MISSOURI Soybean Farmer

FEBRUARY 2020

Yield Contest Results

A tough year can mean many lessons learned in the annual yield contest , including the value of planning.

Ready to Come Home

When the next generation wants to farm full time, how do you prepare the farm and the family?

INSIDE THIS ISSUE OF

MISSOURI Soybean Farmer

FEBRUARY 2020 | VOLUME 24 | ISSUE 1

« Cover Shot

With soybean harvest stretching into December, Centralia soybean farmer Brian Martin captured this shot of a winter sunset above a partially cut field of beans.

Staff Contacts

Executive Director / CEO
Gary Wheeler
gwheeler@mosoy.org

Chief Financial Officer
Kim Hill
khill@mosoy.org

Director of Communications
Christine Tew
ctew@mosoy.org

Director of Policy
Casey Wasser
cwasser@mosoy.org

Director of Business Development & New Markets
Tony Stafford
tstafford@mosoy.org

Director of Biofuels & New Uses
Matt Amick
mamick@mosoy.org

Director of Research
Greg Luce
gluce@mosoy.org

Director of Licensing
Bryan Stobaugh
bstobaugh@mosoy.org

Director of Compliance & Research Administration
Ebby Neuner
eneuner@mosoy.org

Office Manager
Mary Kever
mkever@mosoy.org

Accounting Manager
Jeff Bruemmer
jbruemmer@mosoy.org

External Relations Liaison
Baylee Siegel
bsiegel@mosoy.org

Executive Assistant
Amber Meyer
ameyer@mosoy.org

Missouri Soybean Association
734 S. Country Club Drive
Jefferson City, MO 65109
Phone: (573) 635-3819 www.mosoy.org

Missouri Soybean Farmer is published six times annually and is an excellent opportunity to reach row-crop farmers. Contact Dave Larson at (515) 440-2810 or dave@larsonentllc.com for advertising information.

PRINTED WITH SOY INK™

From The Field

Notes from Missouri Soybeans' leadership team

MISSOURI SOYBEANS

This is my last column as president of your Missouri Soybean Association, and I'll admit I have some mixed feelings about it. First, thank you for your faith and support – it's been both a humbling and exciting two years. Thank you for the votes of confidence that elected me to a second term, and for your frankness along the way. I know I'll miss working as closely with so many of you. I don't think I'll miss all the emails.

When we started this two years ago, the top-of-mind issues were familiar. A priority was securing repayment of debt to Missouri's farmer-owned biodiesel plants. We were wrestling with uncertainty in both clean water laws and Waters of the U.S. China was our largest importer of U.S. soybeans. Your Missouri Soybean Association had been in the same office building nearly 20 years.

We've seen big changes, without a doubt. But at its heart, what we do has stayed the same. The Missouri Soybean Association is a leading voice at the table on policy and continues to advocate for us – soybean farmers. It's been an honor to serve, and I thank you for the opportunity.

C. Brooks Hurst - Missouri Soybean Association President

When we review survey results from grower meetings, field days and other events especially, we consistently hear that our success in the future is directly tied to two things: Soil and Education. Those results are on our mind now, just as they were about three years ago, when we were deep in the process of determining what the future for soybean looked like here in Missouri.

The results of that process now stand in Jefferson City – the new Center for Soy Innovation. At its core, the Center is focused on education. Not only is it going to allow us to host youth for interactive programs, it has space for trainings and workshops for farmers and industry – indoors and out, including demonstration space specific to soil health and erosion. It also gives us a chance to see the new uses for our beans firsthand –like green building materials, asphalt, foams and so much more.

Moving forward with a new building was a huge decision for our board. We look forward to seeing both the impact and opportunities for soy grow for decades to come, and to hosting you in Jefferson City very soon.

Robert Alpers - Missouri Soybean Merchandising Council Chairman

Letter from the Executive Director

It's been well over 50 years since President John F. Kennedy highlighted the financial struggles he saw in farming, saying:

> "The farmer is the only man in our economy who buys everything at retail, sells everything at wholesale, and pays the freight both ways."

At its core, agriculture is about adding value – whether that's cultivating healthy soil, growing a seed into a crop for harvest or crushing a soybean into livestock feed and biodiesel. While a lot of what agriculture is recognized as producing is considered a commodity – something to be commingled and homogenized - when we look at the future of agriculture, we're looking at how we're adding value.

In fact, moving forward in agriculture is nearly synonymous with adding value.

At it's simplest, that can mean doing more with less – more yields on fewer acres and with less water. We've pushed the boundaries on yield for a long time.

We're also adding value in the form of greater margins and opportunities - trait technologies, collaboration and new markets are setting us and our soybeans up to be far more than commodities. From drought-tolerant varieties developed through research partnerships, to incredible market opportunities with biodiesel, to non-gmo high oleic soybean oil like SOYLEIC™, the path forward in adding value to our soybean harvest is incredible. Add in the value to our farms available through advances in soil health, water quality and precision agriculture, and we're truly setting future generations up for something great.

Not only are we making those differences personally, the work we're doing is truly that rising tide that lifts all boats. When we add value to our soybeans, we're adding value to our communities – creating opportunities for new jobs (including more than 2500 supported directly by biodiesel), supporting local schools and infrastructure too. We're making our communities better places to live and raise our families. We're developing new markets for beans, and advocating for free and open trade - ensuring the global economy continues to add value to our soy well into the future, and farmers have the opportunity to capture that value.

Your Missouri Soybean Association and Missouri Soybean Merchandising Council work every single day to add value for Missouri's soybean farmers and their partners. Whether it's research and business development, or policy and education, your bottom line is our priority.

Where Kennedy looked at potential struggle in agriculture, I hope you'll join me in seeing opportunity. Yes, at times we pay the retail and freight, only to sell wholesale. And sometimes wholesale is a lot better than others. More than anything though, we're in a position where future success is bound only by the limitations we place on ourselves. The value is there.

God Bless each of you, and I look forward to our adding value together this year.
Sincerely,

Gary Wheeler
Executive Director / CEO
Missouri Soybean Association
Missouri Soybean Merchandising Council
Foundation for Soy Innovation

Casey Wasser serves as the Director of Policy for the Missouri Soybean Association and Merchandising Council. He represents Missouri soybean farmers on policy issues at the state and federal levels.

Soybean Policy Update

The new year is starting fast. Missouri's legislative session kicked off Wednesday, January 8, and trade negotiations are seeing near-daily updates. Beyond that, in just over six months our nation will have decided which two candidates will square off in a fight to take the White House in the 2020 Presidential Election.

State Policy – SB 568 and HB 1858

The Missouri Soybean Association is hyper-focused on a policy proposal that supports your bottom line, Missouri's economy and the environment. The Missouri-Made Fuels Act, SB 568 and HB 1858, respectively, does that by expanding Missouri's use of the fuel produced from your soybean oil: Biodiesel.

In Missouri, we highlight soybeans as Missouri's top crop for the value they bring – more than 20,000 jobs and $1.4 billion in labor income, along with $7.7 billion in total output.

In New Madrid County, soybeans mean $424 million in sales and more than 500 jobs. Buchanan County has less than one-third the acres of beans, but more than double the sales and jobs tied to beans. In Buchanan County, they produce biodiesel.

Across Missouri, biodiesel directly supports more than 2,500 jobs. It has lower emissions compared to petroleum-based diesel too, including 47 percent less particulate matter and 67 percent fewer hydrocarbons. Biodiesel also generates 87 percent fewer lifecycle greenhouse gases. Definitely a win for cleaner air.

Missouri, although a leader in biodiesel production, has not focused policy efforts towards consumption of the biodiesel we produce up to this point.

Missouri exports a sizeable amount of biodiesel to neighboring states, as well as the east and west coasts based on those states' policy initiatives. Those policies – and by extension the demand for our soybean oil and biodiesel they create - are out of the hands of our farmers and policymakers.

Our state does not produce petroleum diesel, meaning an increase in biodiesel use isn't taking production jobs away from Missourians. With biodiesel, we have the opportunity to improve our air quality, and protect the work of our farmers, biodiesel producers and researchers here in Missouri, as well as to grow that impact by both increasing consumption in here at home and maintaining those export relationships.

Within a week of Missouri's legislative session starting, the Missouri Soybean Association's priority legislation had its first hearing by the Senate Agriculture Committee. The hearing was filled with supports which included the National Biodiesel Board, MFA Oil, production plants and soybean, corn and livestock producers. The Missouri Petroleum Council and Petroleum Marketers & Convenient Store Association were opposed due to loss of market share. Your Missouri Soybean team will continue working with this legislation throughout session.

State Policy – HB 2033
We continue to provide support for legislation that ensure the use of eminent domain is protected and not abused. HB2033 addresses those challenges this session, in the same vein as the legislation Rep. Hansen sponsored last year that was widely supported by Missouri's leading agricultural advocacy groups. MSA will be in support of this legislation while monitoring the continued work to building windy energy lines in northern Missouri.

State Policy – State Income Tax
With the new year, tax filings are top of mind for many of us. The Missouri Soybean Association encourages producers to consider exemption information for Market Facilitation Program and disaster program payments when preparing their 2019 tax returns. Under the disaster relief legislation of 2014/2015, those types of payments are exempt from state income tax.

For filers claiming the exemption, payments should be included on line 16 of Form MO-A. Payments included on Form MO-A are required to be reported in federal adjusted gross income or federal taxable income.

The Missouri Department of Revenue maintains a Frequently Asked Questions section on their website at with details. Filers should consult a tax professional or the Missouri Department of Revenue with questions specific to their returns.

Your Missouri Soybean Association is proud to have worked on this exemption, especially knowing the challenges that preempted MFP payments, and the losses that precede disaster declarations.

Federal Policy – Trade
We are all hopeful that recent momentum on trade deals continues and that 2020 will be the year our ongoing challenges are resolved.

The U.S.-Japan Trade Agreement was the first of a string of positive movements with prospective and current trading partners. Each time a trade agreement can increase exports of soybean meal consuming livestock and poultry our soybean producers are a benefactor.

The United States-Canada-Mexico Agreement is set to be approved by the Senate very soon. It's cleared the first hurdle and should be ready for floor debate. Mexico is the #2 market for whole beans, meal and oil, and Canada is the #4 buyer of meal and #7 buyer of oil for U.S. soybean farmers, making the trade agreement essential to sustaining the growth realized in those two countries under the North American Free Trade Agreement (NAFTA). Under NAFTA, U.S. soybean sales to Mexico quadrupled and to Canada doubled.

Many producers are asking exactly what recent agreements with China mean for their exports. The American Soybean Association provided the following details:

> China agreed to "reduce or eliminate an array of agriculture non-tariff barriers including ag biotech products."
>
> China agreed to expand trade in the areas of agriculture, manufacturing, energy, services and goods by increasing imports over two years by an additional $200 billion over the 2017 baseline. Under this agreement China has committed to purchase an additional $32 billion in agriculture products over 2 years above the 2017 baseline.
>
> They will also make a "best effort" for an additional $5 billion in ag imports. We do not know if the $32 billion amount has been broken down by specific commodities.
>
> China has not formally agreed to reduce any tariffs as a part of the agreement.

Want to know more?
Members of the Missouri Soybean Association receive regular email updates on policy and regulatory movement in Jefferson City, Washington D.C. and elsewhere Missouri soybean farmers' bottom line stands to be affected.

Visit mosoy.org for details.

Maintaining Farmer Health

Just as farmers maintain their equipment, remembering to check in on their health - especially during stressful times - is so important.

By Linda Geist, MU Extension

Farmers know that well-maintained equipment is key to success.

Yet they often do not listen to the "check engine" warning signs of stress, says Sean Brotherson, family science specialist for North Dakota State University. Brotherson was the keynote speaker at the recent University of Missouri Crop Management Conference.

"Ag has its own rhythms. It has its own culture," Brotherson said. When those rhythms go awry, stress can result. "Health is the most important asset to any operation. If it is the most important asset, it also needs to be the most important priority," he said.

Many sources of stress, such as weather and prices, are beyond the control of farmers. "You are at the mercy of things," Brotherson said.

Research from the U.S. Occupational Safety and Health Administration ranks farming as one of the top 10 stressful occupations. The U.S. Centers for Disease Control and Prevention reports that the suicide rate for farmers is 1.5 times the national average.

MU Extension farm health and safety specialist Karen Funkenbusch said that in 2019 farmers faced flood, rains, late planting and uncertainty about commodity prices. Issues beyond a farmer's control can weigh heavily and lead to depression, anxiety and suicide even in a typical farm season, Funkenbusch said. Debt, illness and injury also add to pressures.

"Farmers, because of their strong and independent nature, often are reluctant to talk about these issues," she said. "Fortunately, resources are available. If you need help or know of someone who needs help, reach out."

Funkenbusch leads the Missouri AgrAbility Project, an MU Extension program that works with partner organizations to provide practical education and direct assistance that promotes rural independence.

Funkenbusch offers these suggestions for farmers, ranchers and their families:

- Know the warning signs of stress. Physical signs include headaches, aches of the back and neck muscles, fatigue, labored breathing, weight gain, rising blood pressure, sweating, stomach issues, and sweating. Emotional signs include anger, restlessness, irritability, inability to sleep and relax, increased alcohol or drug use, and withdrawal from other people.
- Slow down.
- Get a physical checkup.
- Seek local resources, including clergy and medical professionals. Talk with other farm families and neighbors.
- Exercise daily. Take regular breaks throughout the day.

SHOW-ME HOPE

The Missouri Department of Mental Health is also partnering with Missouri's agricultural groups and organizations across Missouri to provide stress-management trainings, information on available resources - including support specific to areas hit especially hard by flooding and other disasters this year. To learn more about those resources, and find help near you, call (855) 823-4817.

Additional resources:

Missouri AgrAbility Project, AgrAbility.missouri.edu.

MU Extension Show-Me Strong Farm Families, on Facebook at ShowMeStrongFarmFamilies.

MU Extension Mental Health First Aid classes help people learn to identify, understand and respond to signs of mental illnesses and substance use disorders in communities. Visit extension.missouri.edu/hes/families.

Farm and Ranch Stress, North Dakota State University, ag.ndsu.edu/farmranchstress.

National Suicide Prevention Lifeline, 1-800-273-8255.

We'll minimize your risk. You can rest easy.

Crop Insurance

Our Crop Insurance Teams are ready to help you manage your business risk with the expertise you need to make sound decisions. We'll help you find the products that protect your operation and give you peace of mind.

- Multi-Peril Crop Insurance MPCI
- Livestock Insurance MPCI-LRP MPCI-LGM
- Pasture Rangeland Forage PRF
- Crop Hail Insurance

Find an office near you:

1.800.444.3276

WWW.FARMCREDITSEMO.COM WWW.MYFCSFINANCIAL.COM

FARM CREDIT SOUTHEAST MISSOURI

FCS FINANCIAL

FCS Financial and Farm Credit Southeast Missouri are equal opportunity providers.

EQUAL HOUSING LENDER

Solving the Resistance Riddle

As chemical controls for weeds in soybean fields falter, 'life finds a way'.

By Jason Jenkins

Mill Creek Communications

Photos courtesy of University of Missouri College of Agriculture, Food and Natural Resources and the United Soybean Board

In the 1993 blockbuster film, "Jurassic Park," director Steven Spielberg brings to life a world where once-extinct dinosaurs now walk among humans at an ill-fated theme park. Set on a fictional tropical island in the Pacific Ocean, the movie introduces audiences to Ian Malcolm, a mathematician and chaos theorist.

While on a tour of the park's laboratories, Malcolm and the other visiting scientists learn that to prevent "unauthorized breeding," all the dinosaurs at Jurassic Park have been genetically engineered to be female. Upon learning this, Malcolm is the first to share his opinion.

"The kind of control you're attempting is, uh, it's not possible. Listen, if there's one thing the history of evolution has taught us, it's that life will not be contained. Life breaks free, expands to new territories and crashes through barriers, painfully maybe even dangerously," he says. "Life finds a way."

Kevin Bradley would agree. Life does seem to find a way, but he's not worried about being trampled by a T-Rex or eviscerated by a Velociraptor. Instead, the University of Missouri Extension weed scientist is concerned about pigweed that prevails despite a producer's chemical-control efforts.

For nearly 75 years, farmers around the globe have enlisted herbicides in their war on weeds. While these chemicals have revolutionized worldwide food production and helped

Dr. Kevin Bradley, speaking at a summer field day.

usher in today's modern agricultural system, they haven't eliminated the enemy. Herbicide-resistant weeds are prevalent, and their strength and numbers seem to increase with each growing season.

"Given the way we do agriculture in the United States, resistance is pretty much inevitable with any herbicide," Bradley says. "It's so intense, it's so massive and we rely so much on herbicides. So, it's a part of life, and life does find a way."

Herbicide History

The world's first successful chemical herbicide — 2,4-D — was commercially released in 1946, a result of research conducted in both the U.K. and the U.S. during World War II. The selective chemistry provided control of broadleaf plants in cereal crops such as wheat, corn and rice. Producers around the world quickly adopted the technology, and other selective and nonselective herbicides would follow, including atrazine in 1958 and glyphosate in 1974.

But nearly as quickly as companies could commercialize new herbicides, other scientists were identifying plants that wouldn't succumb to weed killers. In 1957, just 11 years after 2,4-D was introduced, occurrences of resistance to the herbicide were documented in populations of both Queen Anne's lace and spreading dayflower. In 1970, atrazine resistance would be confirmed in common groundsel and in 1984, a population of field bindweed was found to be resistant to glyphosate.

"We don't create resistant weeds," Bradley says. "They are out there, and we select them out by applying the herbicide. You could have a brand-new herbicide, and chances are, there's already a weed out there resistant to it. We get into trouble when we start applying that same herbicide over and over, selecting out that one plant and allowing it to live and produce seed. Then next year, there's more of them."

> *"We don't create resistant weeds. They are out there and we select them out by applying the herbicide... We get into trouble when we start applying that same herbicide over and over, selecting out that one plant and allowing it to live and produce seed."*
>
> -Kevin Bradley

Research supports the existence of naturally occurring resistance. In 2013, a group of French scientists reported on a project in which DNA analysis had been conducted on more than 700 herbarium specimens from three European collections. One particular specimen, a slender meadow foxtail collected in 1888, contained in its DNA the genetic mutation that would have provided resistance to Group 1 herbicides, the ACCase inhibitors — even though the first of these herbicides was not discovered until the 1970s.

"That just tells you, resistance is something that's present in the population, whether we can see it or not," Bradley says. "We often never see those survivors. In a good management system, you'll spray, and you might have a survivor or two. But then you come back in and take care of those survivors. You won the battle.

"But if you just sprayed and let the survivor live, and then you came back and did the same thing again and let more of them survive, that's the problem," he adds. "Usually, we don't even know resistance is there until about 10 percent of the population in a field is surviving."

At the beginning of 2020, there were 510 unique cases of herbicide-resistant weeds worldwide, according to the International Survey of Herbicide Resistant Weeds. Resistance was reported in 262 different species and in 93 crops across 70 countries. Of the 26 known herbicide sites of action, weeds have evolved resistance to 23 of them.

Missouri Maladies

In Missouri, the International Survey recognizes 10 different weed species resistant to at least one herbicide group. The most concerning of these for the state's soybean producers is common waterhemp, Bradley says, followed by Palmer amaranth, especially in the Bootheel where it's more prevalent. Other herbicide-resistant weeds of concern include marestail and giant ragweed.

"All pigweeds now, in Missouri at least, are pretty much resistant to Roundup," he says. "We started using another class of herbicides, mostly the Group 14 herbicides such as Cobra and Flexstar, but we used those so much we've now got wide-scale resistance to them."

The MU Extension weed scientist has

...continued on next page.

EDITOR'S NOTE:
This is the first article in a yearlong series examining the past, present and future of weed control in the production of soybeans in the Show-Me State. This issue, we address the topic of herbicide resistance — from its origins to its future implications.

...continued from previous page.

conducted regular surveys of waterhemp populations across Missouri during the past 16 years. He said that today, almost every population has two-, three- or even four-way herbicide resistance.

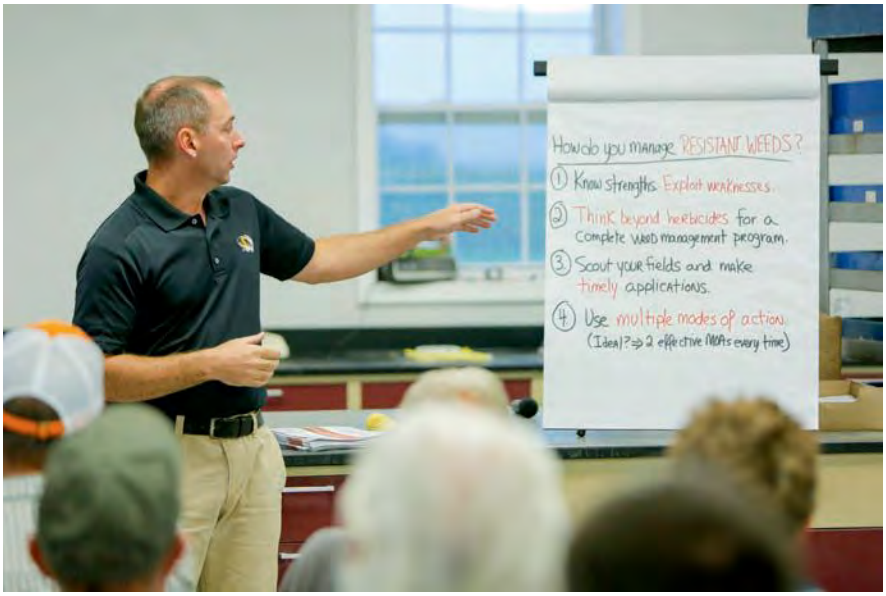
"We've found some that have five-way resistance, and in 2018, we even found one that can't be controlled by six different classes of herbicide," adds Bradley, referring to a population identified in Randolph County that survived application of 2,4-D, atrazine, chlorimuron, fomesafen, glyphosate and mesotrione. "That's pretty scary."

Currently, Bradley is conducting another waterhemp survey. This time around, he's focused on identifying any resistance issues that may be occurring with glufosinate and dicamba, the herbicides employed in the LibertyLink and Xtend soybean systems, respectively.

"We're seeing some failures at the field level, and we're worried about resistance," he says. "We're worried about losing Liberty because we use Liberty a lot."

In the greenhouse, waterhemp plants are grown until they reach a height of 3 inches, at which time, they are sprayed with the labeled rate of either glufosinate or dicamba. Bradley notes that he and his team are seeing things that concern them.

"We don't have any final results, but there's great variability when you run 75 different waterhemp populations beside one another in the greenhouse," he says.



Managing resistant weeds requires more than herbicide technology, according to Dr. Kevin Bradley.

"You have some populations where only 50 percent of the plants die, and the rest survive. Then, you'll have another population where all the plants die. So, those are the ones we're going to look into more thoroughly and see what's going on."

While resistance to an ever-growing list of post-emergence herbicides has been the storyline for waterhemp, a major plot twist occurred in 2019. Weed scientists in Illinois announced they had identified two populations of the weed that were resistant to Group 15 soil-residual herbicides. This group includes metolachlor, the active ingredient in Dual Magnum and commonly used in many premixes. The discovery represented the first confirmed case in the world of a broadleaf weed species being resistant to a Group 15 herbicide and the first known to be associated with corn and soybean production.

"That is a terrifying finding because we are relying so much on soil-residual herbicides right now, and particularly metolachlor and the Group 15 herbicides," says Bradley, noting that shortly after the Illinois announcement, researchers in Arkansas confirmed Group 15 resistance in Palmer amaranth.

"If you were to ask me what's the most scary new type of resistance that we could have in waterhemp, that would probably be on the top of the list. I don't know of any in Missouri. I don't want any."

If a future scenario were to develop in which waterhemp couldn't be controlled with herbicides, it could have far-reaching consequences for soybean producers in the Show-Me State and beyond.

The weed grows quickly — as much as 1.25 inches per day — and multiple

> *"Some of these things aren't new, but we're trying to get them back in front of growers and get them integrated with the herbicide program. In the future, it's going to take more than herbicides. Just doing herbicides is what's gotten us into trouble."*
>
> -Kevin Bradley

...continued on page 14.

...continued from page 12.

flushes can emerge throughout the growing season. A single plant produces roughly 250,000 seeds, which can remain viable in the soil for about four years. Overall, season-long competition with soybeans can reduce yield by 44 percent.

Future Focus

While Bradley would like to paint a more positive picture for the future of chemical weed control, it's hard to overlook the history of herbicide resistance.

"We've been on this herbicide treadmill, and when you see the whole history, it doesn't take too long before you ask, 'Why do we think that herbicides are going to solve all these problems?'" he asks. "We're down to fewer and fewer options."

A dwindling list of effective herbicides means that more pressure gets placed on those active ingredients that are still working, Bradley notes. This increases the likelihood of future resistance. He says any living weed that isn't killed by herbicide has the possibility of becoming a resistant weed.

"All that's required is the weed to be present and the herbicide to be sprayed," Bradley says. "If you look at it that way, it's just a matter of time."

He adds that as soybeans with new traits are released and adopted over a wide geography in a short period of time, more pressure gets placed on a particular class of herbicides.

"These traits are marketed as the answer for resistance, and growers are obviously planting them as the answer," he says. "We have a history of the industry bringing something new that bails growers out and solves a given resistant weed problem. So, growers believe there will always be something that will solve the next resistance problem — some new trait, some new mode of action. That's where historically we have gotten ourselves in trouble."

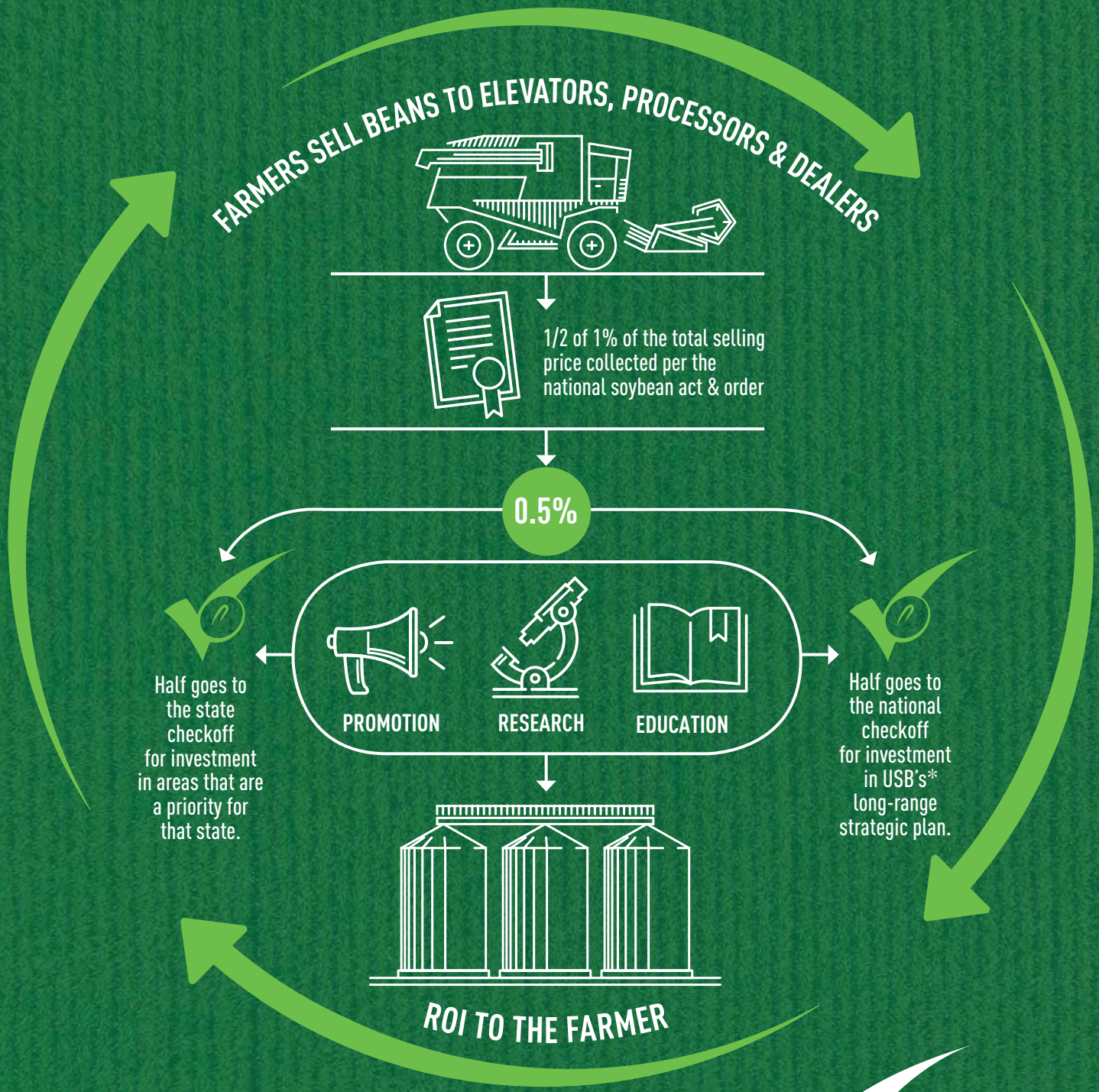
> *"We've been on this herbicide treadmill, and when you see the whole history, it doesn't take too long before you ask, 'Why do we think that herbicides are going to solve all these problems?' We're down to fewer and fewer options."*
>
> -Kevin Bradley

Recognizing that a day may come when the agrochemical industry isn't able to deliver the "next" answer for herbicide-resistant weeds, Bradley is among the group of weed scientists around the globe researching solutions for weed control that go beyond something sprayed. Cultural techniques such as tillage, row spacing, cover crops and harvest weed seed management are all part of his research program, which is funded in part by the Missouri Soybean Merchandising Council.

"Some of these things aren't new, but we're trying to get them back in front of growers and get them integrated with the herbicide program to make an overall effective program," Bradley says. "In the future, it's going to take more than herbicides. Just doing herbicides is what's gotten us into trouble."

FULL-CIRCLE RETURN

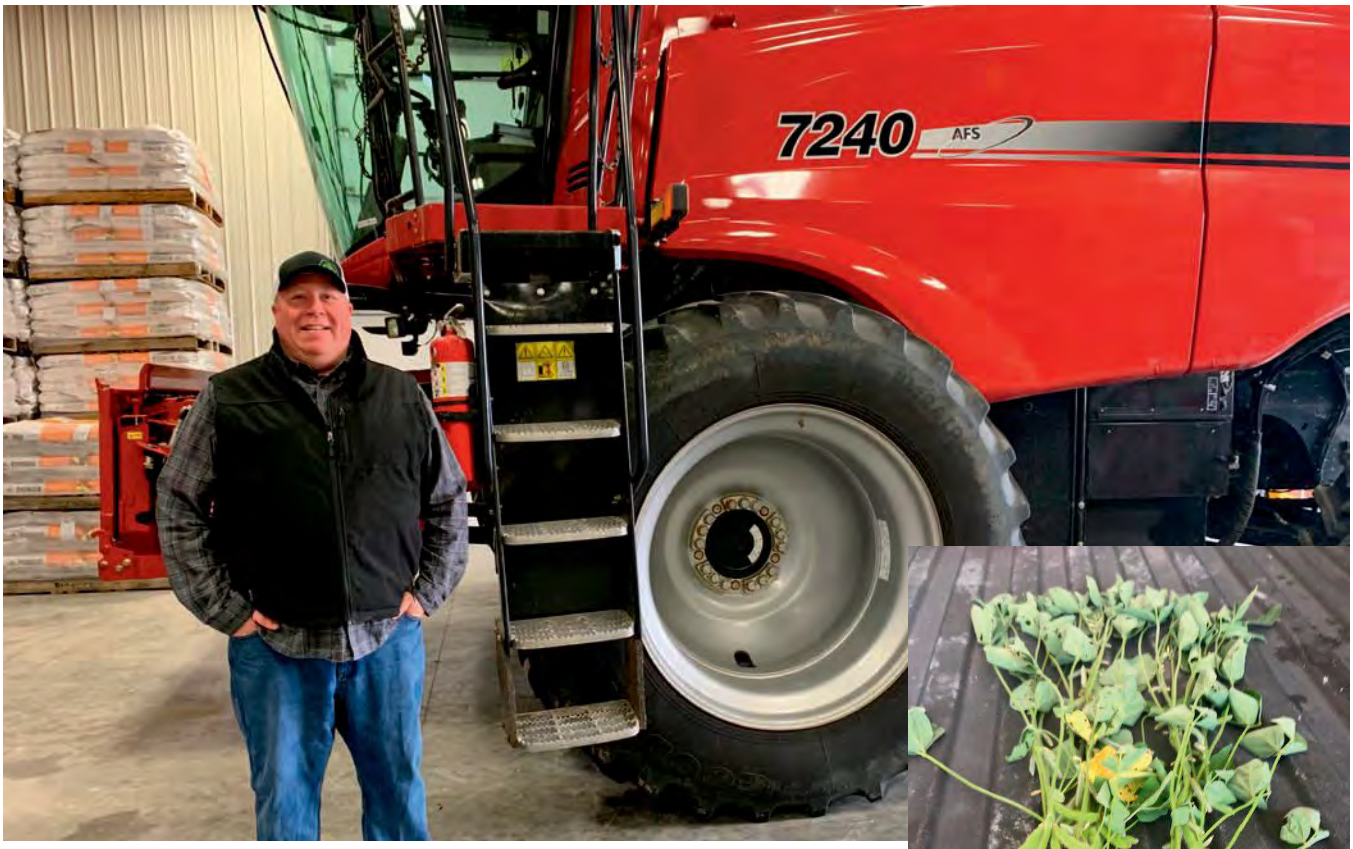
HERE'S HOW THE SOY CHECKOFF WORKS. The national soy checkoff was created as part of the 1990 Farm Bill. The Act & Order that created the soy checkoff requires that all soybean farmers pay into the soy checkoff at the first point of purchase. These funds are then used for promotion, research and education at both the state and national level.



* Led by 73 volunteer soybean farmers, the United Soybean Board (USB) invests and leverages soy checkoff dollars to MAXIMIZE PROFIT OPPORTUNITIES for all U.S. soybean farmers.

unitedsoybean.org

OUR SOY CHECKOFF™



Yield Contest

A tough year didn't stop these farmers or their high-yielding beans.

By Brandelyn Twellman

Flooding and excess moisture were common challenges faced by farmers participating in the Missouri Soybean Association's yield contest in 2019. Despite the never-ending battle with Mother Nature and the constant adaptation required during the growing season, many high yields were posted across Missouri. The farmers who won the irrigated and non-irrigated categories presented yields of 96.93 and 92.53 bushels per acre, respectively.

"The results of Missouri's annual soybean yield contest showcase the determination and perseverance of Missouri soybean farmers," said Brooks Hurst, a soybean farmer from Tarkio, Missouri, and president of the Missouri Soybean Association. "We had a challenging season, but the numbers we saw were a result of great stewardship and attention to detail. The friendly competition this contest presents was impressive, as well. Thank you to all our participants, contest officials and partners who make this event possible every year."

The contest's top honors for non-irrigated beans went to Brian Steinhoff of Steinhoff Grain Farms LLC. He raised 92.53 bushels per acre beans in St. Charles County with Pioneer P37T09L. Steinhoff, the fourth generation to farm in his family, has a background rooted in the agricultural industry. He grew up on the family farm.

After college, Steinhoff worked in industrial sales for ten years, knowing one day he'd like to come back to the farm. When his father started looking toward retirement, Steinhoff made the transition to the farm full time. He also started working as a seed sales

Top honors for non-irrigated beans went to Brian Steinhoff with 92.53 bu/ac.

> *It wasn't under water where the soybean contest field was, so I had time to take my time and enter it in the contest. I only had 40 percent of my farm ground planted, and I was planting up to the water.*
>
> -Brian Steinhoff

representative for Pioneer, a role he still holds.

Today, Steinhoff raises corn, soybeans, wheat and toddlers on his farm. He has grown and optimized the family operation with the help of his father during harvest and a full-time employee.

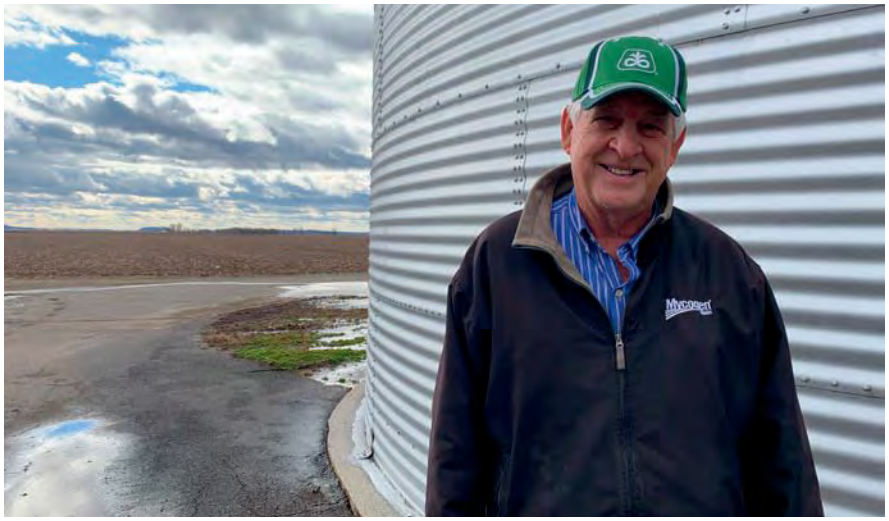
He was pleasantly surprised with his win in the non-irrigated portion of the yield contest. Like many farmers across the state, Steinhoff had several challenges to overcome this growing season.

"I've entered the contest three years, and this is the first time I've won," he said. "I thought there would be better beans in the state. We had a lot of excess moisture here. I had about 85 percent of the ground I farm that had water on it from the river."

He wasn't able to plant all of his acres this year, which he thinks may have given him an advantage in the contest.

"It wasn't under water where the soybean contest field was, so I had time to take my time and enter it in the contest," Steinhoff said. "I only had 40 percent of my farm ground planted, and I was planting up to the water. The rivers were high, so when we would get a rain, water would just pile up inside. So, before we even had the flood, we were flooding from the inside out."

Although each growing season varies, Steinhoff has zeroed in on soybean production practices that maximize his yield potential, which benefits his operation in challenging years.



Scouting and good drainage helped Jerry Cox reach his winning yield in 2019, despite getting nearly double the normal rainfall on his fields.

"A few years back, when corn prices were poor and beans were $10.00-plus, I really honed in on trying to raise my soybean yields because that was the cash crop then," Steinhoff said. "In a river bottom, usually the focus is on corn because it's so productive, but at that time the money was in beans. So, I started doing a few different things then."

He focuses on fertility through fertilizer requirements based on his yield goal. He also picks high-yielding varieties with good agronomics each year. Steinhoff utilizes seed treatment technology, which gives him confidence to plant early. Weed control is also a priority on his farm, along with managing disease and insects, especially near the river bottom.

"If I had to, I would most attribute this year's high yield to a fungicide and insecticide application at the R3 growth stage," Steinhoff said. "And, ILeVO® seed treatment. Usually in a year like this, we'd have sudden death. That plant would get infected after we planted it because it was raining so much. Usually in August that would compound and then that half of the field would be dead. I think ILeVO® seed treatment, fungicides and insecticides made the difference."

He also used technology to his benefit, keeping detailed records and identifying the best areas of his field.

"I was able to utilize yield history maps and satellite imagery to hone in on the best spots of the field," Steinhoff explained. "Pioneer has an app you can use to see your field through the growing stages. They take pictures of that field, so, basically, when those beans started turning, I could see where the green spots were still."

One advantage Steinhoff did have this year was an abundance of sunlight.

"Photosynthesis is really important, and

...continued on next page.

...continued from previous page.

we had plenty of sunlight this growing season," he said. "Some summers are ugly for a couple weeks in the prime of growing season, and I think that hurts us more than we realize. We had plenty of sunlight this year."

First place in the irrigated category went to Jerry Cox of Cox Farms. He and his son, Matthew, farm in Cape Girardeau County. Cox is proud to own and operate his grandfather's land as the third generation to farm in his family.

This year, he raised 96.93 bushels per acre with Pioneer P48A60X. This is Cox's second year winning the yield contest. Like Steinhoff, he was pleasantly surprised by the results.

"Two years ago when I won the contest, I had a higher yield," Cox said. "With the type of weather we had this year, you just didn't know what yields would look like across the state."

One of the keys to his success -- scouting.

Brian Steinhoff shared this shot of his view during soybean harvest. He says a focus on fertility and setting a yield goal helps him manage his crop throughout the growing season - especially during a challenging year.

"I am always out there looking at my crops, seeing if there's anything that needs to be tended to," Cox said. "Sometimes you find things like diseases or insects, so you've got to be timely. Sometimes you find things you can't even fix this year, but looking at your crops is the biggest thing."

This 'boots on the ground' approach helps Cox overcome trials throughout the growing season.

"The biggest challenge this year was too much rain," he said. "We had close to 40 inches of rain from April to August, which is about double what we would

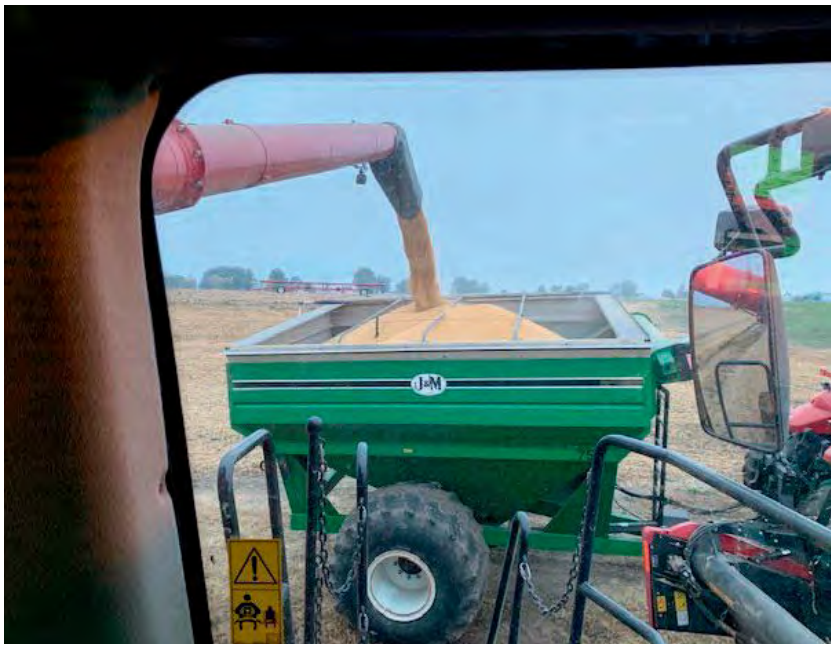
2019 MSA Soybean Yield Contest District Winners						
Name	**Farm**	**County**	**District**	**Category**	**Variety**	**Yield**
Don Seipel		Nodaway	1	Conventional Till	Pioneer P42A96X	74.99
Chris Russell		Holt	1	No-Till	Pioneer P40A47X	72.80
Joe Kruse		Randolph	2	Conventional Till	Asgrow AG39X7	79.33
Nathan White	White Farms	Carroll	2	No-Till	Pioneer P42A96X	74.60
Christina Nelson	Nelson Farm	Audrain	3	No-Till	MorSoy 3859E	77.34
Mark & Scott Hodges	Hodges Brothers	Ralls	3	Conventional Till	Pioneer P44A37L	87.60
Darrin Trobough	Trobough Farm	Johnson	4	No-Till	Pioneer P38A98X	77.12
Paul Brandt	Paul Brandt Farms	Lafayette	4	Conventional Till	Asgrow AG36X6	73.33
Norb Mengwasser		Osage	5	No-Till	Pioneer P38A98X	62.80
Brian Steinhoff	Steinhoff Grain Farms LLC	St. Charles	6	Conventional Till	Pioneer P37T09L	92.53
Jeremy Couch		Warren	6	No-Till	Pioneer P41T79L	70.33
Matthew Cox	Cox Farms	Cape Girardeau	7	Conventional Till	Pioneer P48A60X	92.39
Charles Hinkebein	Hinkebein Farms	Cape Girardeau	7	No-Till	Merschman Orlando 2047E	90.47

normally have. Fortunately, our soils drain off good. We were fortunate enough to have dry spells in between the rains to get things done."

Like many farmers this year, Cox wishes he was able to get in the field sooner. He said the yield contest field was planted on May 28 this year, but ideally they would have been planting three or four weeks earlier.

With a past in the land leveling business, Cox has ensured his land is all precision leveled with a constant fall from one end of each field to the other. Cox most attributes this year's yields to stewarding this flat land and his fertility efforts, both adding a unique twist to his farm.

"When it comes to what field you enter in the contest, you know where your best ground is and where you'll get the best yields," he said. "But, I use the same practices on just about all my fields, scouting and using fungicides if we need to. We use chicken litter for most of our fertility rather than commercial



Harvest at Steinboff Grain Farms LLC.

...continued on next page.

...continued from previous page.

fertilizer."

Cox said chicken litter has brought several benefits to his operation.

"Not only do you get your major nutrients like potassium and phosphorus, but you also get micronutrients, and it seems like you can build your soil up easier with chicken litter than you can commercial fertilizer," he said.

He also works to manage furrow irrigation on their farm.

"We've irrigated since the late 70s and early 80s," Cox said. "We plant on ridges so we can run water down the furrow, but we would probably do that anyway because that helps get the crop up off the ground, especially in a year like this when we have a lot of rain. Every area has different ways of doing things, and that's just the normal way of doing it in our area because of our land and the access we have to water."

Jerry Cox's 96.93 bu/ac irrigated soybeans grown in Cape Girardeau County took the top spot in the irrigated contest this year.

To keep his operation up to date and consistently improving, Cox said he seeks out learning opportunities in the off season. These range from meetings hosted by MU Extension, Missouri Soybean grower events and seed company research reports and conferences. He also utilizes the yield contest to try new methods and practices on his farm.

"I didn't try too many new things this year, but in the yield contest, I think it's always good to take a small acreage and try different things on it," Cox said. "A lot of people think you spend a lot of money to win the yield contest, but it's not that. It's what you learn from it that you might apply to all your acres. Even when things I try don't work, I think you learn more from your mistakes and your failures sometimes."

The Missouri Soybean Association's yield contest is made possible by generous contributions from the Missouri Soybean Merchandising Council and soybean checkoff, Beck's Hybrids, Baker Implement Company, Missouri Crop Improvement Association, Sydenstricker John Deere, Asgrow, Pioneer, ProHarvest – Resor Seeds, BASF, Nutrien Ag Solutions, Corteva, Stratton Seed Company, FMC, MFA Incorporated and MFA Oil.

Thanks to the partnership of the Missouri Soybean Merchandising Council and industry partners, prizes were awarded to statewide winners, including a trip to the 2020 Commodity Classic in San Antonio, Texas and gift cards to Cabela's and for biodiesel. District winners in each category also received their choice of $750 in biodiesel or in Cabela's gift cards.

There was not a conventional till winner for district 5, as no entries met all requirements for that category in the 2019 competition.

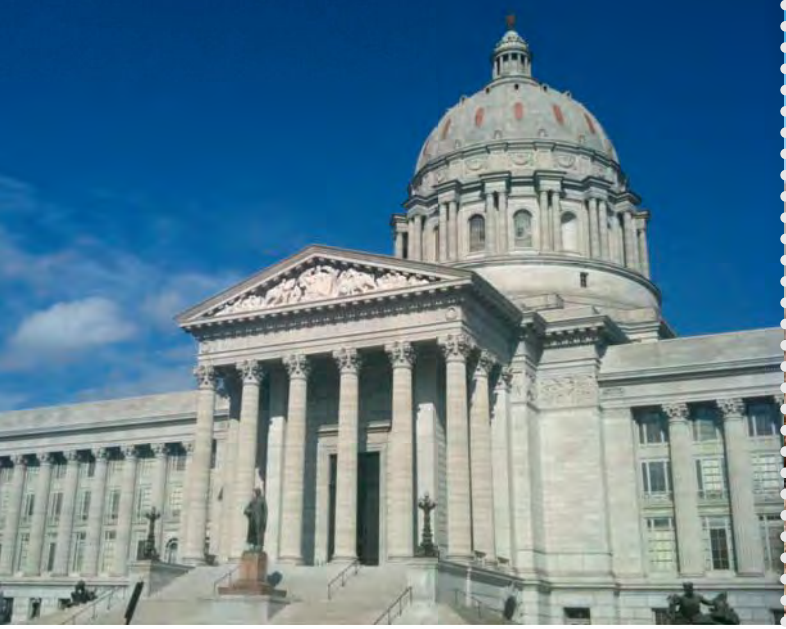
Participants in the Missouri Soybean Yield Contest were required to enter their fields into the competition prior to harvest. The 2019 entry deadline was extended to September 30, 2019.

At harvest, participants were required to have a designated judge verify their yield results for the competition and to submit their verified results.

Contest rules are posted online at mosoy.org. Details for the Missouri Soybean Association's 2020 Yield Contest will be posted online at mosoy.org and announced in this magazine.

> *"I think it's always good to take a small acreage and try different things on it. A lot of people think you spent a lot of money to win the yield contest, but it's not that. It's what you learn from it that you might apply to all your acres."*
>
> -Jerry Cox

YOUR MEMBERSHIP SUPPORTS YOU HERE.



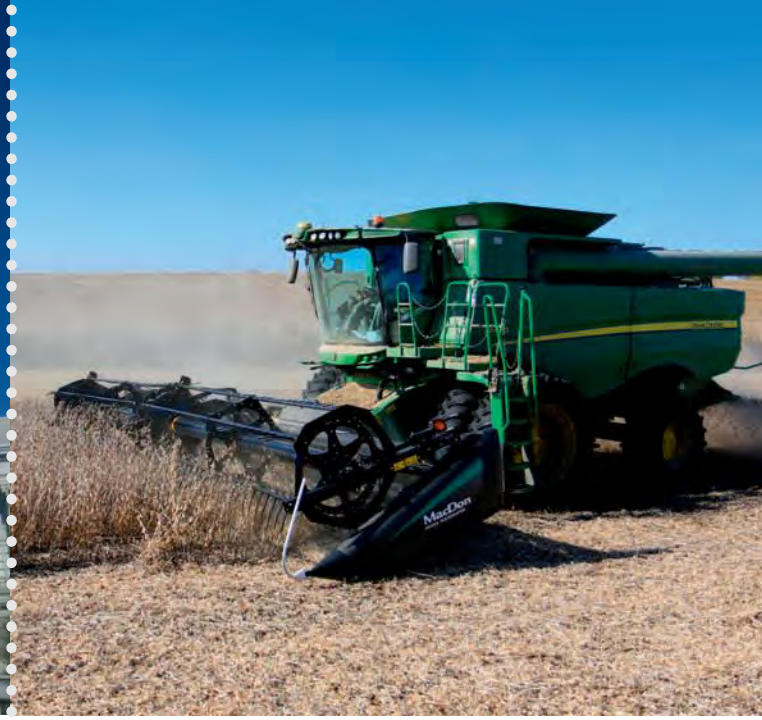
Missouri Soybean Association

Missouri soybean farmers count on good ag policy, and the Missouri Soybean Association (MSA) is the voice for Missouri soybean farmers at the state and federal levels. MSA works from the grassroots level and in the Capitol to combat anti-ag legislation and ensure farmers aren't subject to more burdensome regulations and trade barriers. ***Soybean checkoff dollars cannot be used for lobbying*** - that's why your MSA membership is vital to ensuring the soybean industry in Missouri is successful and profitable for years to come.

MISSOURI SOYBEANS

To learn more, visit
mosoy.org/missouri-soybean-association

YOUR CHECKOFF SUPPORTS YOU HERE.



Missouri Soybean Merchandising Council

The Missouri Soybean Merchandising Council manages Missouri's portion of the Soybean Research and Promotion Program, established in 1991 and commonly referred to as the soybean checkoff. Soybean farmers pay one half of one percent of the bushel price to the checkoff when they sell soybeans. Half is sent to the United Soybean Board and half is invested right here in Missouri in soybean production research, marketing and promotion, new product development and education to maximize profit opportunities for soybean farmers.

MISSOURI SOYBEANS
Brought to you by Missouri soybean farmers and their checkoff

To learn more, visit
mosoy.org/missouri-soybean-merchandising-council

HONOR WALL

Good news from those working on behalf of Missouri soybean farmers

NIFA Grants for Soybean Research

David Korasick was recently awarded a United States Department of Agriculture National Institute of Food and Agriculture (USDA NIFA) postdoctoral fellowship to pursue his research on the molecular basis of soybean cyst nematode infection resistance.

Korasick's work is supervised by Jack Tanner, professor of biochemistry, and Melissa Mitchum (University of Georgia), his mentor and co-mentor, respectively. Soybean cyst nematode (SCN) is the most detrimental and costly pathogen that affects soybean production in the U.S.; more than $1 billion is lost annually due to SCN infection. The project focuses on the soybean metabolic enzyme serine hydroxymethyltransferase 8 (SHMT8), and how changes in SHMT8 from an SCN resistant plant line confer pathogen resistance.

Korasick combines protein biochemistry, protein biophysics and X-ray crystallography approaches to tackle this problem. Korasick stated, "Our goal is to gain the information through these studies necessary to engineer a new line of soybeans with durable resistance for use in agriculture."

A Curators' Distinguished Professor in the Division of Plant Sciences, Henry Nguyen's research focus is related to abiotic stress tolerance and disease resistance in plants, primarily soybeans. Two United States Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA) grants, totaling almost $900,000, will allow Nguyen to build on those focus areas. The grants will help Nguyen and his team tackle important issues related to soybeans, including waterlogging tolerance and soybean cyst nematodes (SCN). Flooding and SCN cause billions of dollars worth of damages every year.

Nguyen is collaborating with Julia Bailey-Serres, director, Center for Plant Cell Biology at the University of California, Riverside, on the watterlogging project, and with Khalid Meksem, professor, Plant Soil and Agricultural Systems, Southern Illinois University, Carbondale, on the SCN project.

The University of Missouri College of Agricutlture, Food and Natural Resources initially shared this news.

Siegel Graduates, Joins MoSoy

Former Missouri Soybean intern Baylee Siegel is back on the soy team, now as a full-time member of the staff. After graduating from the University of Missouri with a bachelor of science degree in agricultural economics in December, Siegel joined the Missouri Soybean Association in January as the industry relations liaison.

During college, Siegel also interned with the Missouri Pork Association, Missouri Corn Merchandising Council and in Senator Brian Munzlinger's office.

Baylee is the daughter of Joshua and Katie Siegel of California.

Oseland Takes First Soy Foundation Scholarship

New program bridges resource gaps for next generation of problem solvers.

Putting technical training and research results to work are central to Eric Oseland's view of his role for farmers. The first-year Ph.D. student at the University of Missouri is focused on controlling weeds in soybeans, and connects his work directly to challenges facing farmers – and their bottom line.

Foundation for Soy Innovation

Oseland is the first recipient of the Foundation for Soy Innovation's new scholarship, and plans to use his award to both further his education and share what he's learned. He'll use the $1,000 award toward travel to the March 2020 Weed Science Society of America conference where he'll present his research on dicamba and the effect it has on soybeans.

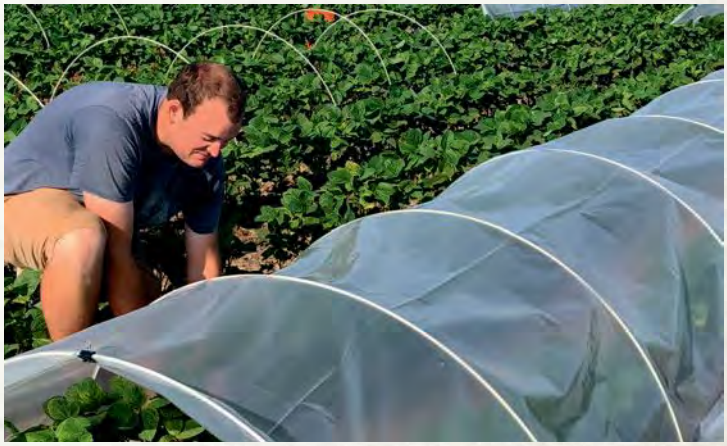
For Oseland, the scholarship supports both his academic goals and professional aspirations. He's charting a career path that will allow him to be a resource for others – assisting farmers, training developing agronomists and ag sales professionals, and designing research trials.

"When I complete my degree at the University of Missouri, I hope to work as an agronomist, consulting with farmers to develop strategies and select products to increase profitability and production," he said.

Oseland works closely with Missouri's Dr. Kevin Bradley, including on a research project funded by Missouri soybean farmers' checkoff dollars and the Missouri Soybean Merchandising Council observing the effect low soil pH has on dicamba volatility. The work is directly related to challenges farmers have faced with off-target movement and dicamba injury in recent years.

"Dr. Bradley has trained me very well in implementing field and greenhouse trials in ways that provide useful and timely data to soybean producers," he said.

Oseland completed his undergraduate work at Southern Illinois University – Carbondale, where he first worked on weed science research and earned a bachelor of science degree in Crop, Soil and Environmental Management.



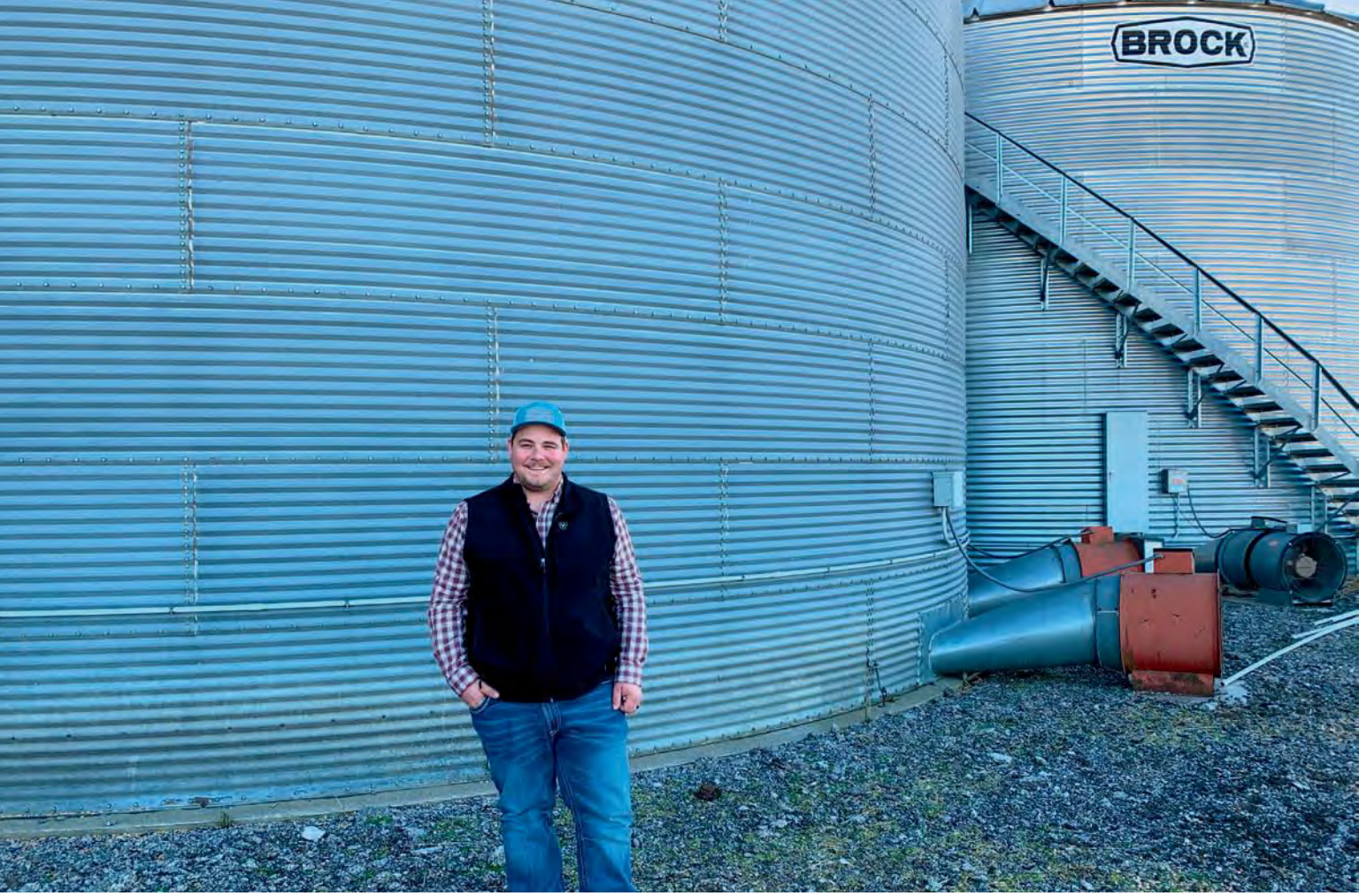
Eric Oseland

In establishing the scholarship program, the farmers behind the Foundation for Soy Innovation envisioned supporting students and early-career faculty who are working to support farmers. Scholarship funds may be used for coursework, supplies, specialty training and/or participation in a professional conference.

"We often talk about there being a bright future for soy, from its uses in livestock nutrition to building products and biodiesel, especially in Missouri," said Matt McCrate, chairman of the Foundation. "Through the Foundation for Soy Innovation, we're bringing together those who need to be at the table to really raise the bar on the work farmers have been doing, and to ensure that we're taking full advantage of the opportunities ahead. This scholarship is one step in that effort."

The Foundation for Soy Innovation exists to advance the technology, ingenuity and partnerships integral to the future for soy, at every stage in the process. From innovation in how farmers produce soy to elevating the ways we put soy to work, to developing environmentally friendly soy-based products, there are great opportunities ahead. Through this scholarship program and other efforts, the Foundation and its partners support academic and professional development of the next generation of leaders for the soy value chain.

The Foundation is led by soybean farmer and longtime seedsman Matt McCrate of Cape Girardeau. To learn more about the Foundation for Soy Innovation, explore soyfoundation.org.



Ready to Come Home

Ben Niendick's goal of being on the family farm full time drove his decisions in high school and during college, and as he moved back to Lafayette County after graduation. Through intentional coursework, networking and diversification, he prepared himself for the responsibilities that come with the family business.

By Brandelyn Twellman

What started as a high school student's FFA Supervised Agricultural Experience (SAE) project evolved into a college graduate's full-time job four years down the road. Ben Niendick said he never questioned whether he'd come back home to the family farm.

"I always knew I wanted to come back," he explained. "In FFA, I had a pretty good SAE selling square bales of straw. That built and built each year I was in FFA until I was finally able to purchase a farm when I was a junior in college. Then, I had a farm to come back to, along with farming with my dad. That's always been the plan. Even when I started high school, I knew that's what I wanted to do."

Today, Niendick's plan has come to fruition as he owns and operates Niendick Cattle and Grain in Lafayette County alongside his father, Neal. Though today the two are partners, Niendick started off helping his dad with smaller tasks on the farm.

"If I was old enough to do something, like grabbing Dad a tool, I did it," he said. "Then, I started helping him work on stuff on the farm. My sisters and I were always out and about,

especially during the summertime, helping with as much as we could handle at our age."

As his experience increased, so did his responsibilities.

"As we got older, the tasks got bigger," Niendick said. "You kind of progress like you would in any other job, I guess. It's just a more long-term progression."

After high school, Niendick followed in his older sisters' footsteps and pursued a degree at the University of Missouri (MU). Majoring in Agricultural Systems Management, he said he hoped to learn more about the agricultural industry to bring back home to the family operation.

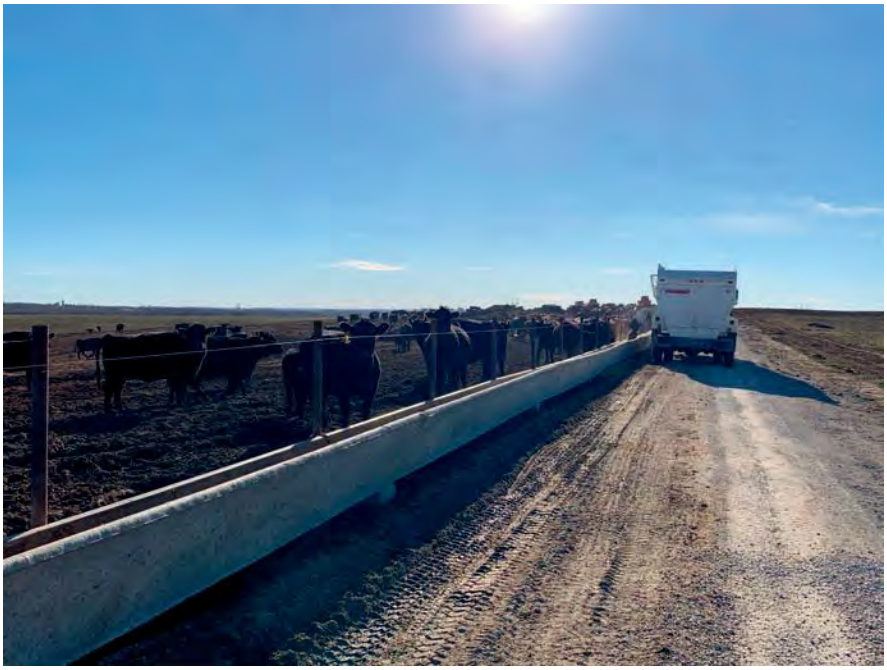
After graduating from MU in 2016, Niendick moved home to pick up where he left off on the farm -- only this time to stay year-round. He and his father had to work on expansion plans to make his full-time farming dreams a reality.

"I was able to purchase my own farm, which helped us expand," Niendick said. "You have to expand because you're going from supporting one family to two."

He and his wife, McKenna, married in 2019 and now live on the farm.

When looking at the future of their operation, the Niendicks made diversification and integration a priority. Today, their diversified operation consists of soybeans, corn, wheat and a feedlot business. They also bale straw, chop silage and do some custom harvesting. They accomplish the demanding tasks of such a diversified farm with the help of three full-time employees.

"When there were two of us here year-round, it created a lot more opportunity for us to expand," Niendick said. "Dad and I built the feedlot when I got back from school, which was also another way to diversify and expand our operation. We had to create more opportunities for diversification and integration to start expanding to creating ways to spread out our risk."



The Niendick family farm operation includes raising soybeans, corn, wheat and cattle. Expansion and diversification made it possible for the farm to support two families, allowing Ben to return to the farm full-time after college.

For the Niendicks, diversification also brings conservation and integration.

"Each part is separate, but it all ties in together," Niendick said. "We plant wheat for our straw after the corn that we chop for silage, which helps keep the erosion down on our farm. Then, our soybeans come in on the double crop side, so we have decisions to make when it comes to planting beans and cover crops."

Niendick said as in most operations, their decisions are affected by several markets.

"The cattle markets and grain markets are all changing," he said. "Either they both support each other, or one carries the other and vice versa. So, diversification has become a really big thing we do to spread out some risk."

Their expansion has made Niendick's daily responsibilities look different than the roles he held in high school.

"Dad and I meet at my mom and dad's house before 7 a.m. to gather our plans for the day before everyone gets there," he said. "We usually start feeding pretty early and get the feeder cattle fed. Then, the cattle take up a lot of our time in winter. In the row-crop offseason, when we're not planting or harvesting, we work on different equipment and make sure that's good and ready to go. Then, of course, if we need to plant or harvest, we do that."

Niendick hasn't skipped a beat since returning home.

"There's not a lot of down time on the farm," he said. "Depending on the time of year, what we're doing and the

> *"Dad and I built the feedlot when I got back from school, which was also another way to diversify and expand our operation."*
>
> -Ben Niendick

...continued on next page.

...continued from previous page.

weather, we'll get home around dark or after."

One of the biggest transitions he's noticed since returning home has been the partnership he now holds with his dad.

"It's a shared deal now and both of us kind of do the same things," he explained. "If someone needs to be somewhere else, we're interchangeable. On the feedlot side, I keep track of more of the feed rations than Dad does, but other than that, we can trade places easily if need be. This started when I came back from school."

Before this partnership could commence, the Niendicks had to sort through the details of their operations and start looking toward the future.

"It's different than we've done it before," Niendick said. "Some stuff we'll split down the middle, so there's kind of his, mine and ours we have to keep track of."

While he said working full time on the farm has met his expectations, the transition was not met without a few challenges.

"Since I got back from college, there's been at least two years that I've heard either my dad or my great uncle say that this is as bad as they've ever seen it," Niendick said. "Whether it's the weather or the markets, it's almost a little discouraging being a beginning farmer at this time in agriculture."

One tool Niendick utilizes to overcome these challenges is the knowledge he gained at MU. He said they've made some updates to their operation based on what he has learned.

"There are a lot of things on the technology side of it that we've started using on our farm," he said. "All the way to computer skills and using Excel programs. The custom feeding and feed bill side of the feedlot operation has been my part in the office. We also use things like iPads and GPS technology on our farm."

> *"I advise taking advantage of the different opportunities and organizations. It'd be tough to do, but I'd like to add it up and see how many dollars worth of business we've done with and for people I met in school. It'd be tens of thousands of dollars worth of business exchanged one way or the other."*
>
> -Ben Niendick

Niendick even took the skills he learned at MU a step further by customizing tools for their operation, specifically.

"I built my own Excel sheet to use for the feed in our operation," he said. "Different agribusiness classes I took helped get me in the right mindset."

He has also utilized connections made during his time in college to help grow the operation.

"In college, I advise taking advantage of the different opportunities and organizations," Niendick said. "It'd be tough to do, but I'd like to add it up and see how many dollars' worth of business we've done with and for people I met in school. It'd be tens of thousands of dollars' worth of business exchanged one way or the other."

Support from his dad has helped this integration.

"Sometimes farmers can kind of get stuck in the way they've been doing things," he said. "It's hard to be welcoming to new ideas sometimes. Dad's been good about keeping his eyes open and letting us talk through things to make some changes. The longer I've been here full time, the better it's gotten. We're getting more used to working together every day."

When looking toward the future, succession planning looks a little different for the Niendicks.

"You hear of some families talking about succession planning while the dad or grandpa is still very involved in the operation," Niendick said. "I think that smooths it over and makes the transition easier for everyone. It's a little different for our family because I'm the only one of my siblings actively involved in the business."

He said the conversations they have with their family about the future are just as important for planning purposes.

"Obviously, we still have to work on a succession plan, but we talk about it more in the short term now," he said. "If at any time you can prevent conflict around the topic in your family, you want to do that. Communication is key."

Niendick plans to continue building on those conversations and plans for growth of their family operation in the future.

"I'm hoping we can expand in every direction we're already going," he said. "In some areas, you have to allocate the time and resources, which determines the growth you can have like in the feedlot and silage-chopping business. As a whole, we'd like to see it grow as much as possible."

A Match Made in Hog Heaven

+

Missouri's animal agriculture consumes roughly **1.2 million tons of soybean meal** per year.

Soybean meal is a quality ingredient for hog rations:

- Easy to digest
- High in protein
- Full package of essential amino acids

Support from biodiesel demand saved farmers **$4.8 billion** on this feedstock in the last 5 years.

Learn more about soybeans in animal agriculture at mosoy.org

MISSOURI SOYBEANS

MOSOY.ORG
(573) 635-3819

734 S. Country Club Drive
Jefferson City, MO 65109

brought to you by Missouri soybean farmers and their checkoff

Where the Money Goes

The checkoff soybean farmers pay when selling their beans contributes to research, promotion and education programs. The Missouri Soybean Merchandising Council ensures the funds staying in Missouri are put to work and generate measurable returns.

By Christine Tew

The soybean checkoff amounts to just one-half of one percent of the net sale price of soybeans at the time of first purchase. Of the funds collected, half stay within the state and half are directed to national programs. Those funds must be invested toward improving the overall profitability for soybean farmers. Funds may be used for research, promotion and education efforts; soybean checkoff dollars may not be used for lobbying, membership or similar efforts and are watched closely by the USDA to ensure compliance with the Soybean Promotion, Research and Consumer Information Act and the USDA Soybean Promotion and Research Order.

The Missouri Soybean Merchandising Council, under the guidance of elected, volunteer farmer leaders and with the support of professional staff, invests Missouri farmers' soybean checkoff dollars to improve the bottom line and future for soybean and soybean farmers.

The Council is comprised of a board of thirteen farmers elected by their peers. Board members represent seven districts across Missouri and are elected to three-year terms. The board is currently led by chairman Robert Alpers of Prairie Home, vice-chairman Kyle Durham of Norborne, and secretary/treasurer Aaron Porter of Dexter.

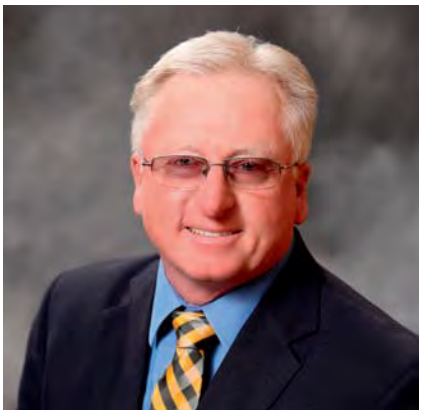
During the 2019 fiscal year, which ran July 1, 2018 through June 30, 2019, the Missouri Soybean Merchandising Council invested in both ongoing and new programs with the goal of increasing the profitability of Missouri soybean growers.

Each year, those investments, as well as the Missouri Soybean Merchandising Council's internal management of checkoff funds, are audited by an outside, accredited accounting firm. The Statement of Activities accompanying this report includes those audited financials.

Providing transparency in how those dollars are spent is a top priority for the farmer leaders and staff in Missouri. Sharp-eyed readers might notice that construction of the new Center for Soy Innovation in Jefferson City is not reflected in this report - it's considered a non-depreciable asset. Likewise, readers comparing this report year over year may notice that checkoff revenues are down considerably over the past fiscal year. Challenging weather and market conditions both contributed to that decrease.

Beyond revenues and expenses, the Missouri Soybean Merchandising Council's budget is summarized in this report using the following categories: Promotion, Research, Consumer Information, Industry Information, Producer Communications and Administration.

Promotion
Promoting Missouri-grown soybeans to stakeholder groups is a key component of investing the soybean checkoff. This budget area includes efforts to raise awareness within the market for Missouri soybeans, working with buyers along the soybean value chain – from grain elevators and processors, to retailers and end users – like livestock producers. This budget area also includes efforts to build demand for Missouri soybeans and soy products



Robert Alpers

around the world in partnership with organizations like the U.S. Meat Export Federation, USA Poultry & Egg Export Council and the World Initiative for Soy in Human Health.

Research
Each year, the board of directors solicits, reviews and selects research proposals for funding. Selected projects are subject to strict reporting and are posted online at mosoy.org and printed in the Annual Research Report. This budget area also provides for work at the Missouri Soybean Association's Bay Farm Research Facility and participation in the North Central Soybean Research Program.

Consumer Information
The Consumer Information budget area is the home for efforts to connect the vast majority of Missourians not living on a farm or ranch to the importance of soy and agriculture. Missouri's Ag Education on the Move program for elementary school students and school administrators, the CommonGround program for women, as well as participation in the Missouri State Fair and other large public events all are part of this category.

Missouri Soybean Merchandising Council
Statement of Activities
Fiscal Year 2019

REVENUES	
Assessment Revenues Collected From	
First Purchasers	$11,664,973
Other States	$1,576,897
	$13,241,870
Less Assessment Revenues Remitted to :	
Other States	$3,181,466
United Soybean Board	$5,006,944
Less Collection Fees Prescribed by State Law Prior to 11/30/90	$30,360
	$8,218,770
Net Assessment Revenues	$5,023,100
Contract Revenue	$45,286
Royalty & Licensing Fee Income	$70,653
Grant Income	$154,601
Other Income	$21,506
Gain on Sale of Equipment	$395
Sponsorship Income	$248,177
Interest Income	$220,548
Total Revenues	**$5,887,244**
EXPENSES	
Program Expenses	
Promotion	$1,126,594
Research	$3,452,111
Consumer Information	$238,210
Industry Information	$645,121
Producer Communications	$1,200,879
Administration Expense	$138,792
Total Expenses	**$6,801,707**
Decrease in Net Assets	**$914,463**
Net Assets, Beginning of Year	**$9,942,582**
Net Assets, End of Year	**$9,028,119**

Industry Information
Initiatives in this budget area include working with feed, seed and chemical companies, as well as manufacturers, to identify new management practices and uses for soybeans and soy products. This area encompasses business development and relationship building programs as well.

Producer Communications
This budget area includes the many ways checkoff funds are used to connect with soybean growers, including providing support for youth in agriculture programs. Farmers who hear soybean news on their local farm radio network, the Brownfield Ag Network or other radio stations are benefitting from the work done under this budget area, as are producers who participate in grower meetings, field days, educational tours or who learn about new practices through this magazine.

Administration
This budget area includes the cost of overseeing and investing Missouri's soybean checkoff dollars, including management, personnel and facilitating elections and meetings of the Missouri Soybean Merchandising Council's board of directors.

Within each of these budget areas, staff of the Missouri Soybean Merchandising Council coordinate with the Council's board of directors in Missouri, and with national directors and staff of the United Soybean Board and many other partners ensuring the value of every dollar is maximized and duplication of effort is limited. Headquartered in St. Louis, the United Soybean Board is charged with investing half the soybean checkoff funds collected in national-level programs.

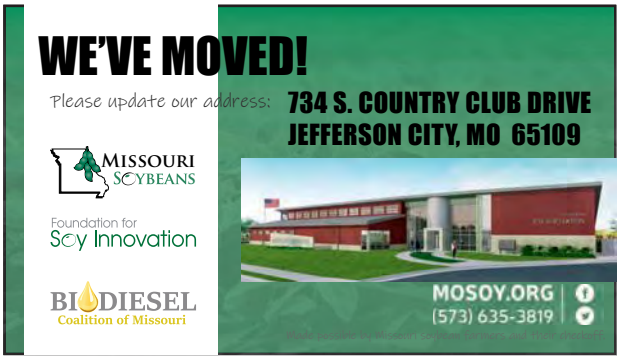
To learn more about the United Soybean Board and national-level soybean checkoff investments, visit unitedsoybean.org.

To learn more about the Missouri Soybean Merchandising Council and investments made on behalf of Missouri's soybean farmers, visit mosoy.org or call (573) 635-3819.

MISSOURI SOYBEANS

Upcoming Events & Activities

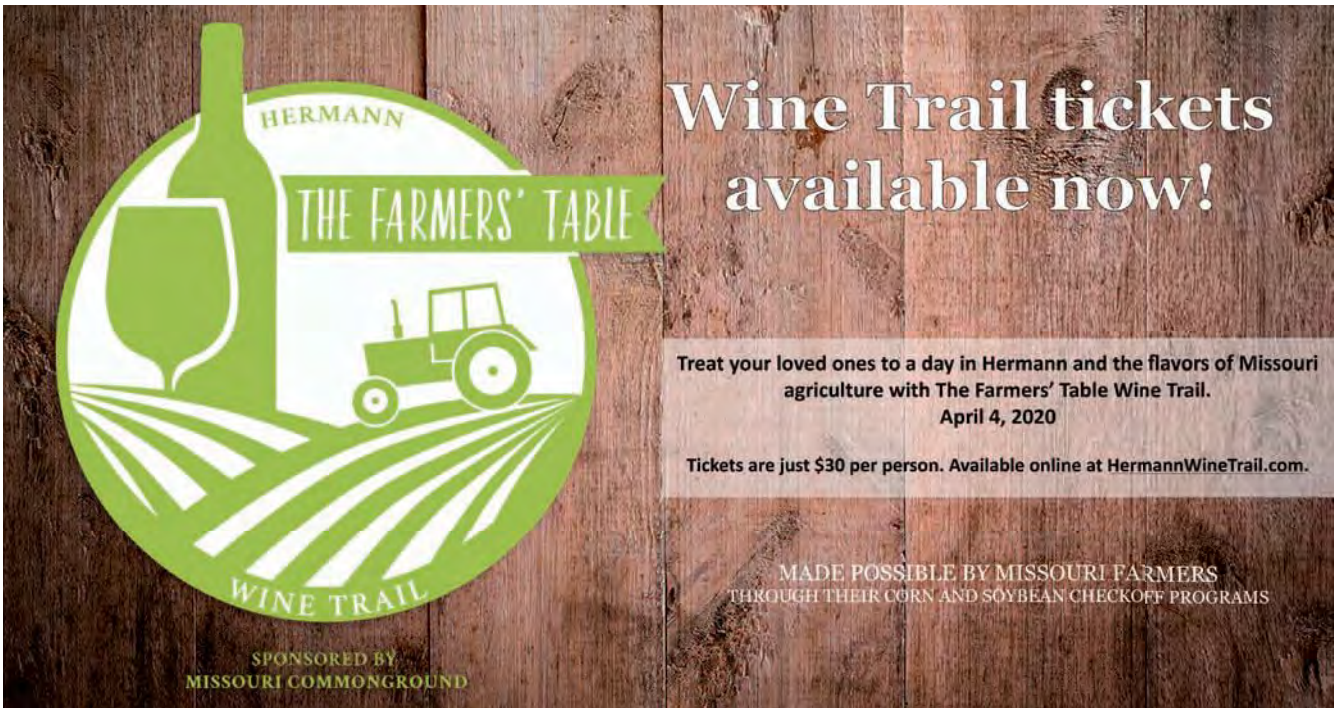
February 7	*District 4 Soybean Meeting - Lamar*
February 13	*District 1 Soybean Meeting - St. Joseph*
	Mental Health First Aid Training - Chillicothe
February 14	*District 2 Soybean Meeting - Norborne*
February 21	*District 5 Soybean Meeting - Columbia*
February 27-29	*Commodity Classic - San Antonio*
March 5	*Center for Soy Innovation Grand Opening Celebration - Jefferson City*
April 4	*The Farmers' Table Wine Trail Event - Hermann*
July 16	*SOYPAC Golf Tournament - Richmond*



Want More?

Visit us at mosoy.org!

"Like" us on Facebook and follow us on Twitter and Instagram.



Center for Soy Innovation

Construction of the new Center for Soy Innovation in Jefferson City is nearly complete, with final touches happening throughout the building as the weather has turned colder.

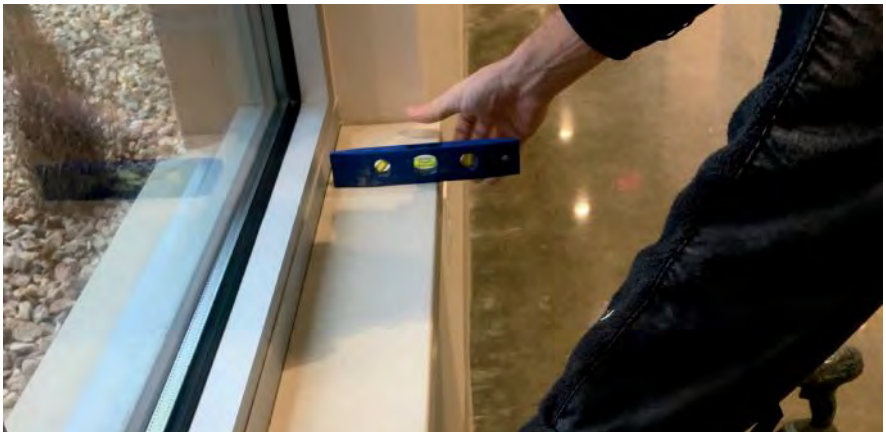
Most recently, the soy resin-based countertops and window sills were installed by Mid-Missouri Surfaces, including the topper for the front desk. The solid surface material from EcoTec Surfaces has a minimum of 53 percent renewable/recycled content and is resistant to fire, impact and staining – and is one of many opportunities for visitors to see new uses for soy in action at the Center.

The end of 2019 and start of 2020 also saw big changes at the Center for Soy Innovation as staff for the Missouri Soybean Association, Missouri Soybean Merchandising Council, Foundation for Soy Innovation and operations for partners like Paseo Biofuels, Biofuels LLC and Missouri Farmers Care moved into the building. The Missouri Soybean Association listed the organizations' previous home at 3337 Emerald Lane for sale last year in preparation for completion of the Center. The sale of the Emerald Lane location closed in December.

Please update your address book to the new address – 734 S. Country Club Drive – now that operations have moved to the new facility in Jefferson City. While the Center continues to be a work in progress as construction winds down and installation of educational displays and interactive exhibits picks up, the Missouri Soybean team looks forward to welcoming everyone to the grand opening celebrating in March.

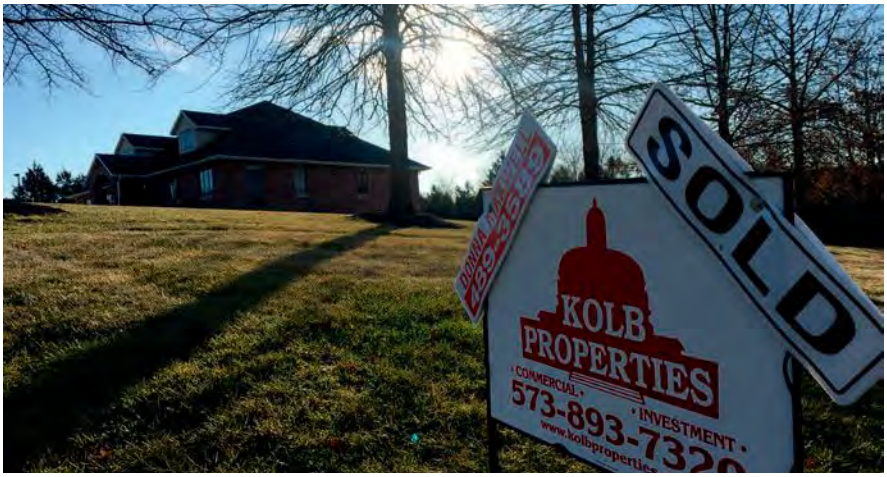
Save the Date – March 5, 2020 in Jefferson City!

To learn more about the Center for Soy Innovation, including opportunities to tour the facility, visit mosoy.org.



Solid surface window sills and countertops made with soy resin are now in place.

Landscaping is being installed as weather allows.



The previous home of Missouri Soybean, at 3337 Emerald Lane, has been sold.

WINTER MEETINGS

Join your Missouri Soybean Merchandising Council and Missouri Soybean Association for a district meeting to hear the latest on ag policy and your soybean checkoff investments – including research and education programs.

REGISTRATION INFORMATION:

Pre-registration is free and available until three days prior to each event.

Friday, January 24
District 3
11:00 - 1:00 p.m.
Audrain County 4-H Center, Mexico
21509 Hwy D Mexico, MO

Thursday, January 30
District 6
6:30 - 8:30 p.m.
Woods Fort Golf Course
1 Country Club Dr. Troy, MO

Friday, January 31
District 7
11:00 - 1:00 p.m.
Miner Convention Center
2610 E. Malone Ave. Sikeston, MO

Friday, February 7
District 4
11:00 - 1:00 p.m.
Thiebaud Auditorium
105 E. 11th St. Lamar, MO

Thursday, February 13
District 1
11:00 - 1:00 p.m.
Stoney Creek Hotel
1201 North Woodbine Rd. St. Joseph, MO

Friday, February 14
District 2
11:00 - 1:00 p.m.
Goppert Community Building
201 S. Pine St. Norborne, MO

Friday, February 21
District 5
11:00 - 1:00 p.m.
Bay Farm Research Facility
5601 S. Rangeline Rd. Columbia, MO

To learn more and RSVP:
contact Amber Meyer at ameyer@mosoy.org or (573) 635-3819

MISSOURI SOYBEANS

MOSOY.ORG
(573) 635-3819

734 S. Country Club Drive
Jefferson City, MO 65109

brought to you by Missouri soybean farmers and their checkoff