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Hardin • Tue., October 25

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Perryville • Tue., November 1 Pilot Grove • Mon., November 7 Pleasant Hill • Wed., October 5 Princeton • Thur., September 29 Purdy • Tue., October 4 Qulin • Tue., October 11 Ravenwood • Wed., November 2 Rolla • Wed., October 12 Salisbury • Wed., October 19 Sarcoxie • Wed., November 2 Shelbina • Thur., October 6 Sheridan • Fri., November 4 Sikeston • Tue., November 8 Springfield • Thur., October 20 St. Joseph • Fri., October 7 Ste. Genevieve • Thur., November 10 Stanberry • Sat., November 5 Steele • Thur., November 3 Sweet Springs • Thur., October 20 Tipton • Mon., November 7 Trenton • Tue., October 25 Union • Wed., November 2 Unionville • Tue., October 4 Vandalia • Tue., November 1 Warrensburg • Tue., October 4 Weaubleau • Thur., November 3 West Plains • Thur., October 13 Willow Springs • Thur., October 13 Windsor • Wed., October 26 Wright City • Tue., September 13

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>> LETTER FROM THE PRESIDENT

The Journey

I recently watched the movie
The Pursuit of Happyness. The
movie is based on the lives of
Chris Gardner and his son in their battle
out of poverty. My favorite part of the
movie occurs when Gardner refers to how
smart our forefathers were when writing
the Constitution. Specifically, he credits
the thought-provoking phrase, "Life,
Liberty and the Pursuit of Happiness." His
comment was specifically focused on "the
Pursuit of Happiness," and he wonders how
insightful they were to call it a pursuit.

It would have been easy to simply say, "Life, Liberty and Happiness," but how did they know to add the word "pursuit"? Perhaps, it's because life is a journey, and each day we are given the opportunity to pursue happiness.

You may be wondering how this relates to MFA Oil Company. To me, it's relevant because we too are on a journey – one that began in 1929 and continues today. Like our nation's forefathers, the men who founded MFA had tremendous vision. They got together in a small schoolhouse in Brunswick, Mo., and created an organization to make sure farmers and ranchers could competitively buy products and services.

Our mission remains the same to this day. We may go about it differently than they did in 1929, but we are still focused on providing farmers and ranchers with a good deal. We've adjusted with the times, just as farmers have embraced innovations in agricultural technology. Tractors have gone from gasoline-powered engines to diesel-powered ones. Lubricants have evolved from single viscosity products to ones with multi-viscosity options.

Similarly, MFA Oil has moved from fullservice stations to self-service options. We've added Break Time convenience stores, and Jiffy Lube and Big O Tire franchises. We've also gone from a few thousand dollars in sales to \$1.5 billion.



Just like the American farmer, we've adapted – and we will continue to do so to maintain our relevancy.

Though there have been changes throughout the years, MFA Oil still stands on the same solid principles that it did in 1929. These principles include a commitment to the following: fiscal responsibility; excellent products and service; operational excellence; ethics and corporate citizenship; safety and compliance; and hiring and retaining excellent employees. These core values have been embraced and consistently applied within this company for decades. Our job is to continue this legacy and never forget from where we came.

Cooperatively,

Mark Fenner President and CEO



ON THE COVER:

Honey bees play a pivotal role in supporting U.S. agriculture by pollinating many crops.



Fall 2016 • Vol. 1 No. 4

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 a 10-state region stretching from Georgia 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.

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Animal Agriculture Plays Key Role in Missouri



The value animal agriculture provides to the state of Missouri extends beyond the raw products leaving the farm gate.

The production of livestock, as well as other commodities, causes ripple effects throughout the economy in the form of employment; production in allied industries; taxes paid to local, state and federal governments; indirect impacts from purchases of input supplies; and induced impacts from household spending throughout the state.

A new report from the University of Missouri Extension Commercial Agriculture Program details how beef, dairy, poultry/egg, swine and other animal production and processing in Missouri provides more than 150,000 jobs, pays \$6.2 billion in labor income and generates \$11.7 billion in value-added products to the state's economy. Additionally, Missouri animal agriculture production and processing accounts for \$698.7 million in local/state taxes and \$1.4 billion in federal taxes.

"This is the first time we've aggregated all of the economic contributions of the various Missouri animal agriculture producers and processing facilities within the state," says Ryan Milhollin, an agricultural economist for the University of Missouri Extension and one of the authors of the report. "In the past, we've usually focused on specific industries, but with this report we're able to show the impact of the industry as a whole."

The report was compiled by analyzing the economic contributions of Missouri animal agriculture and processing industries at both the state and county levels. Using 2014 data, the researchers captured the economic effects produced from direct, induced and indirect contributions to summarize the value animal agriculture and its related businesses generate.

"This report provides useful metrics for animal agriculture producers and processors to show just how much value they are creating," Milhollin says. "From the jobs, income production, value-added industries and taxes, it's clear animal agriculture produces a sizable impact for Missouri and the individual counties that are home to these types of operations."

The detail provided for each of Missouri's 114 counties makes it easy to determine how much of an impact animal agriculture and its allied industries provide and shows counties that are more reliant on animal agriculture than others.

For example, in Sullivan County, animal agriculture and its associated businesses account for 72 percent of the local



economy. Other counties with animal agriculture representing a high proportion of the total economy include: McDonald (51 percent), Vernon (36 percent), Saline (32 percent) and Barry (30 percent).

The Missouri Soybean Merchandising Council commissioned the report as part of its efforts to support the state's livestock industry. Animal agriculture is a key player in the soybean demand situation and consumes 98 percent of the soybean meal that is produced in Missouri, or the equivalent of 3.3 million tons annually.

Milhollin says it's not hard to understand why the Missouri Soybean Merchandising Council funded the study.

"When you value-add to soybeans and animal agriculture products, it's good for the entire value chain from farmers, truckers, livestock producers, processors and input suppliers to consumers," Milhollin says. "A vibrant animal agriculture industry is beneficial for the state's row croppers as it creates substantial demand for their products. Likewise, a healthy crop market within the state gives animal agriculture producers easy access to large quantities of quality feedstuffs. Missouri agriculture is at its best when farmers, ranchers and livestock producers work together."

The full report is available at www.mosoy.org.



AGRICULTURE'S UNSUNG





When people think of farming or agriculture, they often imagine rows of crops, tractors and hard-working men and women dedicated to feeding the world.

While these ideas are mostly accurate, they overlook an important contributor known for its distinct buzzing and honeymaking prowess.

Bees, though small in size, are agriculture's unsung hero.

Both wild and honey bees play a vital role in supporting agriculture through pollination. To make honey, bees search for nectar, which comes from crops such as watermelons, almonds and strawberries. These crops' flowers contain pollen; which bees transfer from crop to crop as they search for more nectar. This process allows these crops to reproduce. Though seemingly simple, the impact these small insects have on agriculture is quite significant.

SMALL BUT MIGHTY

"Bees are very important," says Moneen Jones, a bee expert and assistant research professor at the University of Missouri. "One in three bites of our food are dependent on honey bees."

Honey bees and other types of pollinators, such as wild bees, butterflies, certain wasps and the wind, play a key role in plant reproduction.

According to the U.S. Department of Agriculture, pollination by managed honey bee colonies adds at least \$15 billion to the value of American agricultural products annually through increased yields and superior-quality harvests.

"Without bees, there is no us," Jones says.
"We wouldn't survive as a species without honey bees. We need them to pollinate our (food) products."

Many crops would disappear or significantly dwindle in number without bees. Apples, cherries, blueberries, avocados and many more crops require bees for the bulk of their pollination. Almonds, in particular, use more than half of the nation's managed honey bee

colonies and would be one of the first crops to disappear without bees.

Ray Nabors, a crop consultant and retired University of Missouri researcher and extension entomologist, says honey bees affect agriculture both directly and indirectly.

"If they aren't directly pollinating what you're selling, they are pollinating the seed crop that allows you to grow what you're selling," Nabors says.

Bees provide pollination for nearly three quarters of the 100 crops that provide 90 percent of the world's food. In North America, honey bees pollinate almost 100 kinds of fruits, nuts and vegetables.

Jim Duever, an apiarist, president of the Boone County Beekeepers Association and member of the Missouri Beekeepers Association, says honey bees can increase crop yields by 10 to 15 percent for certain crops.

DECLINING POPULATIONS

Despite their important contributions to the economy, bees have been facing massive declines in populations.

Bee populations saw a 44 percent decline in 2015 – a dramatic increase from the average decline of 15 to 20 percent per year.

Since 2006, Colony Collapse Disorder (CCD) has been a major issue plaguing honey bees. CCD is a syndrome specifically defined as a dead colony with no adult bees or dead bee bodies, but with a live queen. Scientists have yet to identify the cause of CCD, but theories abound for what may be causing entire bee colonies to disappear so quickly.

Jon Zawislak, apiculture instructor with the University of Arkansas Division of Agriculture, believes CCD is a result of overstressed bees.

"CCD could not be correlated to a single pathogen or environmental cause, but appeared to result from a combination of factors," Zawislak says. "Honey bees are being stressed out by many factors that include the Varroa mite, viruses that the mites vector, bacterial diseases, fungal pathogens, habitat degradation, poor nutrition and chemical exposure."



THE UNWELCOME GUEST

The Varroa mite, a destructive parasite that attacks honey bees and their brood, currently poses the No. 1 threat to bees, according to Zawislak. Varroa mites act as tiny vampires in a honey bee colony by sucking the blood of bees and spreading deadly viruses and bacteria.

"The mites stress the bees' immune systems, making them more prone to viruses," Zawislak says.

The mites typically spread by hitchhiking on foraging bees that invade other colonies weakened by Varroa infestations to steal honey. These bees become infected and can carry large numbers of mites back to their home colony.

Most beekeepers, like Duever, rely on miticides to battle mite infestations, but there are other ways to treat hives, including oils, acids, hive screen guards and replacing the queen with resistant stock. Duever treats his hives when he discovers a greater than 3 percent miteto-bee ratio.

TO PREVENT BEES FROM
SUFFERING ACCIDENTAL LOSSES
RELATED TO PESTICIDES AND
OTHER CHEMICALS, RESEARCHERS
RECOMMEND BEEKEEPERS AND
FARMERS COMMUNICATE.

Beekeepers cannot rely on the same product over and over again. Repeated

use of the same chemical will lead mites to develop resistance. Zawislak recommends beekeepers use a combination of different methods.

A LEARNED SKILL

In 2008, news about CCD made headlines, which, according to Jones, brought out waves of new beekeepers. The only problem was that these new, inexperienced beekeepers didn't know what they were doing.

"People were becoming beekeepers, but after two years, they started dropping out," Jones says. "People aren't being educated well enough on how to maintain bees."

Jones sees the lack of commonly known beekeeping best management practices as a major source of problems. Her hope is that beekeeping classes taught through University of Missouri Extension can help build a foundation of knowledge for all beekeepers. The Missouri Master Beekeeper Certification Program was developed to teach beekeepers the necessary skills needed to master the craft. Experienced beekeepers teach the classes, and mentors offer the necessary hands on experience to succeed. Classes are available for those who are just starting, and those who have been beekeeping for a while.

CHEMICAL CONTROVERSY

Another theorized cause for bee decline is the widespread use of pesticides. In 2013, Europe instituted a ban, though no longer in effect, on certain pesticides linked to harming bees.

To prevent bees from suffering accidental losses related to pesticides and other chemicals, researchers recommend beekeepers and farmers communicate.

"Many bee poisoning problems could be prevented by better communication and cooperation among the grower, pesticide applicator and the beekeeper," says a report by Purdue University's department of entomology.

"Most farmers do not keep bees,"
Duever says. "But many of them don't
mind beekeepers bringing them out
onto their property. They just need to
coordinate together so the pesticides
don't affect the bees."

Nabors, who worked as the University of Missouri's state apiary specialist for 20 years, suggests farmers need to be more conscience about bees when applying insecticides.

"The average person thinks it's possible to grow crops without crop protection products. That is wrong; we need them, but farmers must avoid spraying bees," says Nabors. "If growers would spray insecticides and pesticides in the evenings—even after dark—that would reduce a majority of the pesticide issues with bees."

Jones encourages farmers and beekeepers to work together because it benefits both



Missouri is home to approximately 3,000 of the nation's estimated 125,000 beekeepers. *Photo credit, Nathan J. Snodgrass.*

parties. To facilitate a more open channel of communication, she helped found the Missouri Pollinator Conservancy Program through MU Extension. The program offers resources and tools for beekeepers and farmers to communicate about pesticide usage.

Beekeepers can register apiaries through Mo.DriftWatch.org, a site that specifies locations of beehives to farmers who use pesticides. Once registered, beekeepers can purchase large, black-and-yellow flags to identify hives near crop fields for ground and air pesticide applicators.

"We would like to see all beekeepers in agricultural areas registering their hives," Jones says. "Sometimes there is accidental pesticide drift, and we want to protect beehives from that."

FINDING A SOLUTION

As the list of challenges facing bees grows, so do the number of organizations and researchers dedicated to finding a solution.

"The future of bees is uncertain," Zawislak says. "But there's a lot of people working on the problem."



He says the ultimate goal of researchers is to breed bees with a resistance to mites.

"We're a long way from our goal, but there are a lot of people who are willing to take up this challenge," says Zawislak.

Universities are making efforts to identify a solution to the problem. For example, Jones collects samples of honey, beeswax, pollen and bees from hobby beekeepers to test pesticide residue different. She hopes this data will help develop best management practice for beekeepers.

Her lab is also testing for tolerance differences between strains of honey bees to neonicotinoids, a type of pesticide once banned in Europe, to see if one strain is more innately tolerant than others.

Researchers, farmers and beekeepers aren't the only ones who can make an effort to save the bees. Nabors suggests people buy honey from local beekeepers.

"Local honey is important because you're helping to pollinate the state," Nabors says. "You're getting more out of it than just the honey."

Duever suggests people plant more flowers to support bees.

"If everyone added 10 percent more flowers to their yards, just imagine the amount of food that would be there to benefit bees," Duever says.

Though the challenges facing bees persist, the efforts to find solutions to the CCD phenomenon are encouraging. Researchers agree better communication combined with a deeper understanding of honey bee health and an appreciation for their pollination skills will keep agriculture's unsung hero buzzing and supporting the world's food supply.

CROP POLLINATION

Many important crops are pollinated by bees. The list below is just an example of some of the various crops that depend on bees to spread their pollen.

CROPS POLLINATED BY BEES:



Almonds



Apples



Limes



Alfalfa

Tomatoes



Strawberries



Watermelons

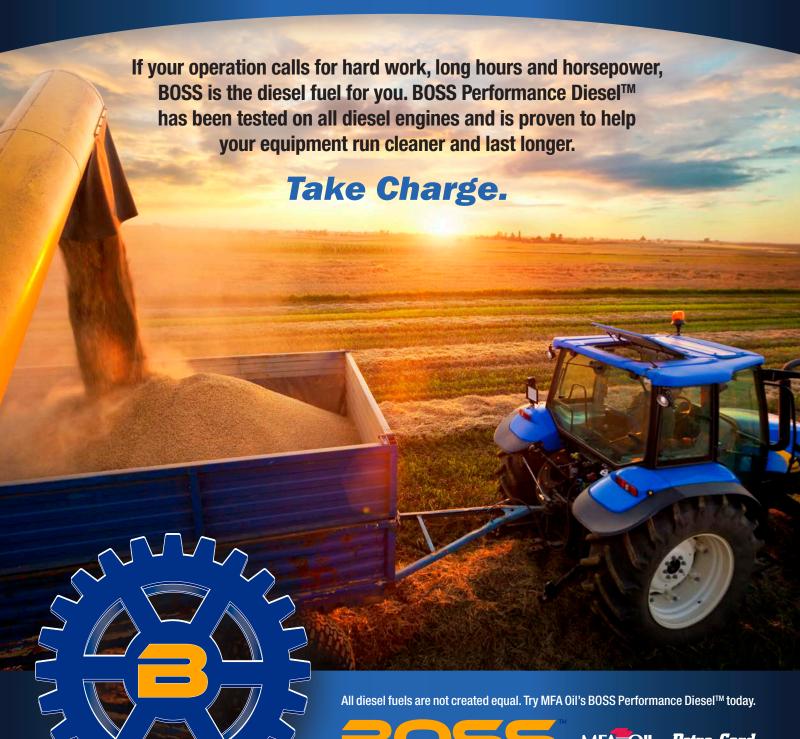




Oranges



HARD WORK AHEAD



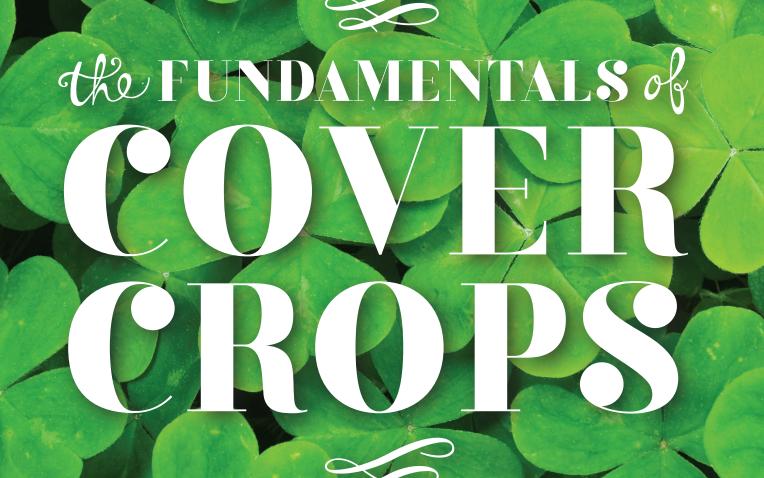


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By Alan Sundermeier, extension educator with Ohio State University Extension

FALL 2016

12 /// MOMENTUM



Recent environmental and ecological awareness has started a resurgence in cover crop use. Although cover crops have been used for centuries, today's modern farmer has grown up in a generation which has replaced the use of cover crops with widespread use of fertilizers and herbicides. Now as some farmers are trying to use cover crops, they lack the information and experience to be successful. University and private researchers are going back to the basics and are experimenting with beneficial plants to determine how they can be used best in modern farming practices to supplement or replace purchased inputs. Cover crops have an important role in successful sustainable farming systems.

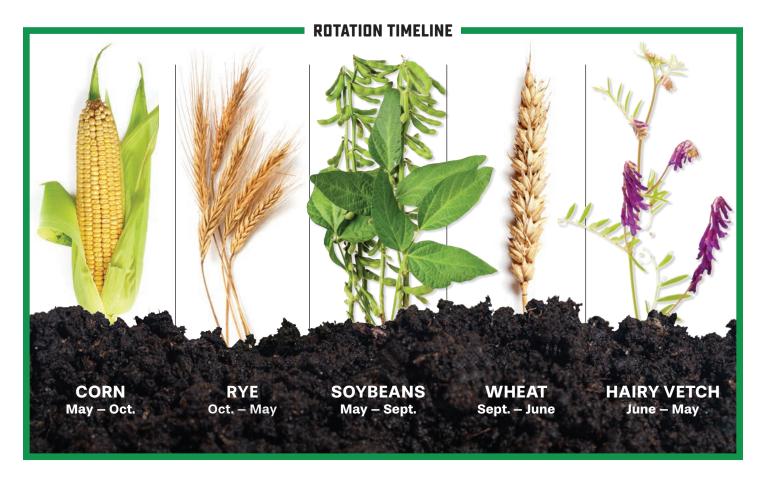
BENEFITS

The main purpose of a cover crop is to benefit the soil and/ or other crops but is not intended to be harvested for feed or sale. Some of the primary benefits from cover crops include:

- Soil quality improvements—Soil tilth is improved whenever a plant establishes roots and grows into compacted areas. Water infiltration is improved as well. When a field lays fallow for a period of time, the surface tends to seal and water will run off. Cover crops protect the soil surface and reduce sealing. Also, beneficial organisms in the soil, such as earthworms, thrive when fresh plant material is decomposing. Organic matter levels tend to improve with the addition of cover crops.
- Erosion control—Cover crops reduce wind and water erosion on all types of soils. By having the soil held in place by cover crops during the fall, winter and early spring, loss of soil from erosion is greatly reduced.
- Fertility improvements—Legumes can add substantial
 amounts of available nitrogen to the soil. Non-legumes
 can be used to take up excess nitrogen from previous
 crops and recycle the nitrogen as well as available
 phosphorus and potassium to the following crop. This is
 very important after manure application, because cover
 crops can reduce leaching of nutrients.
- Suppress weeds—A dense stand of winter rye or other cover crop can suppress weeds by soil shading.
 Allelochemicals from cover crops suppress the growth of other plants.
- *Insect control*—Beneficial insects, such as lady beetles or ground beetles, may be encouraged by planting cover crops.

WHEN TO PLANT

How do farmers get started with cover crops? First, they must determine how their farming system can accommodate cover crops. Ideally, as soon as one type of crop is utilized (harvested, killed or incorporated), the next is planted. In this way, active plant growth occurs from March to November each year. Look for open periods in each field's rotation where a cover crop can be planted. The rotation timeline on the next page illustrates opportunities for using cover crops in a corn, soybean and wheat rotation.



TYPES OF COVER CROPS

Selection of a cover crop depends on when it can be planted and the goal for its use. There are many cover crop species. Legume cover crops fix atmospheric nitrogen into a form plants and microorganisms can use. Non-legume species recycle existing soil nitrogen and other nutrients and can reduce leaching losses.

Legumes	Non-legumes
Clovers	Rye
Hairy Vetch	Oats
Winter Peas	Wheat
Annual Medic	Forage Turnips
Alfalfa	Oilseed Radish
Cowpeas	Sudangrass
	Buckwheat

A combination of two or more types of cover crops may be beneficial for quick establishment and improved nutrient utilization.

SEEDING

Seed cost, method of seeding and method of killing the cover crop should also be considered. Often, farmers are able to grow their own cover crop seed and save on seed costs. Larger seeds, such as hairy vetch and winter peas, can be planted through the normal hopper of a drill. Clovers may require a small-seeder attachment. Broadcasting cover crop seed can also be done with a fertilizer cart followed by light incorporation. If a legume is planted that has not been grown before, the proper inoculant should be added when seeding.

MANAGING GROWTH

There are some drawbacks to using cover crops. If the cover crop does not naturally winter-kill, then a farmer should have a method for killing the crop before it competes with the next cash crop. This can be done mechanically or by using herbicides. Cover crops can act as weeds if not controlled.

Timing is important when killing a spring growing cover crop. Cover crops should be allowed to grow as long as possible in the spring to add additional nutrients to the soil and suppress weeds, but they can also use up soil moisture and hurt the following cash crop if dry conditions exist. More management time is required to determine how and when it would be best to control the cover crop. Hard seed that did not germinate may also require control later in the season. Like any other crop, moisture is needed to establish a cover crop. This is especially critical during July and August.

RETURN ON INVESTMENT

The economics of using cover crops can be calculated by the savings of purchased nutrients and herbicides versus the additional cost of using cover crops. There are also other factors that are not easily credited to cover crop use, such as improved soil tilth, enhancing soil biology and improving organic matter content of the soil. Overall, as the costs of fertilizer and herbicides continue to increase, the benefits of using cover crops in a sustainable farming system will become more attractive to modern farmers. More research is needed to quantify the effects of cover crops so that research-based recommendations can be given to producers.

SURVEY REFLECTS ENTHUSIASM ECOVER CROPS

Insight from 2,020 farmers across the country reflected enthusiasm for cover crops and—for the fourth year in a row—found a yield boost in corn and soybeans following cover crops. Multiyear data shows the yield boost increases as cover crops are planted year after year, a revelation that points to an appealing long-term benefit of the conservation practice. The survey offers data unavailable elsewhere, providing a vital glimpse into farmers' use of and perceptions about cover crops.

The survey was conducted in March 2016 by the Sustainable Agriculture Research and Education (SARE) program and the Conservation Technology Information Center (CTIC) with help from the American Seed Trade Association (ASTA) and Purdue University.

Acreage planted to cover crops continued its steady rise among survey participants, reaching an average of 298 acres per farm in 2015 and projected to grow to a mean of 339 acres in 2016. Those figures are more than double the acreage survey participants said they planted in 2011.

YIELD BENEFITS OF COVER CROPS

Corn yields rose an average 3.4 bushels per acre, or 1.9 percent, after cover crops, and soybean yields increased 1.5 bushels per acre, or 2.8 percent. Analysis of the survey data revealed that yield increases rose to 8.3 bushels per acre of corn after cover crops had been used for more than four years on a field. In soybeans, the average yield gain increased from 0.1 bushel per acre after a single year in cover crops to 2.4 bushels after four years.

The modest average gains reported for 2015 are in line with agronomists' expectations for a good growing season, says Rob Myers, regional director, Extension Programs for SARE at the University of Missouri.

"Cover crops really shine in challenging years, when the improvements they influence on soil moisture holding capacity and water infiltration can minimize cash crop yield losses to stress," Myers notes. "In a favorable growing season, we expect to see less of a yield impact. However, the link between the length of time in cover crops and yield improvements points to the long-term benefits of building soil health.

"It's also important to note that two-thirds of this year's survey respondents agreed that cover crops reduced yield variability during extreme weather events," he adds. "These farmers are taking the long view and recognizing that not every season turns out like 2015."

Myers added that a mild surprise in this year's survey was how many farmers reported a profit benefit from cover crops. Of the farmers surveyed, 33 percent found their profit improved as a result of using a cover crop, while only 5.7 percent said their profit decreased. Remaining responses were split between those reporting no change in profit and those not yet having enough data/experience to evaluate profit impact.

MORE THAN MONEY

"The vast majority of cover crop users report the most important benefits of cover crops to be improved overall soil health, reduced erosion and increased soil organic matter," says Chad Watts, executive director of CTIC. "Though the yield benefits, profitability and resilience provided by cover crops are widely recognized by the farmers in the survey, the benefits they highlight most are long-term soil health impacts."

Other highlights of the survey include:

- Cereal rye was the top species of cover crop planted by survey respondents (82 percent) and covered 187,044 acres among the participating farmers.
- A majority of respondents—52 percent—reported that their soybean yields always or often rise after a cover crop of cereal rye. Less than 4 percent said their yields sometimes or always decreased after rye.
- Cereal rye cover crops also proved helpful in other ways, with 82 percent of farmers reporting that the rye helped with weed management—including 26 percent who found it also helped with tough herbicide-resistant weeds.
- Crimson clover was the most widely planted legume cover crop, while oilseed radish was the most common Brassica (mustard-type) cover crop species.
- Farmers were asked what would help motivate other farmers to adopt cover crops or increase their use. The top-ranked response was tax credits, followed by getting a discount on their annual crop insurance premium payment.
- Cover crop mixes are gaining popularity. In all, blends of species were planted on nearly as many acres as cereal rye among survey respondents. Most of those who used mixes—61 percent—said they designed their own blends, while 22 percent rely on advice from their cover crop seed salesperson or crop consultant for advice on mixing species.

"This year's cover crop survey brought more insight and new questions to the four-year survey effort," says Andrew LaVigne, president and CEO of ASTA. "Understanding the opinions, influences and practices, such as what cover crop users find important when they purchase seed, will be extremely informative for crop advisors, seed companies, policymakers, agricultural retailers and other people interested in increasing the adoption and success of cover crops."

The full report is available online at www.sare.org/covercropsurvey.



Construction Ramps Up at Shuttle-Loader Facility

After a wetter than normal summer, construction is well underway on the new shuttle-loader just outside Hamilton, Mo. The grain-handling facility, a joint venture between MFA Incorporated and MFA Oil Company, will consist of 2 million bushels of permanent storage and 1.5 million bushels of temporary storage.

The site will be connected to the Union Pacific Railroad with approximately 13,500 feet of track. The facility will be able to

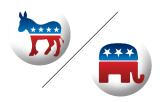
load 110 rail cars in under 15 hours, filling them at 60 bushels per hour. At those speeds, MFA Inc. officials estimate trains could be loaded in less than eight hours and sent on their way to domestic customers and international export markets.

The new facility will significantly improve the transportation infrastructure for farmers in north central Missouri and southern Iowa, allowing for fast, convenient crop delivery at a modern, high-speed grain facility.









The November election is shaping up to be a momentous occasion. There are a wide range of national and state-wide offices up for grabs and some important ballot measures for voters to consider. We've highlighted a few of the important races and questions voters will be deciding upon.

HILLARY CLINTON VS. DONALD TRUMP

For months, Democrat Hillary Clinton and Republican Donald Trump battled through primary elections for their respective party nominations. Now the stage is set for a historic presidential election that will play a pivotal part in shaping the direction of the nation's future.

The differences between the candidates are stark.

Clinton is a Washington veteran and lifetime politician with experience as a U.S. senator, the secretary of state and a former first lady of the United States.

Meanwhile, Trump, who made his name – and his multibillion-dollar fortune – as a real estate mogul and reality television personality, basks in his role as a political outsider.

No matter which candidate wins, the election will make history for a few different reasons.

Age is only a number, or is it?

Regardless of whether Trump or Clinton wins in November, the next president will be quite a bit older than Barack Obama, who, at age 47, was the fifth-youngest U.S. president to be elected. Trump turned 70 on June 14 and would be the oldest president in the history of the United States if he were to be elected. While Clinton is younger than Trump, it's not by much (she turns 69 on Oct. 26). Ronald Regan was the only

president of similar age when he took office. He was 69.

Breaking down gender barriers

Clinton made history when she accepted the Democratic nomination for the presidency. As the first woman ever to be selected by a major U.S. party to run for the office of the president, she's one step away from capping a truly historic campaign. The only other women to be part of a presidential ticket for a major party are Sarah Palin, who was the running mate of Republican John McCain in 2008, and Geraldine Ferraro, who Democrat Walter Mondale named as his vice presidential pick in 1984.

The non-traditional candidate

Not since the 1928 election, when Herbert Hoover won the presidency, has a candidate had as little political or military leadership experience as Trump. If he were to win, Trump would be the first president in more than 60 years without experience holding a congressional or gubernatorial office. Dwight Eisenhower, who served as Supreme Command of the Allied Forces in World War II, was the last person to be elected president without political experience when he won the 1952 election. Trump points to his business empire as proof of his leadership skills and hopes to pick up votes from Americans who are dissatisfied with the status quo in Washington.





RACE FOR MISSOURI GOVERNOR

In something of a mirror of the presidential race, the two candidates vying to take up residence at the Missouri Governor's Mansion are Chris Koster, a Democrat with a long political resume, and Republican Eric Greitens, a businessman who has branded himself as a non-establishment candidate seeking reform. In a strange twist, both men were formerly members of the other political party.

Koster's political career began with his election as the Cass County prosecuting attorney, and he held that office for 10 years before moving on to the state Senate. In 2007, he left the Missouri Republican Party citing divergent views on many issues, such as stem cell research, workers' rights and the non-partisan court plan. Koster successfully ran for attorney general the next year as a Democrat and won reelection in 2012. His eight years as the state's top law enforcement official have given Koster plenty of name recognition. He easily won the Democratic primary with 78 percent of the vote.

Like Gov. Jay Nixon, Koster is typically viewed as a moderate Democrat who sometimes breaks from the party line to support conservative issues. He's an advocate of the death penalty, supported the state's 2nd Amendment referendum in 2014 and is in favor of lowering taxes on businesses. As attorney general, Koster sued the Environmental Protection Agency for over-reaching its federal authority with the controversial "Waters of the U.S." rule, which farmers feared would lead to harmful restrictions on how they use their land.

Koster's centrist approach and his support for the 2014 "Right to Farm" amendment have won him endorsements from traditionally Republican groups such as the Missouri Corn Growers Association, the Missouri Soybean Association, the Missouri Cattlemen's Association and most notably, the Missouri Farm Bureau – the first time the organization has ever endorsed a Democrat running for statewide office.

While Greitens has never held public office, he does have experience as a leader in the military and private sector. The retired Navy SEAL and one-time Democrat's background includes four tours of duty overseas with deployments in Afghanistan and Iraq. When he returned home from combat, Greitens founded The Mission

Continues, a Missouri-based non-profit that helps returning veterans get back on their feet and give back to their communities.

Greitens was a bit of surprise to emerge from a grueling four-way GOP primary that featured Lieutenant Governor Peter Kinder, former Speaker of the Missouri House of Representatives Catherine Hanaway and businessman John Brunner, who was a U.S. Senate candidate in 2012. Greitens captured 35 percent of the vote, topping Brunner's 25 percent. Kinder and Hanaway took 21 and 20 percent, respectively.

Just as Trump has railed against the Washington establishment, Greitens has embraced the role of the outsider, claiming he will "clean up Jefferson City" and vowing to oppose "corrupt politicians, well-paid lobbyists and special-interest insiders taking the state in the wrong direction." Greitens' campaign website outlines a number of positions, including backing of the 2nd Amendment, his pro-life beliefs, support for "Right to Work" legislation, a goal to shrink governmental budgets, simplification of Missouri's tax code and a willingness to fight federal overreach that would negatively impact family farms. He has the endorsement of the Missouri Chamber of Commerce.



TOBACCO TAX BATTLE

For years, Missouri's tobacco tax of 17 cents per pack of cigarettes has been the lowest in the country. The average tax on a pack of 20 cigarettes in the United States is \$1.65. In November, Missouri voters will see a pair of competing initiative petitions aimed at raising those taxes for the first time since 1993. Missouri is just one of three states – along with North Dakota and California – that has yet to increase taxes on cigarettes since the turn of the century.

The first initiative is a constitutional amendment known as Amendment 3. It proposes to raise the taxes on name-brand cigarettes by 60 cents a pack and off-brand cigarettes by \$1.27 per pack over the next four years.

Amendment 3 is backed by an organization called Raise Your Hands for Kids, which has received more than \$2 million from



RAI Service Company of Winston-Salem, N.C., the parent company of R.J. Reynolds Tobacco Company (RJR).

RJR is supporting this tax proposal because it wants to end the pricing differences between its products and those of off-brand cigarettes. The pricing disparity exists because of the Master Settlement Agreement, a pact between 46 states and Big Tobacco which requires the companies to pay states billions of dollars in money for costs the states paid in extra health care as a result of the major tobacco companies hiding the health dangers of their products. Missouri receives about \$130 million each year under the agreement and has collected roughly \$2.2 billion since 2001.

The money raised from Amendment 3 (about \$300 million per year) would go toward the newly established Early Childhood Health and Education Trust Fund.

The Missouri Petroleum Marketers and Convenience Store Association (MPCA), of which MFA Oil is a member, opposes Amendment 3 and argues its purpose is to help RJR gain market share by snuffing out value brand competition rather than helping children. The amendment contains controversial language that restricts how the money can be used – prohibiting spending on abortion services and embryonic stemcell research. Another point of contention with Amendment 3 is that it would undermine the Blaine Amendment, which bans giving taxpayer money to private schools, by providing funding to both public and non-public schools.

Proposition A is the competing ballot measure backed by the MPCA that would institute a statutory tax increase rather than a constitutional amendment. If passed, Proposition A would raise the price of cigarette taxes by 23 cents a pack over a three-year period, starting at 13 cents per pack the first year and adding an additional 5 cents per pack in subsequent years. It's estimated Proposition A would provide around \$100 million annually for state transportation projects.

Ron Leone, executive director of the MPCA, has touted his group's plan as the more sensible of the two.

"We think the unreasonable and outrageous tax increase is going to fail," Leone said. "People are going to say 'no' to (that) again."

Proposition A includes a roll-back provision that would automatically nullify its 23-cent tax if another tobacco tax hike is passed in the future. The roll-back provision was added to alleviate convenience store owners' concerns of tobacco taxes increasing too quickly.

The passage of either of the cigarette tax proposals is no sure thing. Missouri voters rejected triple-digit tax increases on cigarettes in 2002, 2006 and 2012. According to the Centers for Disease Control, 23.1 percent of adult Missourians are smokers, among the highest rates in the nation.



OKLAHOMA RIGHT TO FARM

Oklahomans are set to vote on a state constitutional amendment designed to protect family farmers and ranchers from unreasonable government interference and attacks by out-of-state special interest groups.

State Question 777 – referred to as the "Right to Farm" amendment – would add a section to the Oklahoma Constitution that would create a constitutional right for farmers and ranchers to use agricultural technology, livestock procedures and ranching practices.

The amendment – supported by all of Oklahoma's leading agriculture organizations – is meant to defend farmers and ranchers from unwarranted laws and regulations in the future, including ballot initiatives. Right to Farm laws are on the books in every state, but not all are included in state constitutions as they are in Missouri.

"SQ 777 will protect our ability to use science-based production methods to humanely produce food and fiber," said Terry Detrick, president of the American Farmers & Ranchers/ Oklahoma Farmers Union. "We are in a daily struggle with adverse weather conditions, burdensome regulations and contrary markets. SQ 777 will lend stability to our industry by encouraging younger generations to be involved in agriculture without worrying about outside influences with an antiagriculture agenda."

The state question appears on the ballot as a result of legislation that was passed in 2015. A lawsuit claiming the ballot initiative was unconstitutional was filed by a coalition known as Save the Illinois River, Inc., but the Oklahoma Supreme Court dismissed the suit in August.

"The legal challenge to State Question 777 was nothing but a last-ditch effort by radical in-state and out-of-state groups to silence the voice of Oklahomans," said Tom Buchanan, president of the Oklahoma Farm Bureau. "Thanks to the wisdom of the Oklahoma Supreme Court, the measure now will be decided by Oklahoma voters, rather than the liberal minority."





On July 29, President Barack Obama signed a bill that puts in place federal standards for the labeling of products made with genetically modified organisms (GMOs). The new law will require most food products to carry a text label, symbol, 1-800 number, website or scannable smartphone code indicating whether they contain GMOs.

The legislation is a victory for food and agricultural organizations that had been fervently lobbying Congress to pre-empt a Vermont state law that required food containing GMO ingredients to state they were "produced with genetic engineering" on packaging beginning July 1.

The bill eliminates the possibility of a 50-state patchwork of labeling laws, which House Agriculture Chairman Mike Conaway, R-Texas, said "threaten to increase ... consumer confusion and food costs while interfering with interstate commerce."

Conaway said the large majorities the bill received in the House and the Senate, where the bill passed 63-30, reflected a sense of urgency to nullify Vermont's labeling law after it took effect in July. "The clock ran to zero," he said. "People saw how important it was to get the interstate commerce thing cleared up."

The Coalition for Safe Affordable Food (CFSAF), a collection of more than 1,100 entities representing the nation's food supply chain, applauded Congress for passing the bill and President Obama for signing it into law.

"We are very pleased that President Obama has signed this vitally important legislation into law, creating a sensible disclosure standard that is transparent and consistent across all 50 states," said Pamela G. Bailey, president and CEO of the Grocery Manufacturers Association and CFSAF co-chair.

"As Senate Agriculture Chairman Pat Roberts has observed, America's food producing community has never been more united behind an issue," said Charles F. Conner, CFSAF co-chair and president and CEO of the National Council of Farmer Cooperatives.

The U.S. Department of Agriculture (USDA) has already formed a working group to write rules needed to implement the legislation, which is expected to take 18-24 months. The labeling requirements will cover foods created with conventional recombinant DNA techniques. Foods primarily consisting of beef, poultry, pork or eggs will not be required to carry a GMO label. Manufacturers will have two years before they have to include the labeling.

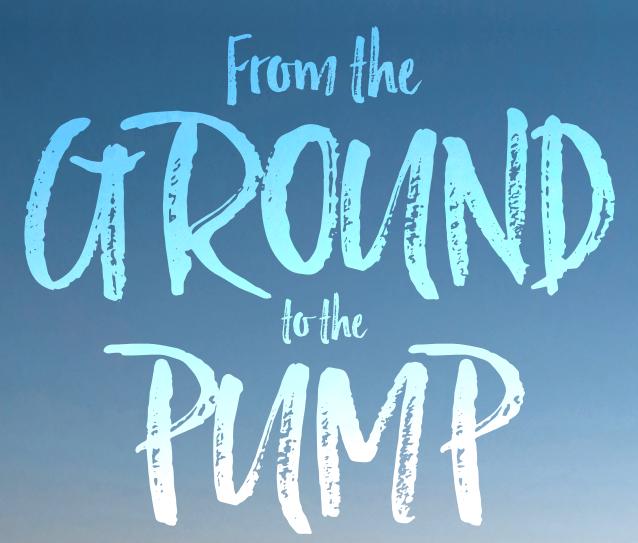
"As this law enters the rule-making process at USDA, the same farm to fork coalition that helped get this bill enacted into law will work to ensure that implementation is squarely in line with Congressional intent and in a manner that best serves consumers, farmers and food companies," Conner said.

The National Academy of Sciences recently reviewed two decades of research and more than 900 studies and found no evidence that GMOs pose a hazard to human health.

"President Obama's signature (puts) in place a uniform, national disclosure system that will provide balanced, accurate information to consumers," said Zippy Duvall, president of the American Farm Bureau Federation. "For decades, biotechnology has made it possible for farmers to grow safe and healthful crops while reducing their environmental impact. We are pleased that Congress and the administration have moved swiftly to prevent consumer confusion and protect agricultural innovation."

Genetically modified technology incorporates desirable traits from nature into crops, resulting in plants that can be healthier, more nutritious and better for the environment. This process is done without introducing anything unnatural or using chemicals.

Growing GMO crops increases agricultural productivity while reducing land, water and pesticide use. Since their introduction, GMOs have helped feed more than 300 million Americans and a global population of 7 billion – of which 1 in 8 suffer from hunger and malnutrition.



THE REFINING PROCESS EXPLAINED

By Adam Buckallew



You probably realize you are using energy when you fill up your vehicle's fuel tank or burn propane to heat your homes. But have you ever stopped to consider the source of the energy or how it is delivered?

It all goes back to the ancient, decomposed remains of plants and animals that died hundreds of millions of years ago in oceans that once covered the Earth. These organisms sank to the bottom of the sea and, over millions of years, were covered with layers of sediment. As these layers accumulated, they were buried deeper and deeper, to the point where heat and pressure from the Earth's crust caused oil and natural gas to form.

The U.S. petroleum industry began in the 19th century. The first oil well was drilled in 1859 and could extract 800 gallons of crude oil a day. Flash forward to 2016 and the U.S. Energy Information Administration (EIA) estimates 97 million barrels of crude oil are produced globally every day.

We use petroleum products in a wide variety of ways, including: transportation fuels and oils; fuel for heating and electricity; asphalt and road oil; and feedstocks to make chemicals, plastics and synthetic materials.

In 2015, the United States consumed a total of 7.08 billion barrels of petroleum products, an average of 19.4 million barrels per day. More than half of the oil consumed in the United States was fed by domestic production in 2015. Imports, mostly from Canada and Latin America, made up the remainder of the U.S. oil supply.

Roughly half of the crude oil and two-thirds of the natural gas produced in the United States come from hydraulically fractured wells. Although this technology has been in use for more than 60 years, it has only recently been used to produce a significant portion of domestic crude oil and natural gas supplies. Up until 2000, hydraulic fracturing, or fracking, accounted for only 2 percent of American oil production and 7 percent of natural gas production.

Fracking is the process of drilling down into the earth and releasing a high-pressure water mixture into the rock to release oil and gas deposits. The process is often combined with horizontal drilling to tap into shale and other tight-rock formations a mile or more below the ground. This has opened up large reserves of oil and natural gas that were previously locked away in areas like North Dakota, Texas, Oklahoma and New Mexico.

However, fracking is not the only source of U.S. oil and natural gas production. Drilling rigs, both offshore in the Gulf of Mexico and on land, can be found in many areas of the country.

Once the oil and natural gas is collected, it must be processed. Crude oil is sent to one of the 139 operating oil refineries in the United States. EIA pegged U.S. refinery capacity at 18 million barrels per day as of June 2015.

Refineries heat crude oil until it turns into a gas and the gas is piped into a fractional distillation column. As the gases cool below their boiling point, they condense into liquids. Gasoline and kerosene settle near the top of the column, diesel fuels are found in the middle and lubricating oil and heavy gas oil are near the bottom. There's a little more work to be done to get the final products, but that sums up the bulk of the process.

Refining an average barrel of oil, which holds about 42 gallons, usually yields 19 gallons of gasoline, 12 gallons of diesel fuel, 4 gallons of jet fuel and 2.5 gallons of propane. The remainder of the barrel is used to make products like petroleum coke, liquefied refinery gases, asphalt, lubricants and other oils for feedstocks like plastics, detergents and solvents.

Once the products are ready to leave the refinery, the majority will be transported by pipelines to distribution terminals. The United States has the largest network of energy pipelines in the world with more than 2.5 million miles of pipe. This extensive network of pipeline serves as the energy lifeline for much of the country.

Most fuel is sent to bulk storage terminals that often service many companies. From there, large tanker trucks, some of which are capable of hauling as much as 10,000 gallons, deliver the fuel to companies, like MFA Oil, who then sell it to consumers.



Supply Issues Point to Bearish Market



The current fundamentals and realities of the energy market are bearish, in my opinion. The question is whether there are longer-term bullish implications we need to consider.

A quick look at supply and demand as of late August shows crude oil stocks in the United States are sitting at 521 million barrels – 64.8 million barrels more than at this time last year and 128.4 million barrels above the three-year average. Similarly, gasoline stocks are 19.8 million barrels above last year's storage levels and 17.8 million barrels higher than its three-year average. The trend continues with distillate stocks up 4.7 million from last year's levels and 20 million barrels above its three-year average.

These numbers point to the U.S. energy market as well-supplied and, in all honesty, probably oversupplied. You could argue about whether 4.7 million more barrels of distillates is really an inundated market, but at a minimum I think it is fair to say distillate supplies are adequate.

These facts about supplies are the reason for my bearish outlook. Despite these circumstances, prices have been steadily moving higher since the start of August.

Why, in the face of an abundance of crude, gasoline and diesel, is the market trending higher? That's a good question.

Weekly gasoline demand has been strong lately at 9.5 million barrels per day for most of the summer driving season. The demand, however, has not been strong enough to eat into the growing supply stocks that are still at record levels. Diesel demand has not been as robust as gasoline, but it is still at a healthy 3.2 million barrels per day. We could potentially see higher diesel prices with enough demand from fall harvest.

Crude oil processing is always an important factor, but oil refineries ran hard through the spring and processed more than 16.6 million barrels per day in most weeks. This strong processing volume has continued to result in building supplies levels – another sign the market is oversupplied.

FUTURE CONSIDERATIONS

With supplies being in such good shape, why are we seeing a rally in the futures market?

Declining rig counts and the loss of U.S. shale production are two of the primary reasons. Last year at this time, the number of U.S.



rigs looking for crude oil was around 674. It's now just more than 400. This has caused domestic oil production to dip from its peak of 9.7 million barrels per day to 8.4 million barrels per day.

Production dropped in response to declining oil prices, and the losses have led to a few companies exiting the market. An important question moving forward is whether prices will be high enough to support shale production. If crude prices could get up near the \$60 per barrel level, many shale producers would be able to resume production.

The cuts oil companies made to their budgets and capital expenditures is another important consideration. Consulting firm Woods Mackenzie estimates about \$1 trillion has been slashed from budgets running through 2020. This has resulted in a halt to oil exploration activities at many firms. At some point in the future, that probably means production will drop.

While I firmly believe oil prices will eventually rise due to the huge cuts to capital expenditures and budgets by all the oil companies, I see this as a longer-term issue for the energy markets in the next three to five years.

The market seems to be overlooking the current glut of supplies and looking farther down the road at some of these other concerns. The market can and will do whatever it wants – no matter how irrational it may seem. However, the current situation seems to point to an excess of supply that will need to be balanced before these longer-term issues become a factor. It wouldn't surprise me if we are wondering how crude oil prices got so high again five to seven years from now. While that may come to pass, the current market seems well ahead of itself in preparing for that time.



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

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Investing in the Future

The MFA Oil Board of Directors works with the cooperative's management team to guide the company in its mission of serving the needs of members. One of the company's core principles is a commitment to operational excellence, and this has become increasingly important in today's business climate.

"We've made a lot of changes in the last couple of years to bring our operational performance up to speed," says Floyd Buckman, who represents District 7 on the MFA Oil Board of Directors. "These moves were all necessary to keep our cooperative competitive. Technology is changing so fast these days, and we're making great strides to stay ahead of the curve."

The work to improve MFA Oil's operational excellence has ranged from upgrades to bigger tanker trucks capable of hauling more fuel to behind-the-scenes improvements, such as new software to improve logistical support to drivers and optimize their delivery routes.

Tank monitors and right-sizing have been other areas of focus. Buckman is one of several customers to sign up for MFA Oil's Auto-Fill Program, which utilizes tank-monitoring technology that factors in past usage and weather conditions to determine when customers will need their tanks refilled. He's been pleased with the program because he no longer needs to check his tank's gauge or worry about running out of propane.

"The Auto-Fill Program is convenient for customers and a great way to improve propane delivery efficiency by cutting down on unnecessary trips," Buckman says. "It's a simple solution that really improves the productivity of our drivers and plant operations."

Other recent operational improvements within the cooperative have included an overhaul of the company's inventory





Top: Investments in bigger delivery trucks help to improve efficiency. Bottom: Some customers in the Auto-Fill Program have tank monitors to help gauge their propane needs.

management system, outfitting delivery trucks with handheld computer tablets and opening the MFA Oil Business Support Campus in Moberly, Mo. The Business Support Campus features improved lab facilities, a larger truck shop with better equipment and a centralized warehouse for the company's parts and packaged goods.

"You have to be willing to adapt and change with the times, and we've made

some wise investments in technology, equipment and facilities that should greatly benefit MFA Oil for many years," Buckman says. "These changes should help to improve our service and allow us to continue delivering high-quality energy products and services to our customers economically. We're proud of the results we've seen thus far and the willingness of our employees to embrace these changes and keep the company moving forward."

MFA Oil Company Expands Operations in Arkansas and Oklahoma

MFA Oil Company has acquired select assets of Fuels & Supplies and Jim Woods Marketing, Inc.

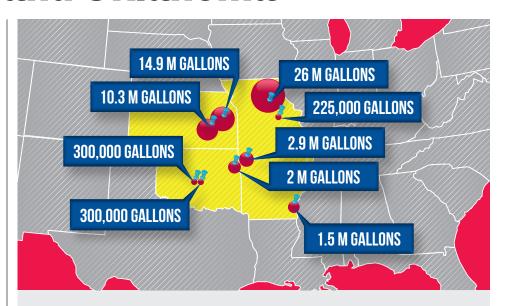
The sale includes propane operations in northeast Oklahoma and refined fuel/tank wagon operations in northwest Arkansas and northeast Oklahoma.

The purchase represents a major step into refined fuel operations for MFA Oil in the state of Oklahoma. This is the company's third propane acquisition in Oklahoma in 2016. MFA Oil previously acquired Terry's Propane, Inc. of Washington in May and R&S Propane, Inc. of Dibble in January.

"This is a great opportunity to expand our distribution network and increase efficiencies in Arkansas and Oklahoma," says Don Smith, MFA Oil director of mergers and acquisitions. "Fuels & Supplies and Jim Woods Marketing have an outstanding reputation in this region, and we are eager to build upon their success. We plan to run their business with little noticeable change, and with the same commitment to service, quality and small-town values."

The former owners of Fuels & Supplies and Jim Woods Marketing plan to shift their focus to their retail and wholesale fuel hauling business.

"Fuels & Supplies and Jim Woods Marketing have been privileged to serve our customers for 60 years," remarked Alan Chapman, president of Fuels & Supplies and Jim Woods Marketing. "We are excited about this transition to MFA Oil. Their management has set the tone from the top, reflecting a corporate culture of integrity which will continue to serve our customers. As a result, all of Fuels & Supplies and Jim Woods Marketing customers can be assured that quality service will continue as we move forward with our future business plans."



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

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.

• 26 million gallons of refined fuel annually and 17

annually and 17 independently owned Sinclair convenience stores

MAY 2016

Terry's Propane, Inc. Washington, Okla.

 300,000 gallons of propane annually

MFA Exchange of Chamois-Morrison & Oil

225,000 gallons of propane annually

AUGUST 2016

Fuels & Supplies/ Jim Woods Marketing, Inc. Springdale, Ark.

 2.9 million gallons of refined fuel annually

Stilwell, Okla.

2 million gallons of propane annually

This is MFA Oil's seventh acquisition of its fiscal year, which began Sept. 1, 2015. Previous acquisitions include Lybarger Oil, Inc. in Garnett, Kan.; Elaine Petroleum Distribution, Inc. in Elaine, Ark.; R&S Propane, Inc.; S&S Oil and Propane Company Inc. in Emporia, Kan.;

Brownfield Oil Company in Moberly, Mo.; and Terry's Propane Inc.

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



Break Time Construction Underway



The Break Time store under construction in Lee's Summit, Mo. will open this fall, and is the first in the Kansas City metro area.



Break Time is keeping construction crews busy around Missouri

Break Time's first location in the Kansas City metropolitan market is set to open in October in Lee's Summit, a suburb southeast of the city.

"Suburban expansion is one of our targeted growth areas, and we plan to continue looking for sites on both sides of the state that make good sense for growing our footprint" says Curtis Chaney, MFA Oil senior vice president of retail.

"In addition to the Lee's Summit location, Break Time is constructing a second store in Rolla, Mo., and is rebuilding its store in Clinton, Mo., along with two of its Columbia, Mo. stores during the 2017 fiscal year.

"We're looking at strategic locations where we can add stores or rebuild some of our smaller properties that are in great locations to improve our sales," Chaney says. "The new and rebuilt stores will be bigger with more fuel pumps and an expansive selection of food and beverage options."

Besides new construction and rebuilds, many customers may have noticed changes in their existing stores.

"This summer we remodeled the food and drink service areas in 18 of our stores," Chaney says. "These stores received new 20-head soda fountains and fresh fountain and coffee graphics."





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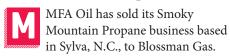
MORE TIME WITH THE PEOPLE WHO LIVE IN IT.

MFA Oil's Auto-Fill program utilizes tank-monitoring technology that factors in past usage and weather conditions and tells us when you need propane. You won't need to check your tank gauge or worry about running out of propane. We'll deliver when you need it.



Ask your MFA Oil representative for details.

Divestment of Smoky Mountain Propane



Jon Ihler, MFA Oil vice president of sales and marketing, said the sale was a good opportunity for MFA Oil to move on from a geographically challenging location that no longer fit with the strategic direction of the company.

"Smoky Mountain Propane was isolated from our core service area and there was a lack of strategic acquisition targets in the region," Ihler says. "We didn't see the same kind of opportunity to grow our market share in that area as we do in others. We're refocusing our attention on acquisitions in the Midwest that complement our existing operations and offer more immediate synergy."

Broadening the Availability of MFA Oil Products

MFA Oil is focused on expanding the distribution of its engine oils, hydraulic fluids, coolants, greases and other lubricants and is working with MFA Incorporated to increase the availability of these products at MFA Agri Services Centers.

"This is a win-win-win for all parties," says Jon Ihler, MFA Oil vice president of sales and marketing. "Customers will have greater access to our lineup of high-performance lubricants and working together makes sense for both companies."

MFA Agri Services Centers will sell MFA Oil products at the same price as local bulk plants with the added convenience of being open for business on Saturdays.

Three New Ways to Pay at Petro-Card 24

MFA Oil has recently added EFS, TCH and T-CHEK credit cards as acceptable forms of payment at all of its Petro-Card 24 locations. In addition to these new options, customers can continue to pay for Petro-Card 24 purchases using any of the following:

- MFA Oil Petro-Card 24 Card
- MFA Oil Preferred Card
- · MFA Oil gift cards
- Visa
- Mastercard
- Discover
- American Express
- Voyager
- Wex Fleet
- Fuelman
- Fleet One
- Comdata M

— NOTICE — MFA OIL COMPANY ANNUAL MEETING

Wed., Nov. 16 9:00 a.m.

Hilton Branson Convention Center Branson, Missouri



Notice is hereby given that the Annual Meeting of MFA Oil Company, as represented by delegates elected in accordance with the bylaws, will be held at Hilton Branson Convention Center, 200 Sycamore Street, Branson, Missouri, on Wednesday, November 16 at 9:00 a.m. for the purpose of receiving the annual report, for election of directors from District 5, West Central, and District 8, Mid-South, and for transaction of such other business as may come before the meeting.

Ten percent (10%) of the Members or ten percent (10%) of the Delegates may request that a matter be placed on the agenda at an Annual Meeting provided such request is in writing and delivered to the Board of Directors at least thirty (30) days prior to the date of the Annual Meeting.

Tami Ensor, Corporate Secretary



Growing Member Benefits— One Acquisition at a Time

MFA Oil Company actively seeks out opportunities to expand its business to better serve customers and offer greater benefits to owners. The department behind this objective, Mergers and Acquisitions, takes a strategic look at potential acquisitions and helps usher new companies into the MFA Oil family.

"We look for acquisition targets that will fit well and make our current operations more efficient and profitable," says Don Smith, director of mergers and acquisitions. "We want to invest our money in ways that create the greatest return for our farmer-owners."

Profits increase as MFA Oil expands its territory and improves current operations. As earnings grow, farmer-owners see a greater return in patronage. Additionally, farmers who didn't reside in MFA Oil territory before now have the option of becoming members.

"When we expand our territory, it opens up membership opportunities for farmers who weren't eligible before," says Jon Ihler, vice president of sales and marketing. "There is value in being part of MFA Oil."

Beyond the physical components of the acquisition, MFA Oil also gains strength in a not-so-tangible way.

"Acquisitions allow us to see how other companies operate, and we get to learn from that," Ihler says. "It gives us knowledge about the business, which makes us stronger."

This knowledge usually rests in a business's most important asset—its employees.

"Acquisitions bring talent into our company. There are very talented individuals who run and work at these businesses," Ihler says. "These people have a deep understanding of the industry, and it benefits the entire company when we add them to our talent pool."

Located remotely across the MFA Oil trade area, a dedicated team of acquisition specialists focus on integrating companies and verifying assets. This paves the way for a smooth transition for prior owners and new customers.

The acquisition process begins with identifying a potential seller that has a general strategic fit with MFA Oil. From there, the team requests information, and if the business is interested, begins negotiating. If a deal is reached, they work with the seller even after the transaction finishes. MFA Oil often engages the former owners in a transitional role to help ensure the integration happens smoothly.



"We try to make the changes less stark for the employees of the company being sold," Smith says. "Initially, we're going to run things the way the operation ran before and mimic the corporate culture."

The most challenging aspect of the job isn't always the negotiating or analyzing—it's managing the emotional attachment sellers have to their businesses.

"We want to assure sellers that we're going to take good care of their companies—their babies—properly," Smith says. "It's tough sometimes. It's about letting go of a business someone has been emotionally and financially tied to, sometimes for generations."

"Don has the ability to relate and make people comfortable," Ihler says. "He explains our company history and values to sellers well."

The recent acquisitions of S&S Oil and Propane and Lybarger Oil have substantially increased MFA Oil's footprint in Kansas. Ihler said these acquisitions played a major role in the company's expansion.

"These acquisitions allowed us to step into Kansas where we had limited sales before," Ihler said. "Both were instrumental in expanding the size and strength of our market in this area."

Since the beginning of its 2012 fiscal year, MFA Oil has acquired 19 companies, including expansion into Utah and Tennessee and an increased presence in Kansas and Missouri.

With farmer-owners and customers at the forefront, the Mergers and Acquisitions department continues searching for opportunities to grow MFA Oil and increase the benefits of membership. ■



Operation Homefront: Aiding American Military Families



Mark Fenner, MFA Oil president and CEO; Jacqueline Watts, Operation Homefront director of programs for the KS/MO field office; Colonel Joseph Koller, U.S. Army; Major Scott Akerley, U.S. Army; John Laws, chairman of the KS/MO Operation Homefront Advisory Board.

Too often, veterans, and their families, face difficult situations when they return home from duty. Many experience disability, high medical costs and unemployment. MFA Oil Company sympathizes with the plight veterans endure and that's why it has partnered with Operation Homefront, a nonprofit charity founded to help military families through difficult periods.

Established in 2002, Operation Homefront serves the families of deployed and transitioning service members and post-9/11 wounded, ill and injured service members and veterans. Its programs are primarily targeted to junior- and midgrade enlisted (E1-E16) service members and financial assistance is provided in the form of grants, not loans, payable directly to the vendor.

Operation Homefront's mission is to "build strong, stable and secure military families so they can thrive – not simply

get by – in the communities they've worked so hard to protect." Operation Homefront strives to fulfill this mission by providing support in three key areas: financial assistance and temporary housing programs; permanent housing and caregiver programs; and recurring family support throughout the year.

In June, MFA Oil hosted its second annual golf tournament fundraiser for Operation Homefront. The tournament, which raised \$165,000, attracted 200 golfers and included prize money and awards for tournament winners. In addition to golf, participants and guests were treated to dinner and a private concert featuring country music singersongwriter Sara Evans.

"We're proud to support Operation Homefront in their efforts to assist the military families and wounded warriors who protect our freedom," says Mark Fenner, MFA Oil president and CEO. "Thanks to the generosity of everyone who played a role in our charity golf tournament and concert, we were able to more than double our donation from last year."

In 2015, the MFA Oil charity golf tournament brought in \$76,000 for Operation Homefront.

"Thanks to our terrific partnership with MFA Oil Company, and to the generosity of numerous sponsors, \$165,000 has been raised to help our mission," says Operation Homefront Chief Operating Officer, Retired Air Force Brigadier Gen. Robert Thomas. "Operation Homefront couldn't ask for a more caring, more generous partner. We are thankful for MFA Oil's thoughtful outreach to military families who tirelessly serve our nation."

Operation Homefront leads more than 3,200 volunteers nationwide and boasts that 92% of its expenditures go towards delivering programs and services to military families. During 2015, Operation Homefront made a significant impact in its mission by:

- Fulfilling 5,986 emergency financial assistance requests supporting 2,360 military families across the U.S.
- Providing more than \$4.2 million in assistance grants.
- Placing 111 wounded warrior families and 289 family members in rent-free transitional housing.
- Giving 33,454 military children backpacks filled with school supplies and holiday toys to 32,906 children.
- Supporting 13,641 military families through holiday meals and other programs throughout the year.

To learn more about Operation Homefront and ways to support its mission, visit www.operationhomefront.net.

Extended Life Coolants Increase Uptime, Cut Costs

Only a third of the energy created in the internal combustion engine of motor vehicles and equipment is used to move the vehicle. The rest is transferred as waste heat in equal amounts to the exhaust gas and engine coolant.

While water is an excellent heat transfer fluid, it's relatively low boiling point, high freezing point and corrosive nature require the addition of ethylene glycol and corrosion inhibitors for it to be an effective engine coolant/antifreeze. The inhibitor system must be designed to protect the different types of metals that can be found in a typical cooling system, and, in heavy duty diesel engines, it must contain additives to prevent damage caused by cavitation (pitting) of the wet sleeve cylinder liners.

For many years, conventional engine coolants were dyed green and contained what is referred to as inorganic additive technology corrosion inhibitors. For light duty engines, the additives might include combinations of borate/silicate/nitrate or borate/phosphate/silicate/nitrate. Coolant additive packages for heavy duty engines also contain nitrite or nitrite/molybdate chemistry to address liner cavitation. When a heavy duty coolant comes precharged with the additive package, also called a Supplemental Coolant Additive or SCA, it is referred to as fully-formulated. This type of coolant has historically been dyed pink.

Because the heavy duty coolant additive package becomes depleted over time, it must be periodically tested using commonly available color test strips. A hand held refractometer is used to check the relative concentration of the coolant and water, and determine the effectiveness of the freeze protection. Typically, after

25,000 miles of use, SCAs must be added to restore the correct chemistry.

The potential for over or under addition of SCAs, or simply neglecting cooling system maintenance, means problems can and do occur. The additives can drop out of solution, causing deteriorating cooling system performance and wear in the coolant pump. This situation is greatly aggravated by poor coolant maintenance. In fact, more than 40% of diesel engine downtime is caused by cooling system failure. Even with good maintenance, conventional automotive or heavy duty coolant should be replaced very 2 or 3 years.

Use a 50/50 pre-mix over tap water. Tap water and even filtered water are full of minerals such as calcium and magnesium which leave deposits inside the entire cooling system – particularly around parts of the engine that reach high temperatures. With a pre-mix



extended life coolant (ELC), you will have proper freeze point protection corrosion inhibitors and extended drain levels.

A major change has been the widespread adoption of organic acid technology extended life coolants (OAT ELC) such as FINAL CHARGE® Global Extended Life Coolant/Antifreeze. These feature organic carboxylate chemistry to address corrosion, lubrication and cavitation issues. The carboxylates act more locally to prevent corrosion as it begins, and form a protective film only where needed. This means they are depleted at a much slower rate than conventional coolant additives, and the coolant doesn't need to be frequently checked to ensure it is providing adequate corrosion protection. Another benefit is that heat transfer at the metal surface is improved, especially important in today's hotter-running heavy duty diesel engines.

Instead of the relatively short life of a conventional or fully-formulated coolant, which must be tested every 25,000 miles and drained and replaced typically at about 300,000 miles, FINAL CHARGE* Global Extended Life Coolant/Antifreeze can last 1,000,000 miles in on-road use, or 8 years/20,000 hours of off-road use.

With the advances that have been made with OAT ELC coolants, it should be an easy decision to move from conventional green and SCA pre-charged coolants to FINAL CHARGE® Global Extended Life Coolant/Antifreeze. Users will find a significant reduction in cooling system issues, resulting in fewer vehicle breakdowns and service visits. Extended life coolants provide the lowest total cost for owners in both product and labor savings because they eliminate the need for purchasing SCAs and chemically charged filters and the costs associated with coolant sampling and testing.



PROTECTION YOU CAN COUNT ON

Almost half of all engine failure is caused by problems related to the cooling system. Keep your engine running at peak performance with MFA Oil Antifreeze and Coolant, formulated to stand up to extreme temperatures and give you worry-free protection from corrosion, rust and scale.



On Sale Through October

Contact your local MFA Oil office for details.



