICK, MO WADE CUMPTON - ADRIAN, MO PAYTON DAMITZ - PRESTON, MO JORDAN DAVID - LENOX, IA FMILY DAVIDSON - WALKER MO EMILY DAVIDSON - WALKER, MO KENNETH DAVIS - CARROLLTON, MO KENNETH DAVIS - CARROLLTON, M DYLAN DAVIS - BEDFORD, IA LAURA DAVISON - MALOV, IA CORBIN DEAN - SENECA, MO HUNTER DEANE - SIKESTON, MO JADEN DERR - MOUND CITY, MO LEIGHANN DINKINS - SENATH, MO MORGAN DOTSON - KIDDER, MO SHELBY DRAKE - FREEMAN, MO KATUYN DRAKE - FREEMAN, MO SHELBY DRAKE - FREEMAN, MO KATLYN DREBENSTEDT - SHELBYVILLE, MO BROOKE DUCKWORTH - ALLERTON, IA TAYLOR DUNCAN - POPLAR BLUFF, MO COLLIN DUNCAN - LADDONIA, MO SHELBY EADS - NEOSHO, MO BRAXTON EARLS - WEST PLAINS, MO CAITLYN EARNHEART - RISCO, MO JORDAN EATON - ADVANCE, MO TYLER EHLERS - ANDERSON, MO RILEY EIBERGER - KING CITY, MO EMILEY EIBERGER - KING CITY, MO ECHO ESSICK - HALE, MO SHELBY EUBANKS - VERONA, MO CAMERON EVANCE - LEPANTO, AR HOPE EVANS - AVA, MO LYNDSEY EWART - ST JOSEPH, MO LYNDSEY EWART – ST JOSEPH, MO SAMUEL FAHRMEIER – WELLINGTON, MO

ALICIA FARBRO – VINITA, OK KAYLEE FARMER – DEERFIELD, MO MORGAN FARRELL – WINSTON, MO JESSICA FILLA – NEW HAVEN, MO MORGAN FARRELI – WINSTON, MO JESSICA FILLA – NEW HAVEN, MO TAYLOR FISCHER – APEUFON CITY, MO SKY FISCHER – NEW LONDON, MO TERIN FLETCHER – STILWELL, OK EMMA FORDYCE – BETHANY MO OWEN FOSTER – BERNIE, MO DEVEN FOSTER – BENNE, MO DEVEN FOSTER – BONA, KS MELEAH FRANCKA – BOLIVAR, MO KYLE FREEZ – DADEVILLE, MO ASHLYN FRIES – NEW HAVEN, MO TAYLOR FRITSCHE – FROHNA, MO REAGAN FUEMMELER – ARMSTRONG, MO DYLAN GADBERRY – SEYMOUR, MO KATILIN GIBBONS – EDINA, MO KATILIN GIBBONS – EDINA, MO KATELYN GILLUM – UNIONVILLE, MO KATELYN GILLUM – UNIONVILLE, MO KATELYN GILLUM – UNIONVILLE, MO AMELIA GIBGERICH – JAMESPORT, MO ASHTIN GLENN – PLANO, IA EMILY GOLD – HIGHLANDVILLE, MO JOSIAH GOULDMAN – CALEKTON, MO JOSHUA GRASHORN – COLLEGE SPRINGS, IA ELIZABETH GRAY – SENOFE MO JOSHUA GRASHORN - COLLEGE SPRIN ELIZABETH GRAY - TRENTON, MO TRINITY GRAY - ASH GROVE, MO HALEIGH GRAY - GREENFIELD, MO CAMERON GRAY - WEST PLAINS, MO AUSTIN GRELINER - CUSHING, OK ASHLEY GRIMES - ARCHIE, MO WYATT GROVES - BILLINGS, MO RILEIGH GRUNDEN - COLE CAMP, MO SAMANTHA GUY - WALNUT, KS JACOB HAGER - EUGENE, MO ASHLYNN HAI F - MARKED TREF AR ASHLYNN HALE – MARKED TREE, AR MACY HALL – BOLIVAR, MO JACKIE HALLER – FREEBURG, MO JACKIE HALLER – FREEBURG, MO OLIVIA HALLFORD – EL DORADO SPRINGS, MO JODIE HAMILTON – WINDSOR, MO COLTON HARGRAVE – CHILLICOTHE, MO SHELBY HARMAN – WALNUT GROVE, MO EMILY HARRIS – STEELE, MO KARLEA HARRIS – HEPLER, KS JORDEN HARRIS – BOSWORTH, MO WICHOL ACHARDIC F DO SWORTH, MO JORDEN HARRIS – BOSWORTH, MO NICHOLAS HARRIS – PIGGOTT, AR HANNAH HARRISON – PALMYRA, MO MELANIE HARTMAN – MCCUNE, KS ISOBEL HASKAMP – GLASGOW, MO MIKAH HECKENBACK – JAMESON, MO LYNDI HELDENBRAND – KIDDER, MO AMBER HELWIG – COLUMBUS, KS THANE HENDERSON – JASPER, MO LILLIAN HERNDERSON – JASPER, MO LILLIAN HERNDERSON – MORO, AR LUKE HERRING – UNION. MO LILLIAN HERNDON – MORO, AR LUKE HERRING – UNION, MO MARTINA HERSHBERGER – MOUNTAIN HOME, AR ETHAN HERZBERG – MILAN, MO WHITNEY HOMAN – OTTERVILLE, MO RYAN HOPKINS – FAIRFAX, MO ABIGAIL HOPKINS – WASHINGTON, MO JARED HORSTMANN – GERALD, MO CHRISSY HOWARD – VERSAILLES MO IACI HOWARD – URBANA MO CHRISSY HOWARD – VERSAILLES MO JACI HOWARD – URBANA, MO BRADY HUFFMAN – GALT, MO NATASHA HUGHES – BOLCKOW, MO CALEB HUMPHREY – WYNNE, AR ASHLEY HUNZIGER – FOREST CITY, MO WYATT HUNZIKER – CENTERTOWN, MO DEVIN ILLY – ELSBERRY, MO DEVIN ILLY – ELSBERRY, MO KATHERINE IMHOFF – CALIFORNIA, MO CAITLYN INGLIS – URICH, MO JESSICA JACKSON – DEVALLS BLUFF, AR DEAVEN JACOBS – SHELDON, MO MASON JAMES – PLEASANT HILL, MO JACQUELINE JANORSCHKE – ST JOSEPH, MO SAVANNAH JOCHEM – BUCKLIN, MO CAYDEN JOHNSON – GALLATIN, MO ERIK JOHNSON – GALLATIN, MO ERIK JOHNSON – GALLATIN, MO CHANTEL KAPPELMAN – HIGGINSVILLE, MO LAYTON KARR – MONTREAL, MO LAYTON KARR - MONTREAL, MO

JAMEY KELLY – BLAND, MO KENDRA KENNEDY – NEOSHO, MO KENDRA KENNEDY – NEOSHO, MO BROCK KERTZ – STE GENEVIEVE, MO KAITLEN KING – LEBANON, MO MAKAYLA KOCH – HOUSTON, MO BAYLEY KOLL – LINCOLN, MO LOGAN KORFF – NORBORNE, MO KARISSA KRONER – MOBERLY, MO JANELLE LANGNER – OSBORN, MO LUCAS LANHAM – GLENWOOD, MO BRITNEY LAW ESS. – EAGL GODVE MI BRITNEY LAWLESS – FAIR GROVE, MO ALEXANDER LAWRENCE – ROCK PORT, MO ALEXANDER LAWRENCE – ROCK PORT, MO NATALIE LEFFLER – AMERICUS, KS KYNLEE LEHMAN – LAMAR, MO SARAH LEININGER – CLARKSDALE, MO MOLII LEMEN – CINCINNATI, JA MIRANDA LIGHTFOOT – BOLIVAR, MO MIKAILA LIVINGSTON – HARRISONVILLE, MO NICHOLAS LODDER – ROTHVILLE, MO LAUREN LONG – LANGLEY, OK PACHEL IDGEVZ – DILOT GODUE MO LAUREN LONG – LANGLEY, OK RACHEL LORENZ – PILOT GROVE, MO GARRETT LOUISELLE – STOVER, MO SARAH LUALLEN – CABOOL, MO CALEB LUCIUS – PARAGOULD, AR PEYTON MADDOX – BELL CITY, MO FAITH MANNING – CAMDENTON, MO LUCAS MARTIN – PARAGOULD, AR EVERETT MARTIN – SPRINGFIELD, MO LYNDSI MARTIN – CLARKSBURG, MO MELINA MATHENEY – MOVINGER MO LYNDSI MARTIN - CLARKSBURG, MO MELINA MATHENEY - NOVINGER, MO TIMOTHY MAY - COLUMBIA, MO DERRICK MAYES - HUNNEWELL, MO TORI MCAFEE - WINONA, MO JARRELYN MCCALL - LONOKE, AR DILLON MCVEY - ALMA, MO KARLIE MEEKS - MOUNT VERNON, MO JONATHAN MILLER - POPLAR BLUFF, MO ZACHARY MITCHELL - STOTTS CITY, MO TRENT MOORE - COPYDON IA ZACHARY MITCHELL – STOTTS CITY, MO TRENT MOORE – CORYDON, IA SABRINA MORTIS – ROLLA, MO KEEGAN MORTIS – RUILA, MO CURTIS MOSSBARGER – NEW CAMBRIA, MO BRHET MUMMA – RICH HILL, MO BRADY NEIL – PALMYRA, MO JONI NELSON – BRAYMER, MO RENEE NELSON – VANDALIA, MO CLIFFORD NICHOLS – CLINTON, MO MADISON NOITE – CHAMOIS MO MADISON NOLTE – CHAMOIS, MO MADISON NOTE – CHAMOIS, MO ANDREW NUNN – LAGRANGE, MO ASHLEIGH NYE – CABOOL, MO JOEL OGLETREE – MACOMB, MO FREDRICK PADILLA – SULLIVAN, MO ABBY PALSA – CARLISLE, AR ABDT PALSA – CARLISLE, AR Marissa Paris – Pleasant Hill, mo Bailey Parish – Camdenton, mo Madeleine Pearson – east prairie, mo Joshua Petzoldt – Marshall, mo JOSHUA PETZOLDT – MARSHALL, MO COLBY PEUKERT – BEVIER, MO ARIEL PIERCE – VIENNA, MO LARYN PINKSTON – LAPLATA, MO CALE POTTER – CARTHAGE, MO GRANT POWELL – STROUD, OK TANNER PREGER – RUSSELLVILLE, MO MORGAN PRICE – ASHLAND, MO KATHERINE PRICE – ASHLAND, MO STEPHEN PRICET – COLIMBIA MO KATHERINE PRICE - ASHLAND, MO STEPHEN PRIEST - COLUMBIA, MO TAYLOR PULLIAM - BIRCH TREE, MO CALEB QUINLAN - MEXICO, MO EMMA RADEMACHER - DAWN, MO COLTON RADEMACHER - DAWN, MO COLTON RADEMACHER - OWENSVILLE, MO ERIN RADER - MARSHFIELD, MO ABIGAIL RAY - ST JAMES, MO JUSTIN RAYBURN - HAMILTON, KS BEAU RECTOR - LEXINGTON, MO MADYSON REIBOLDT - NEOSHO, MO JACOB REINER - CUBA, MO KENZIE RENO - EAGLEVILLE, MO TAYLOR RETHERFORD - LAFE, AR KOBY REYNOLDS - HOPKINS, MO KIRSTEN RICHEY - RECTOR, AR WILLIAM RIESTER - HALLSVILLE, MO ETHAN RILEY - WESTBORO, MO ETHAN RILEY – WESTBORO, MO JORDAN RING – CHILHOWEE, MO BRAYDON ROBERTS - ST CLAIR, MO

TANNER ROBERTSON – SPARTA, MO ABBY ROBINSON – PERRYVILLE, MO WILLIAM ROBINSON – WELLSVILLE, MO NICKOLAS ROBINSON – LINN, MO NICKOLAS ROBINSON - LINN, MO NICHOLAS ROMINE - CENTRALIA, MO TYLER ROPER - LICKING, MO ALLISON ROSENBURG - NEWBURG, MO ANNA ROSS - KAHOKA, MO ALLIE RUNDE - PARNELL, MO KYLE SACHS - TROY, MO ERIN SALSBURY - GUILFORD, MO AARON SANDER - TRUIFORD, MO SYNDEY CANDERS - TRUIFT MO ERIN SALSBURY - GUILFURN, MU AARON SANDER - CULUMBIA, MO SYDNEY SANDER - TRIPLETT, MO KELLI SCHIEBER - STANBERRY, MO BLAKE SCHLITT - ORAN, MO KARLIE SCHMIDT - NEW FLORENCE, MO BENJAMIN SCHNELLE - LOCKWOOD, MO JOSHUA SCHOONOVER - CAINSVILLE, MO MEGAN SCHREINER - BROWNING, MO MATTHEW SCHUMANN - JACKSONVILLE, MO EMILY SCOTT - WENTZVILLE, MO JOHN SCRIVENER - ROCKVILLE, MO ANIGALI SEIPEL - CALLAO, MO AUGUST SHIELDS - WHEATLAND, MO NOAH SHRABLE - CAULFIELD, MO REBECCA SJOSTRAND - HARTSBURG, MO HUNTER SMITH - VAN WERT, IA RYAN SMITH - VAN WERT, IA RYAN SMITH - SLATER, MO CORTNEY SMITHERAM - ELKLAND, MO CORTNEY SMITHERAM - ELKLAND, MO CORTNEY SMITHERMAN – ELKLAND, MO COREY SMOTHERS – ELMER, MO RYAN SMYSER – SHERIDAN, MO KAILEIGH SNYDER – GREEN FOREST, AR ASHLEY SPEAR – LOUISBURG, MO SETH SPEICHINGER – BROOKFIELD, MO GAVIN SPOOR – MARTINSBURG, MO KADY SPRY – FAYETTE, MO JED STAHL – LAMAR, MO MADIGAN SETIETE – MARYVILLE MO KADY SPRY – FAYETTE, MO JED STAHL – LAMAR, MO MADISON STELTER – MARYVILLE, MO VANESSA STEPHENS – DEXTER, MO JACOB STIVERS – GREEN CASTLE, MO JACOB STIVERS – GREEN CASTLE, MO JACIS STORY – WILLOW SPRINGS, MO RYLEE STREIT – HOLDEN, MO RIVER STURGES – MIAMI, OK HUNTER SUMNER – SKIATOOK, OK LOGAN SUNNARBORG – SEDALIA, MO SIDNEY SYKES – LAPLATA, MO ROY TARVIN – REPUBLIC, MO BLAKE TEMMEN – WESTPHALIA, MO GARETT THELE – LEOPOLD, MO JULIE THOMPSON – MONETTE, AR MEREDITH THOMPSON – ROLLA, MO DAKOTA TOWNSEND – EAGLE ROCK, MO LUKE TROYER – COLUMBIA, MO MACKENZIE TYNON – MORAN, KS KAYLEE UMPHREY – STURGEON, MO KJIA UNDERWOOD – COLUMBIA, MO MACKENZIE TYNON – WARRENSBURG, MO HALEY VENOLIA – NIANGUA, MO MORGAN WALL – BUFFALO, MO SHAELA WATERS – MOUNTAIN GROVE, MO COLLEEN WARBURTON – HALE, MO VICTORIA WARD – MEMPHIS, MO MADISON WATERBURY – PATTONSBURG, MO ALLISON WEFKLEY – BLACKWATER. MO MADISON WATERBURY - PATTONSBURG, MO ALLISON WEEKLEY - BLACKWATER, MO ABBY WELLS - NEWTOWN, MO ABBY WELLS – NEWTOWN, MO SHELBI WELSH – CROCKER, MO HOLLY WETTERLING – HUMESTON, IA ABIGAIL WHEELAN – PARIS, MO DYLAN WHITE – BOWLING GREEN, MO BRANDON WHITLEY – ST CLAIR, MO MORGAN WIELAND – BUNCETON, MO BAILEY WIGGINS – SPARTA, MO JESSE WILLIAMS – CORNING, AR CASSIDYWIL I JAMS – GORVIESPENING M CASSIDYWILLIAMS - GROVESPRING, MO CASSIDYWILLIAMS – GROVESPRING, MO MELISA WILLIAMS – ODESSA, MO JORDAN WINNINGHAM – NEW FRANKLIN, MO ASHLEY WISE – HERMITAGE, MO KAYLI WOMACK – LAKE CITY, AR IRIS WORMINGTON – MONETT, MO JAMES WRIGHT – BERTRAND, MO MEGAN YOKLEY – MOUNDVILLE, MO TIERANN ZELL – MEADVILLE, MO

••••



# FARM ECONOMY CONTINUES TO TIGHTEN

#### **By Adam Buckallew**

It wasn't long ago that U.S. farmers were enjoying booming business as farm incomes for row-crop producers swelled from 2007 to 2013, propelled by record exports and strong demand for biofuels. Now on the other side of the coin, many farmers are faced with commodity prices that will make it a challenge to simply break even.

The U.S. Department of Agriculture (USDA) projects farm income to fall for the third straight year. Farm profitability has plunged to its lowest level since 2002 and the second-lowest total in more than 30 years. The USDA projection calls for farm income to fall 56 percent from its peak of \$123.3 billion in 2013 to below \$55 billion this year.

20

"Momentum in the farm economy has shifted over the past three years," says Jeff Houts, executive vice president and chief operations officer for FCS Financial. "Farm receipts are projected by USDA to continue their downward trend although at a decreased rate of decline. With the shift in overall income trend in a downward slope, a transition period is created where many questions lead to varying levels of uncertainty in decision making for farm producers and supporting agribusinesses. Commodity price decline has made the overall size of the pie smaller. How the pie is sliced and whether it will satisfy the corresponding appetite for that related piece of the integrated ag economy is yet to be determined."

Economists at the Federal Reserve Bank of Kansas City observed the ag economy continued to weaken in the first quarter of 2016 and expect it to remain soft throughout the year.

"The weakening has been relatively gradual over the past few years, but it has been persistent and has intensified in recent months amid mounting financial stress for some agricultural producers," the Kansas City Fed says. "Future cash flow appears likely to remain a top concern for producers over the coming year as agricultural credit conditions, and the path of interest rates, evolve."

### THE ROAD TO LOWER PRICES

Why have corn and soybean prices fallen so much in recent years? The short answer is supply and demand. U.S. farmers planted record-breaking soybean crops in 2014 and 2015. Likewise, the United States has produced its three largest corn harvests the past three years. Unfortunately, crop production in the United States has expanded faster than consumption.

Cortney Crowley, an economist with the Kansas City Fed, says, on average, U.S. inventories of corn, soybeans and wheat have increased more than 100 percent since 2013, while consumption has increased just 7 percent over the same period.

"In addition to stagnant domestic demand, softening global demand and growing competition are hampering U.S. exports of agricultural products," Cowley notes.



Low corn and soybean prices have put pressure on farming budgets.

While U.S. farmers have been busy harvesting record crops, their counterparts in South America and the former Soviet Union have been steadily increasing their production to near-record levels. This has pushed worldwide stockpiles higher and put downward pressure on crop prices.

At the same time, the value of the dollar has risen, making U.S. agricultural exports more expensive in comparison to those of Brazil and Argentina. This has created trade headwinds, and USDA forecasts 2016 agricultural exports at \$125 billion, \$14.7 billion less than those from 2015.

### **CHALLENGES AHEAD**

Despite the depressed levels of commodity prices, the cost of seed, fertilizer, herbicide and other inputs have been slower to fall. The elevated production costs are keeping farm profit margins tight, and in some cases, breaking even may be the best farmers can hope for. Consequently, farm income is expected to remain low through 2016 while farm debt grows.

The Kansas City Fed issued the results of its first quarter Ag Credit Survey on May 12. The survey shows growing concerns about the agricultural economy among bankers in the Fed's Tenth District, which encompasses Colorado, Kansas, western Missouri, northern New Mexico, Nebraska, Oklahoma and Wyoming.

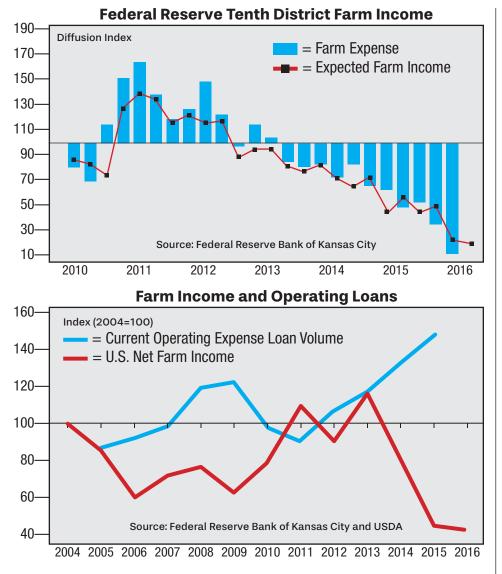
Respondents to the survey indicated poor cash flow prevented many borrowers from paying off loans from the previous year, causing them to carry outstanding debt into the first quarter. The number of farmers with more carry-over debt than a year earlier increased from 18 percent in 2015 to 29 percent in the most recent quarter. Moreover, bankers noted that more than 18 percent of loans made in the first quarter involved restructuring existing debt to meet short-term liquidity needs.

Loan-repayment rates have fallen for the 10th consecutive quarter, which the Kansas City Fed says is the longest run of deteriorating repayment rates since the early 2000s. While farm loan delinquency rates remain low, growers with significant debt may face continuing stress.

"This most recent uptick in loan demand may be more concerning because it has coincided with a period of falling repayment rates, softening farmland values and increasing collateral requirements," the Kansas City Fed reports.

Houts acknowledges the difficult financial conditions farmers are facing but thinks change may be coming sooner than expected.

"Some agricultural businesses have already or are in the process of making adjustments which will support enhanced profit opportunities in this changing environment," Houts says. "Many believe multiple years of challenge lie ahead of us. Rate of change is on a strong and continuing trend of acceleration. I feel this acceleration in rate of change will support



a positive correction sooner rather than later based upon the strong fundamental demand position held by agriculture in the world economy."

Although financial stress has continued to increase throughout the U.S. farm economy, Houts does not foresee the development of a farm crisis like the one seen in the 1980s.

"It appears to be a substantially different situation, and as such we shouldn't see the same outcomes," Houts says. "The interest rate environment associated with the debt capital required by capital-intensive agriculture is lower and appears more stable. The overall economic situation and rate of inflation is substantially different now when compared to those factors during the 1980s. Access and availability to information and the tools supporting management of the farms and ranches is historically unprecedented. The present situation with transparency of information and the tools to support changes in operating structure and strategy are at a level producers during the 80s could only dream about."

### **MANAGING RISK**

Although outright defaults in the farm sector have been limited to date, Nathan Kauffman, assistant vice president of the Kansas City Fed and Omaha branch manager, says some producers could face difficulty financing their operations in the coming year.

"Banks are taking proactive measures to reduce risk by increasing the amount of farm real estate used to collateralize large non-real estate (operating) loans and raising interest rates slightly. Though farmland values have remained relatively strong, a poor outlook for cash flow could continue to pressure a larger share of farm borrowers



Jeff Houts, FCS Financial executive vice president and chief operations officer

in the coming year, particularly those most highly leveraged," Kauffman says.

Houts says there will be some farmers who are better prepared than others to weather the downturn in commodity prices.

"Liquidity is a welcome and powerful tool in uncertain times," Houts says. "Farmers and ranchers who are highly leveraged especially in financial or operational areas where material adjustments have and are already occurring (i.e., high capacity equipment, more marginal production land financed or rented) can be more vulnerable. Overall, the financial leverage of the farm sector is well-positioned. Leverage will trend higher for many, and those already carrying above-average leverage will need to aggressively manage to ensure future sustainability."

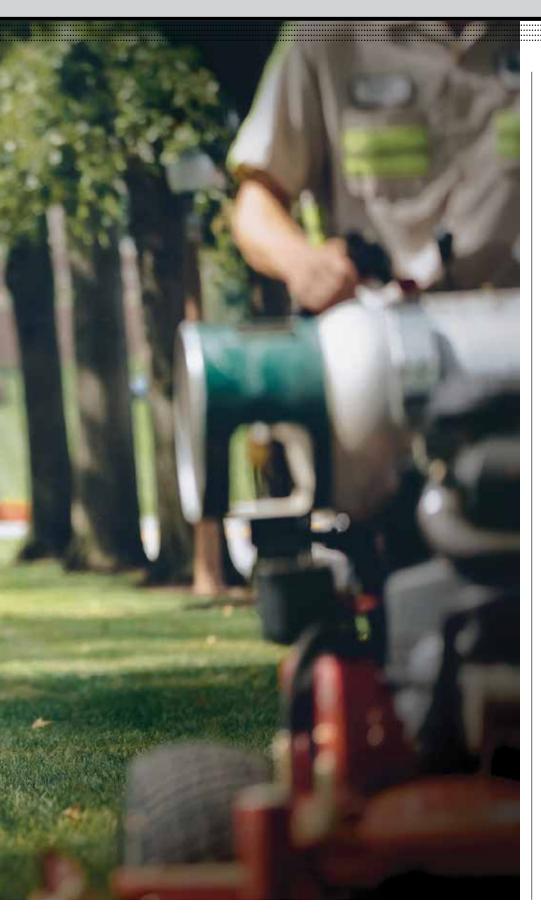
In these turbulent times of financial stress, Houts says it is imperative that farmers have a firm grasp of balance sheets and related data.

"Know the strengths and weaknesses of your operation and don't rely on generalities," Houts says. "Know your breakeven and what operating strategies provide your business the best risk/reward balance. Gathering and documenting the facts of your specific business empowers you to eliminate many of the uncertainties which you can control. Facts empower management and provide a level of internal confidence which supports good decision making in externally uncertain times. Strong liquidity provides management flexibility. Operating decision anchor points like 'break even' and financial fundamentals are powerful in all economic scenarios."

# **M \*\*** THE BIG PICTURE

Photo by Geoff Johnson

ULTRACOT 60



### Propane-Powered Mowers Cut Grass, Emissions and Upkeep Costs

Landscape contractors, corporate maintenance crews and government agencies looking to improve the sustainability of their mowers are increasingly turning to propane. The cleanburning nature of propane reduces harmful carbon emissions compared with conventional fuels. Propanepowered mowers reduce greenhouse gas emissions by more than 15 percent and carbon monoxide emissions by more than 40 percent compared with conventional mowers.

The reduction in emissions from propane mowers not only is good for the environment, but also provides financial advantages. In many places around the country, propane mowers are being used on ozone action days when other mowers are not permitted to operate.

Additionally, because propane mowers burn cleaner, maintenance crews no longer need to worry about carbon deposits or particulate matter contaminating their engines. This means less maintenance (including fewer oil changes), a longer engine life and improved productivity compared with conventional mowers.

*To learn more about propane mowers, contact your local MFA Oil propane plant.* 

### Brothers Partner to Start Farming Careers

700-

Q

~~

1.

### Story and Photos by Adam Buckallew

Farming profit margins look slim for the 2016 crop year, but that's not dampening the enthusiasm of Drew and Luke Mitchell. The downturn in the agricultural economy has provided the Mitchells with a golden opportunity: the chance to rent 800 acres of farmland in central Arkansas. As older farmers look to retire or rent out their land due to the current tough pricing environment, it is providing a chance for beginning farmers, like the Mitchell brothers, to pick up land.

Ø

Access to land is one of the most significant barriers to kick-starting a farming career. According to a U.S. Department of Agriculture survey of land values from August 2015, farm real estate is valued at an average of just more than \$3,000 per acre. In some areas of the Corn Belt, it goes for as high as \$6,350 per acre. Considering most young farmers have limited access to capital, it can be hard to find acreage that is affordable to farm.

"I really think this is one of the only times we could've gotten into farming," says Drew. "If everything was still really good, you wouldn't see people wanting to get out or people being forced out like they have been. I look at it as a blessing to have the opportunity. Yeah, it's going to be tough as we're starting out, but once prices start to rebound, we should be in a decent position to succeed."

### THE CALL TO FARM

Scott Mitchell never encouraged his boys to farm. He didn't want them to feel pressured to follow in his footsteps. If they wanted to farm, Scott wanted it to be their decision.

"If a person doesn't want to farm or they aren't sure if they want to farm, they shouldn't do it," Scott says. "The people that need to farm are the ones who just aren't happy unless that's what they are doing. You've got to be in it for the long haul. There are years that we pay to farm, there are years where we break even and then there are some when we make money. It's a marathon."

Drew, 28, and Luke, 26, both left the farm after graduating from high school to attend college and seek careers outside of agriculture. Their experiences away from the farm only served to reinforce their desire to return to farming.

"I was working out of an office selling insurance for a time," Drew says. "It didn't suit me. I missed farming."

Luke also figured out he wanted to return to the farm after a brief stint away.

"Farming has always been in the back of my mind," Luke says. "I got a degree in psychology and was working at the probation and parole office in Conway, Arkansas. I quickly found out that wasn't what I wanted to do every day for the rest of my life. That helped me make up my



mind about farming. It's not always easy, but it's something that I enjoy."

Scott gladly welcomed his sons back into the family farming operation.

"This is what they wanted to do. I couldn't tell them no," Scott says. "They both have college degrees, but they wanted to farm. We're fortunate enough to have a family farm but we were thankful that this opportunity came along for them to rent their own land. To find 800 acres like they did, that's pretty fortunate."

### **OPPORTUNITY CALLS**

The way prices were trending in 2015, Scott had a feeling his sons would eventually find an opportunity to acquire land.

"There's so many older farmers, and those guys can't farm forever," Scott says. "We knew a few bad years would probably open up some acreage. When beans are at \$12 and corn is at \$5, people won't quit because they are making money. They may be 75 years old, but they don't want to retire because they're making money. When things get bad, those older guys see they can rent their land out while still turning a profit with no risk. That opens up opportunities for young farmers who are looking to rent land. The trick is, you've just got to be able to stay in business through those difficult years."

When Scott got a call with an offer to rent 460 acres last November, Drew and Luke saw the opening they had been waiting for.

"I was struggling with how to help my boys begin their farming careers, so this acreage becoming available was a real blessing," Scott says.

In late February, as the Mitchells were making preparations for the upcoming planting season, they got another phone call.

"We found out about some land that was up for rent that we thought was already leased out," Drew says. "We threw our name in for the land, and we were lucky enough to pick up an additional 340 acres."

The brothers were able to secure an operating loan to cover their farming



expenses for their first crop. One thing that helped keep their costs down was a leasing agreement they have arranged with Scott. Rather than being forced to purchase their own costly equipment, Drew and Luke are leasing Scott's machinery.

### "THERE'S NOT A BETTER TIME TO START FARMING THAN IN A DOWN CYCLE...IT TEACHES YOU TO BE A BETTER FARMER BECAUSE YOU HAVE TO MANAGE EVERYTHING CLOSELY." - SCOTT MITCHELL

"We sat down and talked with our loan officer, and he told us he's seen this approach work," Luke says. "Leasing the equipment from our dad helps our family spread its cost over 26 percent more acres, and this way, Drew and I don't have to worry about making payments on an equipment loan. We're probably going to have to work longer hours to make sure we get everything done in time, but it's worth it." Scott Mitchell (center) is excited to see his sons, Drew (left) and Luke, carry on the family tradition of farming. Drew and Luke represent the fourth generation of Mitchells who have chosen to farm.

### GETTING OFF ON THE RIGHT FOOT

Since they are relatively unfamiliar with the fields they will be farming, Drew and Luke are taking a conservative approach to their first crop.

"We want to start off with what we think are the safest crops, so we're planting rice and soybeans this year," Luke says. "Eventually we'll probably add some corn, but not this year. Prices don't quite make sense for corn at the moment. Corn is riskier, because we don't know the history of those fields and how much water is on each farm for irrigation yet."

The Mitchell brothers have plenty of farming experience thanks to summers spent working with their father and their recent employment on the family farm. This is Luke's fourth year back on the farm on a full-time basis, and Drew has been back for two. Though they have acquired plenty of real-world, handson experience, they're not taking the management of their new farmland for granted. They have been busy attending classes to prepare them for the various management decisions they will face throughout the season. From chemical applicator training to yield workshops to courses on budget management, Drew and Luke are determined to hit the ground running.

Besides attending extension seminars and field days, Drew and Luke look to their father when they have questions. Scott's 32 years of farming knowledge are a great resource for the beginning farmers.

"Dad's got a lifetime's worth of experience that we can draw from," Luke says. "No matter how good of ground you have or how much water you can use to irrigate, you've got to know how to manage it to be successful. Being able to talk through questions and problems with our dad is invaluable."

Scott reasons that if Drew and Luke can make it with the current low prices in commodities, he has no doubt they will be able to succeed when prices eventually swing higher.

"There's not a better time to start farming than in a down cycle," Scott says. "When prices are up, you've generally got a good shot at making a profit, but when there's a down cycle, it teaches you to be a better farmer because you have to manage everything closely. If you learn how to do that it in hard times, it carries over to when things are really good."

### **NEW FOCUS**

Drew and Luke represent the fourth generation of Mitchells who have chosen to farm. Seeing his sons carry on the family tradition of farming has invigorated Scott. His role in preparing his sons to eventually take the reins of the family farm has Scott excited for the future.

"This has been like a spark that's given me new life," Scott says. "I was getting to the age where I didn't think it would be wise to buy or build anything new, but now that the boys are back involved on the farm, I'm not as worried about trying to come up with an exit plan. If Drew and Luke are successful and like farming, I'm in a good position. But more than that, we've now got three families that are dependent on our farming operation. That changes your mindset. I'm no longer simply working for my wife and I. I'm working for the future of my sons and their families as well."

Just as Scott's outlook on farming has changed, Luke says he and Drew are adapting to their newfound responsibility.

"It's a little different having your own acres. It's not a job that you can go home and forget about. It's always on your mind," Luke says. "There's lots of things you can't control, like the weather and prices. But the things you can control, you pay more attention to. If I see an empty coke bottle laying in a field, I'm jumping off the tractor to grab it and throw it in the trash. We take pride in our farm."

While Drew acknowledges there are many things outside their control, he says they concentrate on what they can.

"We're focused on working hard and keeping the right attitude about our work," Drew says. "We want to make the most of this opportunity." ☑



By Ashley McCarty, Missouri Farmers Care executive director

Giving legs to the motto "Stronger Together," MFA Oil fills a key role with Missouri Farmers Care (MFC), a joint effort of Missouri's farming and agriculture community to stand together for the men and women who provide the food and jobs on which communities depend. The coalition works statewide to foster opportunities in agriculture and build student and consumer literacy of agriculture and food production.

Formed in 2010, MFC now comprises 38 commodity associations, trade organizations and agribusinesses, which represent the vast majority of the state's farmers and ranchers. Members share the mission of promoting the continued growth of Missouri agriculture.

MFA Oil serves on the executive board of MFC, providing resources and guidance to the coalition.

"Missouri Farmers Care is playing a necessary role in educating the public, including local and state leaders, about the importance of agriculture within our state," says James Greer, MFA Oil vice president of supply and government affairs. "MFA Oil is proud to be working with the coalition to ensure the long-term viability of Missouri farmers and our rural communities."

Because more and more people grow up without ever setting foot on a farm, there is plenty of opportunity for confusion and misunderstanding when it comes to agriculture. This is why public outreach is a primary focus of MFC.

Agriculture's productivity and efficiency increases over the past 100-plus years have enabled many families to move to town or pursue careers off the farm. While this diversification of our economy is a strength, it leaves many of us disconnected from the farm, often by generations. Farm families understand this distance impacts people's understanding of the realities of farm life. We begin bridging this knowledge divide through education, communication and advocacy.

### **INVESTING IN THE FUTURE**

Through Ag Education on the Move (AEOTM), passionate educators teach third graders about agriculture and farm families through hands-on learning experiences. While addressing classroom objectives and state standards, students learn about crops, livestock, soil and water conservation, nutrition, and agricultural careers during the interactive 10-week program.

"When incorporated with science, history, writing and reading, agriculture can truly make an exciting and lasting impact on a child. From planting seeds to baking bread students learn through doing, and it is a wonderful thing," says Luella Gregory, AEOTM program director.

Students have the opportunity to create corn plastic, edible soil profiles, feed rations, butter and more. Hands-on visuals enhance their experience, as students explore cattle feed samples, ear tag systems, GPS units, and other crop and livestock byproducts. Through interactive lesson plans, students Left: Missouri Farmers Care has partnered with the St. Louis Cardinals to raise awareness of Missouri agriculture. The Farm Team, comprising [L-R] The Baconeer, Fredbird, Captain Cornelius, Simon the Soybean and Sweet Bessie, will be racing in Busch Stadium at every Friday night home game to increase understanding about food production in the Show-Me State. Right: Elementary students explore the parts of a soybean plant while learning about the soybean's life cycle, soy by-products and the importance of Missouri soybean farmers.

often take a virtual tour of beef, dairy, pork and poultry farms and learn the process from farm to table.

In addition to in-classroom programming, MFC sponsors tours for teachers to explore crop and livestock farms and agribusinesses in their area. Regional farm tours allow teachers to experience first-hand agriculture important to their region.

AEOTM has had more than 200,000 impressions since its beginning in 2011 with the Missouri Soybean Merchandising Council and soybean checkoff. Program efforts have an impact in communities across Missouri and continue to expand to urban areas and to enhance understanding of agriculture and its unique opportunities and challenges.

### SWINGING FOR THE FENCES WITH CARDINALS BASEBALL

Outside the classroom, MFA Oil and its partners in MFC have joined forces for an awareness and outreach campaign with the St. Louis Cardinals. Now in its seventh year, Race to the Plate connects St. Louis Cardinals fans with farm families who raise their food, fiber and fuel, linking them to trusted sources for their questions about agriculture and their food.

Race to the Plate runs through the regular season and, hopefully, into the postseason. Radio spots air during each of the Cardinals' regular season games on more than 140 Cardinals Radio Network stations spread across Missouri and neighboring states. Fans in the stands can enjoy watching the action during each Friday night home game as corn, soybean, dairy and pork mascots put it all on the line in a race to the plate for bragging rights. In-stadium videos highlight



facts about modern pork, dairy, soybean and corn production.

To warm up for the race, the Farm Team mascots, Captain Cornelius, Simon the Soybean, Sweet Bessie and the newest team member The Baconeer, can be found posing for pictures and answering questions about agriculture and food production. With average attendance at Friday games nearing 45,000, the second-highest attendance in Major League Baseball, and each game garnering more than 150,000 fans tuning in over the airwaves, Missouri agriculture's positive messages hit a home run with an estimated 3.5 million consumers each season.

"Whether sitting down to dinner with your family or grabbing a bite at the ballpark, we want everyone to feel confident that farmers have their best interests in mind," says Becky Frankenbach, Missouri Corn Merchandising Council director of communications and coalition coordinator. "This partnership with the St. Louis Cardinals shares insight on how farm families produce food and fuel and builds conversation and trust on how food is produced."

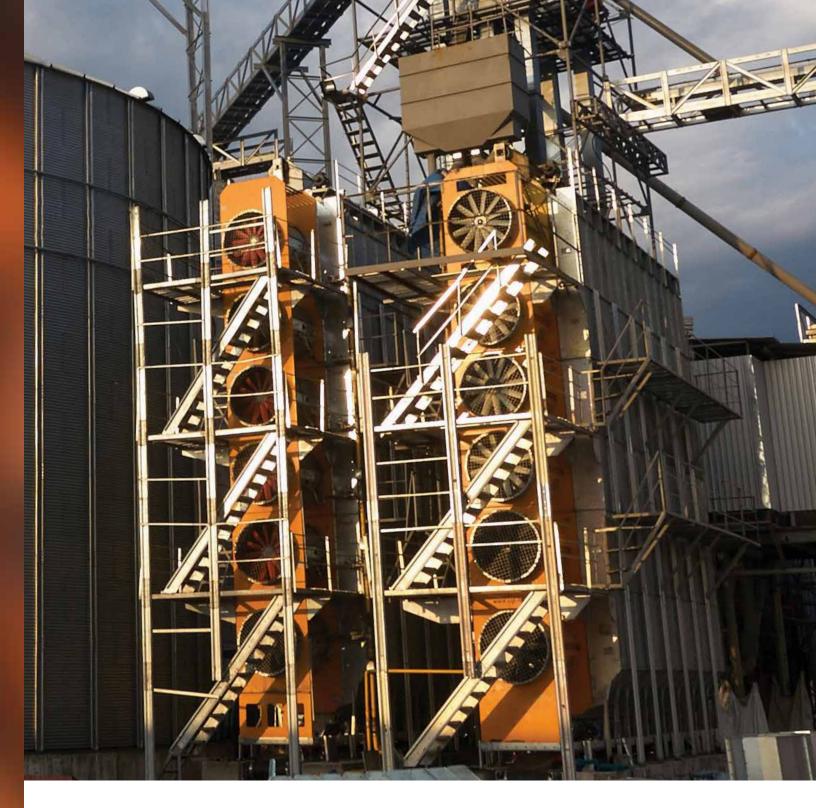
### EQUIPPED FOR GROWTH

MFC's newest initiative creates a partnership between coalition groups and Missouri counties. The Agri-Ready County Designation recognizes counties that actively support agriculture by establishing an environment and policies conducive to agricultural business success. MFC launched the Agri-Ready County Designation program in December 2015. Out of the gate, six counties have become designated: Audrain, Carroll, Dallas, Chariton, Cooper and Cole with more applications under consideration. "Agriculture is the lifeblood of our economy as our state's number-one economic engine," says MFC Chairman Alan Wessler, D.V.M. "The Agri-Ready designation supports the role that all farms, ranches and agribusinesses play in the state's economic health, but in particular our strong family farmer contingent. Agri-Ready County Designation provides a sense of certainty to family operations and agribusinesses, equipping them to grow and plan for the future."

County commissions must apply for designation, attesting to their willingness to promote agricultural stewardship, growth and opportunity and that the county does not have any ordinances that discourage, limit or restrict agricultural operations. Once a county achieves designation, MFC members use their extensive networks and available resources to promote the state's Agri-Ready counties and encourage and equip business entities to locate and do business in the growing list of Agri-Ready designated counties.

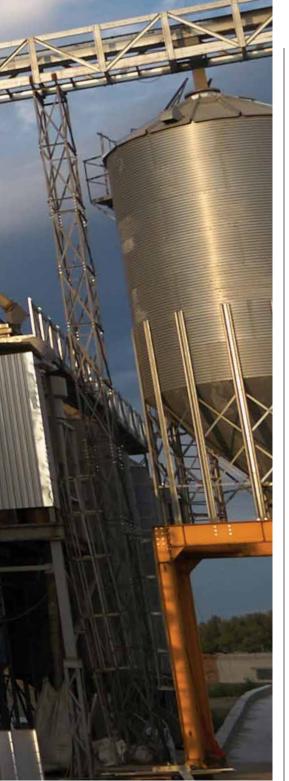
As the Agri-Ready program continues to build momentum, additional components will be offered to designated counties to enhance economic development, recruitment and entrepreneurship and equip students with the skills they need to be successful in the local workforce.

The Agri-Ready County Designation harnesses the potential for a strong partnership between MFC and leaders who know agriculture is important to the long-term viability of their county. Creating opportunities for innovation and expansion of agribusinesses, farms and ranches will benefit families, communities and Missouri.





By Adam Buckallew | Photos by the Propane Education and Research Council



Are you getting the most bang for your buck from your grain dryer? Research from the Propane Education and Research Council (PERC) suggests that unless you're using the latest grain drying technology, you may be leaving money on the table.

Grain dryers provide farmers with harvest flexibility that can save time and yield by reducing crop loss. Usage data collected by PERC shows



A Propane Education and Research Council study found farmers who converted from older, inefficient grain dryers to newer models reduced costs associated with yield losses and energy consumption by 43 percent.

modern propane-powered grain dryers can substantially reduce growers' fuel consumption and maintenance costs when compared with older equipment.

"Our study found that by converting from an older, inefficient grain dryer to a more efficient dryer, the farmers we surveyed reported they reduced costs associated with yield losses and energy consumption by 43 percent," says Cinch Munson, PERC director of agriculture business development.

Participants in PERC's 2014 Propane Farm Incentive Program tested 21 different models of propane-powered grain dryers by seven manufacturers. On average, participants rated the new propane dryers 72 percent higher than the models they replaced. The farmers cited favorable operating costs, reliability, environmental friendliness, equipment availability and ease of maintenance as key factors in their ratings.

While many farmers have experience with propane grain dryers, they may not be familiar with the latest models and just how far the technology has progressed.

Today's grain dryers require about half the thermal heat of older systems, which were already efficient. Newer grain dryers use approximately 1,650 BTUs to remove a pound of water, compared with older technology that takes as much as 3,500 BTUs. In addition to more efficient energy consumption, the newest generation of propane-powered grain dryers distribute heat in a more precise fashion that ensures grain dries evenly, resulting in higher yield quality. The new technology also comes equipped with convenient features such as remote monitoring and automated filling, unloading and shut-off.

Beyond the savings associated with upgrading to new equipment, Munson notes propane grain dryers can help cut hidden costs you normally don't factor in, such as yield loss.

### "WHILE MANY FARMERS HAVE EXPERIENCE WITH PROPANE GRAIN DRYERS, THEY MAY NOT BE FAMILIAR WITH THE LATEST MODELS AND JUST HOW FAR THE TECHNOLOGY HAS PROGRESSED."

"A timely harvest can maximize grain yield and profitability," Munson says. "Leaving crops in the field is only leaving things to chance. On-farm drying with a propane grain dryer puts you back in the driver's seat, with flexibility in harvesting and more control over marketing your grain. Instead of paying premiums to the elevator to dry your grain, you can dry it yourself. This gives you better control of your fuel costs and puts money back in your pocket."

# **The Rebalancing Act**

Energy prices fell significantly in early 2016 as a result of record supplies of all things energy. Prior to the recent dip, prices had generally been on the rise for most of the 2000s with the exception of the Great Recession, which began in December 2007 and stretched into 2009.

The higher prices created a lot of profitable opportunities for oil companies to look for crude oil, find it, pull it out of the ground and refine it into products. The increased exploration and refinement resulted in record stock levels of crude oil, gasoline and diesel fuel. Energy demand also took a hit after the Great Recession due to high unemployment and slower-than-expected growth in China. Consequently, the abundant supply and low demand created a recipe to drive energy prices to the lowest levels the market had seen in a decade in February 2016.

Since February, the market has seen a steady rebound off its lows, and the biggest factors helping to support prices have been the decline in capital expenditure by oil companies and a falling rig count that eventually will result in declining production.

The market continues to try to determine when the rebalancing of supply and demand will begin and at what point prices will find support and the risk of another plunge will no longer be a concern. In order for the market to rebalance itself, demand will need to pick up, production will need to drop or some combination of both will have to occur.

### HIGH SUPPLY - IS PRODUCTION ADJUSTING?

Stock levels for crude oil, gasoline and distillates have all set record highs in recent months. Crude stocks beat record-breaking thresholds with 538.6 million barrels on April 20, 2016. Gasoline stocks put in a record high of 258.7 million barrels during



the week of February 12, 2016. The supply of distillates stocks hit record levels with 165.5 million barrels during the first week of January 2016 and have since remained flat as strong production and low demand have kept stocks relatively unchanged. Gasoline supplies have been in steady decline since peaking in February while the stockpile of crude oil has steadily grown week after week.

The market has been watching the number of rigs drilling for crude oil decline substantially over the last year and a half, yet production surprisingly held steady above 9 million barrels per day until recently. The total number of U.S. oil rigs in operation is down 500 from the prior year as of April 28, and production seems to finally be heading lower. The U.S. Energy Information Administration (EIA) is predicting U.S. production will decline by 700,000 barrels per day, a greater drop in production than previously expected. Global crude oil production levels remain in flux in the short term as countries grapple with concerns over declining profits and market share.

### GAS DEMAND RISES, DIESEL FALLS

U.S. motorists took advantage of low gasoline prices to drive a record 3.1 trillion miles in 2015. As of early June, weekly demand estimates continue to show energy demand is on the rise. The EIA reported gasoline demand is up about 1 percent year over year so far in 2016, and the agency has forecasted gasoline demand to increase by 1.4 percent in 2016. Meanwhile, diesel consumption fell in 2015 by 1.5 percent, and EIA expects demand to drop an additional 1.8 percent in 2016.

### EYE ON THE FUTURE

As of the beginning of June, the U.S. supplies of crude oil, gasoline and diesel are above or near their respective 10-year averages. Prices have rallied from the February lows, but much of this has been driven by speculation from investors. The fundamentals do not seem to support the rally, but it's possible February's lows were overdone.

The market will need time to sort itself out as there are still a lot of questions that need to be answered about supply and demand. I think a correction is likely after this spring's rally. Keep your energy budgets in mind and an eye on Fall 2016 and Spring 2017 contract prices as the next several months could offer an early buying opportunity. **M** 



>> TIM DANZE is the hedging manager for MFA Oil.



# **SHARE THE LOVE.** REFER A FRIEND AND YOU'LL BOTH GET \$50.



As a current MFA Oil account holder, you can earn a \$50 MFA Oil gift card for every new propane customer you refer. There is no limit! And, not only will your friends enjoy friendly, reliable service, they will get a \$50 gift card too!



Call your MFA Oil Propane office or visit www.mfaoil.com to get started.

Some restrictions apply. Contact your MFA Oil Propane office for details.

# **Focused on Safety**

MFA Oil's guiding principles provide the company's board of directors with a clear vision of how to run the cooperative. Safety is always an important factor and makes up one of the six guiding principles.

"When you're working with refined fuel and propane, safety and compliance are not to be taken lightly," says Ronald Felten, who represents MFA Oil's sixth district on the board of directors. "We place a high priority on arming our employees with the tools and training they need to safely perform their jobs."

MFA Oil is in the process of conducting annual safety meetings with employees at 10 regional locations throughout the company's trade territory. These mandatory meetings for MFA Oil field staff serve as a refresher on a variety of safety topics such as HAZMAT protocol, extinguisher procedures and cylinder requalification.

"Our customers can feel confident that our drivers and field employees are state-certified professionals who have been properly trained," Felten says. "Our team of experienced staff follows a strict environmental, health and safety program that ensures we are in compliance with all local, state and federal regulations."

### "THE BOARD IS COMMITTED TO PROVIDING OUR EMPLOYEES WITH TOP-QUALITY EQUIPMENT." - RONALD FELTEN

Recent upgrades to the MFA Oil fleet of delivery and crane trucks have also improved the safety and working conditions of MFA Oil employees.

"The board is committed to providing our employees with top-quality equipment," Felten says. "Improvements in our equipment have the added bonus of enhancing not only employee and customer safety but also the efficiency of our business. That's a winning situation for all parties."



MFA Oil employees participate in a crane truck training session at the company's headquarters in Columbia, Mo.



Sergeant Scott White of the Missouri State Highway Patrol spoke to MFA Oil employees about driving safety, the importance of defensive driving and how to reduce the potential for traffic accidents.

# Acquisitions Improve Operating Efficiency and Solidify Trade Territory

MFA Oil Company recently acquired two new companies in Brownfield Oil Company, a refined fuels and lubricants supplier based in Moberly, Mo., and Terry's Propane, Inc., a propane supplier based in Washington, Okla. The acquisitions, MFA Oil's fifth and sixth of the company's fiscal year, are the latest in a series of purchases MFA Oil has made to expand its operating footprint and provide additional value to its members.

The Brownfield Oil purchase included a Sinclair gas station in Shelbina, Mo., and a Sinclair cardlock fueling facility in Kirksville, Mo.

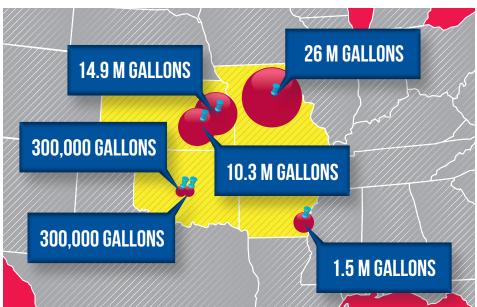
"Brownfield Oil serves an area where MFA Oil has a large market presence, making it a natural fit," says Don Smith, MFA Oil director of mergers and acquisitions. "It brings a significant amount of fuel volume to the company and will allow us to improve our operational efficiency."

In addition to bringing 26 million gallons of annual refined fuel volume to the company, the Brownfield Oil purchase brings fuel supply agreements for 17 independently owned Sinclair convenience stores in Missouri.

These contracts will be serviced by MFA Oil's Wholesale Load Division, APM, which supplies gas stations and convenience stores across the Midwest.

"The fuel contracts we've acquired from Brownfield Oil will provide substantial growth and momentum to APM," says Jon Ihler, MFA Oil vice president of sales and marketing.

Acquiring Terry's Propane strengthens MFA Oil's position in the central Oklahoma region and adds 300,000 of annual propane sales.



### **PROPANE & REFINED FUEL ACQUISITIONS FY 2016**

### SEPTEMBER 2015

#### Lybarger Oil Inc., Garnett, Kan.

• 10.2 million gallons of refined fuel and 4.7 million gallons of propane annually

#### **OCTOBER 2015**

#### Elaine Petroleum Distribution Inc. Elaine, Ark.

• 1.5 million gallons of refined fuel annually

### **JANUARY 2016**

#### R&S Propane, Inc. Dibble, Okla.

• 300,000 gallons of propane annually

"Purchasing Terry's Propane solidifies our presence in the Oklahoma City area and is a complementary fit with R&S Propane Inc., another company we recently acquired," Smith says. "Terry Reynolds, the former owner of Terry's Propane, has agreed to stay on and manage both operations for us. The ability to bring Terry

#### **FEBRUARY 2016**

#### S&S Oil and Propane Company Inc. Emporia, Kan.

• 5.2 million gallons of propane annually and 5.1 million gallons of refined fuel annually

### **APRIL 2016**

### Brownfield Oil Co. • Moberly, MO

 26 million gallons of refined fuel annually and 17 independently owned Sinclair convenience stores

### MAY 2016

#### Terry's Propane Inc. Washington, Okla.

• 300,000 gallons of propane annually

into our company was a key part of this acquisition, and we are very excited to have him join the MFA Oil Company team."

MFA Oil plans to continue evaluating acquisition opportunities in its existing market area and other states where it can expand its footprint.





Refill your propane cylinder with MFA Oil Propane. Find a location near you at www.mfaoil.com.



## APM Enhances Profitability for Independent C-Store Owners

American Petroleum Marketers, a division of MFA Oil, is a wholesale distributor of a broad spectrum of quality petroleum products for independently owned gas stations and convenience stores. Currently, APM operates in eight states across the Midwest, distributing more than 55 million gallons of fuel a year to its wholesale customers.

"We offer a wide selection of fuels, such as Top Tier<sup>®</sup> gasoline in almost any grade, regular and premium diesel, E85 and biodiesel," says Jesse Burg, APM senior dealer manager.

APM's service to its customers does not stop after a load of fuel has been delivered. APM has a large network of vendors it taps into to offer its clients group discounts. "Our customers can take advantage of MFA Oil's credit card sales volume for reduced processing fees," Burg says. "If you consider the thousands of credit card transactions that a c-store goes through in a month, there's an opportunity for the stores we work with to see significant savings thanks to our ability to negotiate favorable processing rates with the credit card companies."

Additionally, APM is actively working with its customer base to stay ahead of the ever-changing c-store environment.

"C-stores are in the process of adopting newer and safer technology, such as chip card readers, to offer peace of mind to consumers and increase their operational efficiency," Burg says. "Through our many vendor connections, we are helping our clients navigate this transition to the latest credit card processing technology while using our buying power to make the investment more manageable."

The other main advantage APM offers its customers is branding choices. Stores working with APM can choose to offer Cenex, ConocoPhillips, Shell and Sinclair branded fuels. APM customers have the option of tapping into these brands for marketing support, or they can elect to retain their own brand and identity.

"Bottom line, we are all about giving our customers options and working with them to find ways we can save them money," Burg says. "Whether that's through our bulk fuel purchasing, credit card processing or through quality control and fuel analysis by our laboratory, we're committed to helping our partners take their business to the next level." M

# NEWS BRIEFS

### MFA Oil Partners with MFA Inc. on Northwest Missouri Shuttle-Loader Facility

On May 2, 2016, MFA Oil Company and MFA Incorporated announced a joint venture to build a shuttle-loader facility on the Union Pacific Railroad approximately five miles east of Hamilton, Mo. The grain-handling facility will consist of 2 million bushels of permanent storage and 1.5 million bushels of temporary storage along with a loop rail siding to accommodate a 110-railroad-car "shuttle" unit. Once completed, the structure will allow farmers in north central Missouri and southern Iowa to deliver crops to a modern, high-speed grain facility. Its rail siding capacity will provide new efficiencies to MFA Incorporated's grain division as well as access to new markets.

The joint venture between MFA Incorporated and MFA Oil Company brings resources and expertise from both cooperatives and a significant investment in local communities. The facility will be operated by MFA Incorporated and is expected to bring five full-time jobs as well as seasonal part-time jobs to the region.

"This is a unique opportunity to aid local farmers by improving the transportation infrastructure in northwest Missouri," said Mark Fenner, president and CEO of MFA Oil. "We're always looking for ways to support our existing customers and attract new ones, and this joint venture with MFA Incorporated will help us do both."

"The shuttle loader helps fulfill our mission," said Ernie Verslues, president and CEO of MFA Incorporated. "MFA was formed more than 100 years ago to address lack of buying power and market access for farmers. We still take that mission seriously. This facility fits MFA's vision to grow in strategic, profitable ways that enhance the economic wellbeing of our member/owners."



From left: Ernie Verslues, president and CEO, MFA Incorporated; Don Mills, chairman of the board, MFA Incorporated; Benny Ferrell, chairman of the board, MFA Oil; Mark Fenner, president and CEO, MFA Oil.



### Greer Elected to Leadership of MPCA

James Greer, MFA Oil vice president of supply and legislative affairs, was elected to the Missouri Petroleum Marketers and Convenience Store Association (MPCA) operating committee on Feb. 19. Members of the MPCA operating committee cycle through leadership roles en route to becoming the association's president. The MPCA exists to promote the longevity and success of petroleum marketers by focusing on the protection of members' legislative and regulatory interests in Jefferson City and Washington, D.C.

### Annual Delegate Meeting Date Set



MFA Oil has announced it will hold its 87th Annual Delegate Meeting in Branson, Mo., on Nov. 15 and 16.

The annual meeting is where delegates conduct elections for the MFA Oil Board of Directors and approve the distribution of patronage for the year. The meeting is also a great opportunity to hear MFA Oil executives give an overview of the company's performance and outlook. A tradeshow takes place in conjunction with the annual meeting for delegates to learn more about MFA Oil operations, product offerings and latest initiatives.

Delegates are encouraged to save these dates on their calendar.

## Wholesale Load Division Provides Transport-Sized Deliveries to Customers

Established in recent months to meet the needs of large-volume customers, the MFA Oil Wholesale Load Division is now servicing a wide variety of businesses and government organizations. Our goal is to provide a quick and easy way to arrange for the delivery of transport-sized fuel loads.

The Wholesale Load Division handles the big deliveries that cannot be completed in a single trip by trucks at our local bulk plants. Typically, customer orders made through the division will be at least 7,000 gallons per delivery. We use a common carrier to deliver these orders directly from the fuel terminal to the customer. The Wholesale Load Division works with the MFA Oil Dispatch Department to ensure delivery efficiency on all orders to keep our bids competitive.

Customers can count on the Wholesale Load Division to meet their fuel needs from start to finish. We provide fast, accurate quoting, bid acceptance, delivery and invoicing. We strive to provide the best pricing, highest quality and rapid response to customer fueling needs. We do this by monitoring daily fluctuations in the market and provide purchasing advice to help our customers get the lowest price available. In the event a problem arises between the terminal and the delivery site, our dispatch team works with the carrier to ensure the delivery is made with minimal interruption to customers' fuel supply.

Once a bid has been accepted, we generate an invoice for easy payment by check, electronic funds transfer (ETF) or through our online payment service at www.mfaoil.com. We're currently working on adding an automated payment option that would give customers the ability to have their payments auto-submitted on their due date.

MFA Oil is committed to providing excellent service and making orders through the Wholesale Load Division a hassle-free solution to meet our customers' large-scale fuel volume needs. Give us a call at 844-8-MFAOIL to learn more.

 By Paul Samp, wholesale product distribution and dispatch manager



### >> WHOLESALE LOAD DIVISION

Customers interested in working with the Wholesale Load Division should call 844-8-MFAOIL (844-863-2645) and have the following information available:

- Product type(s)
- Additives
- Tank size
- Delivery date and location
- Purpose of use (agriculture, commercial or construction)
- Special instructions

## MFA Oil Foundation Helps Christian Academy Build New Classrooms

The MFA Oil Foundation provides cash grants to support nonprofit organizations that are working to improve communities in MFA Oil Company's trade area. The foundation's mission is to assist rural communities where the company has a presence by donating resources that help develop and strengthen organizations dedicated to education, youth, human services or civic endeavors.

The Bill Rice Ranch in Murfreesboro, Tenn., is one of many organizations recently selected to receive a grant from the foundation. The Bill Rice Ranch is a revival organization originally founded to provide ministry to deaf young people. Since its founding in 1953, the ministry has grown to serve both hearing and deaf people and now includes the Bill Rice Christian Academy, which serves more than 100 elementary school students.

Nathan Reeves, the administrator of the Bill Rice Christian Academy, says the school will use the grant money to construct and furnish a new classroom building to accommodate its growing student body.

### "WE APPROACHED SEVERAL BUSINESSES ABOUT DONATIONS, AND MFA OIL WAS THE FIRST, AND ONLY ONE SO FAR, TO MAKE A SUBSTANTIAL CONTRIBUTION TO OUR BUILDING CAMPAIGN." - NATHAN REEVES

"Our county has consistently been one of the top 10 counties in the nation for growth for several years," Reeves says. "Consequently, Bill Rice Christian Academy has grown an average of 15 percent per year for the last 10 years. Because of this growth, we are in need of more classrooms."



Chris Tynes, front row, center, manager of the MFA Oil propane plant in Murfreesboro, Tenn., presents a grant to the Bill Rice Christian Academy to help with the construction of a new classroom building to serve the school's growing student body.

The academy's building project will add four new classrooms and space for up to 60 additional students. The extra space will make it possible for the academy to offer high school classes once the addition is completed.

"We're thankful to the MFA Oil Foundation for its support," Reeves says. "We approached several businesses about donations, and MFA Oil was the first, and only one so far, to make a substantial contribution to our building campaign. Our local MFA Oil plant manager, Chris Tynes, has developed a good relationship with our ministry over the years, and we are so thankful for his friendship. Thank you, MFA Oil, for investing in what we do!"

"The Rice family and their ranch have been a big part of the Murfreesboro community for many years, and I'm glad the MFA Oil Foundation could provide them with help on their building project," says Chris Tynes, who manages the MFA Oil propane plant in Murfreesboro. "They serve a great number of children through their academy and summer church camps."

Since its inception in 1998, the MFA Oil Foundation has awarded more than \$1 million in grants. The foundation is primarily funded by pre-tax, nonmember income. Organizations interested in applying for a grant from the MFA Oil Foundation can do so online at www.mfaoil.com.

For more information on the Bill Rice Ranch, visit www.billriceranch.org.



# **Advantages of Low-Viscosity Motor Oils**

Choosing the right motor oil for your engine is an important decision. The wrong choice can result in reduced lubrication, expensive repairs and shortened engine life.

One of the factors to consider when selecting a motor oil is the viscosity. That's the measurement of how fast or slow the oil will flow through the engine. In the past an oil's flow properties were a crucial consideration because it would affect how well the motor was able to operate in various temperatures. While viscosity is still important, the lower-viscosity oils available today are capable of increasing engine performance and extending the life of engines in all temperatures. It's no longer just about cold startup.

"In the past, lubricant manufacturers would try to keep the moving parts of an engine separated by the thickest oils," says Don North, MFA Oil director of product development and quality control. "This worked well in older engines, but consumers and the government eventually began to demand more from their vehicles and motor oils. To meet this demand, lower-viscosity oils were developed."

Lower-viscosity oils pass more freely throughout engines, increasing oil volume circulation. This increases the ability of the oil to cool, clean and lubricate at all temperatures. This keeps moving parts separated by oil volume rather oil thickness.

"Picking an oil with the correct viscosity will help reduce wear and tear on the engine while optimizing its efficiency and performance."

Oils meeting the Society of Automotive Engineers' (SAE) low-temperature requirements have a "W" (which stands for winter/cold testing) after the viscosity rating (example: 5W), and oils that meet the high-temperature testing ratings have no letter (example SAE 30). Oils capable



of meeting temperature demands in both hot and cold environments are rated as multi-viscosity (example: SAE 5W30).

An oil is rated for viscosity by heating it to a specified temperature, and then allowing it to flow out of a specifically sized hole. Its viscosity rating is determined by the length of time it takes to flow out of the hole. If it flows quickly, it gets a lower rating. If it flows slowly, it gets a higher rating.

Lower-viscosity engine oils have become more common in gasoline engines, and now the heavy duty engine industry is moving in this direction. With this in mind, it's good to know what this means for your vehicles and equipment. There are many benefits to low-viscosity motor oils, including: better performance, longer engine life, improved fuel economy and lower exhaust emissions.

While lower viscosity offers many advantages, there is a limit to how low it can go.

"The engine oil has to be thick enough to offer enough protection to keep the parts from coming into contact with each other and to prevent wear," North says. "So you can't necessarily just keep going thinner and thinner without reformulating the oil and additives to keep the durability up." North suggests checking your owner's manual for the proper recommendation for your vehicle.

"It's best to use the viscosity grade recommended by the original equipment manufacturer of the engine and follow those guidelines to protect your engine's warranty," North says. M

### >> BENEFITS OF LOWER-VISCOSITY OILS IN ENGINES

- Reduced friction and wear
- Reduced friction and energy consumption provides as much as a 2.5-percent improvement in fuel efficiency
- Engines run quicker, cooler and cleaner
- Enhanced cold startups

   easier starting, faster
   lubrication, better engine
   protection
- Increased engine power with less drag
- Fewer exhaust emissions achieved with lower oil consumption and improved fuel economy
- Extended oil drain intervals



Let MFA Oil Propane keep your family warm this winter and you relaxed this summer.

Lock in your propane price now and take the guesswork out of budgeting your heating needs next winter. You can save money and take care of your family – with no hidden fees. Simply choose the payment option most convenient for you, and we'll do the rest!

WAYS TO SAVE 100% Pre-Buy: Pay 100% when you sign up.
4-Pay: Pay 25% down and 25% per month for 3 months.
Budget Billing: Make a down payment, then divide the balance over the remaining

months through April 2017.

www.keepwarm.com

