

# missouri

## SOYBEAN FARMER

A photograph of a man and a woman holding a baby in a field of golden soybeans. The man is on the left, wearing a dark blue jacket with a Missouri Soybean Farmers' logo. The woman is on the right, wearing a grey sweater and a dark vest. The baby is in the center, wrapped in a white blanket. The background is a field of golden soybeans under a bright sky.

### *Harvest to Home*

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December 2022

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SOYBEAN FARMER

Staff Contacts

Executive Director / CEO  
Gary Wheeler  
gwheeler@mosoy.org

Chief Operating Officer & Senior Policy Dir.  
Casey Wasser  
cwasser@mosoy.org

Chief Financial & Information Officer  
Kim Hill  
khill@mosoy.org

Director of Communications  
Samantha Turner  
sturner@mosoy.org

Communications Coordinator  
Ryan Siegel  
rsiegel@mosoy.org

Communications Coordinator  
Madelyn Warren  
mwarren@mosoy.org

Director of Market Development  
Matt Amick  
mamick@mosoy.org

Director of Agronomy & Research  
Eric Oseland, PhD  
eoseland@mosoy.org

Director of Licensing & Commercialization  
Bryan Stobaugh  
bstobaugh@mosoy.org

Director of Conservation Ag &  
Farm Operations  
Clayton Light  
clight@mosoy.org

Conservation Programs Manager  
Brady Lichtenberg  
blichtenberg@mosoy.org

Director of Outreach & Education  
Baylee Asbury  
basbury@mosoy.org

Field Services Coordinator  
Dylan Anderson  
danderson@mosoy.org

Policy Coordinator  
Liz Henderson  
lhenderson@mosoy.org

Accounting Manager  
Jeff Bruemmer  
jbruemmer@mosoy.org

Accounting Coordinator  
Macy Whittenberg  
mwhittenberg@mosoy.org

Senior Executive Specialist  
Mary Kever  
mkever@mosoy.org

Office Manager  
Amber Meyer  
ameyer@mosoy.org

Research Administrator  
Beth McCollum  
bmccollum@mosoy.org

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« Cover Shot  
The cover photo of the December issue was captured by Madelyn Warren. Pictured is MSA Board Member Dane Diehl, his wife, Erica, and daughter, Levelle, of Butler, Missouri.



Missouri Soybean Association  
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Contact Samantha Turner at (573) 635-3819 or sturner@mosoy.org for advertising information.

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# From The Field

## Notes from Missouri Soybeans' Leadership Team

### MSA Board Members:

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At the helm of harvest, I often think about home — my kids, my wife and the simple comforts of being in my house. In this season, outside of the combine cab, I try to spend as much time as possible with my loved ones in our home. As I sit and reflect on the house and family we've built, I can't help but think about how soybeans have helped with that — not only as part of our livelihood but as household products.

In this issue of the magazine, you'll find a number of ways soybeans are used to make a house a home. One of the truest reflections of that sentiment is the Center for Soy Innovation. It's the Center that soy built with everything from soy sealant to soy paint and Bioheat— we have it all.

With the recent passing of HB 3, legislators are showing their strong support of soy and strengthening and sustaining agricultural markets. As a farmer and MSA board member, I was thrilled to see the bill get past the finish line.

HB 3 was the top legislative priority for MSA during the governor's call for special session and contains all agriculture provisions originally passed by the General Assembly earlier this year in HB 1720. The tax credits for biodiesel producers and fuel retailers will increase demand for Missouri-made fuel and drive down the cost of biodiesel blends to consumers, making the growers across the state more prosperous for their family operations.

This holiday I hope you find comfort in your home and are surrounded by loved ones. I want to wish you a very Merry Christmas and Happy New Year.

Matt Wright - Missouri Soybean Association President



When you think about something on your farm that is versatile, what comes to mind? Maybe it is your truck, ATV, skid-steer or your favorite cordless impact. One that may not come to mind is probably in your field, grain truck or bin. That is the minuscule, yet powerful, soybean.

Soybeans are the building blocks for supplying animal agriculture with the highest quality, high-protein feedstocks. Soybeans are also used as a feedstock for many forms of carbon-friendly fuels such as biodiesel, renewable diesel (RD), sustainable aviation fuel (SAF) and home heating oil. Yet, that is just the tip of the iceberg when it comes to the plethora of ways soybeans impact our daily lives.

Many of the products that we use in our homes are derived, at least in part, from soybeans. From mold-inhibiting shingles on the roof and plush carpet on the floor to insulation in the walls that keeps us warm and attractive countertops in the kitchen, soy can be found almost everywhere in the home.

Soy provides a quality, sustainable and environmentally friendly alternative to petroleum-based products and other food ingredients, all while increasing demand and value of the soybeans we produce. The Missouri Soybean Merchandising Council has and continues to invest checkoff funds in developing and expanding new and existing markets, ultimately adding to the bottom line of the farmers that produce them.

Hopefully, for most, harvest is complete, and Thanksgiving has allowed for some time to unwind, visit with family, and reflect on the blessings all around us.

I pray you have a Merry Christmas and a Happy New Year!

Aaron Porter - Missouri Soybean Merchandising Council Chairman

# Letter from the Executive Director



The more the merrier! This sentiment rings true, especially in agriculture. Not only in yields and acreage, but in people — our industry's No. 1 commodity.

This holiday, we invite you to pull up a chair, sit down and have a drink. If I could, I would invite all the farmers into my home and welcome them to join my table this Christmas. I want to meet and mingle and reflect on the seasons behind and ahead.

We know during this time you are accounting for the next year — setting goals and making plans to prosper in 2023. At Missouri Soybeans, we are doing the same, and we want to align our visions for the soybean industry with yours.

To put our vision in perspective, Missouri Soybeans is spending time and resources discovering how Missouri can strengthen our domestic uses and increase animal agriculture — especially swine and broilers. Ultimately, we want Missouri to become a soybean net importer and generate revenue back to our soybean farmers and rural Missourians. With the construction of a new Cargill crushing facility in southeast Missouri, we are making strides to bring more beans back to Missouri.

Currently, we are seeing strong soybean prices but anticipate a dip in the markets. We not only need to sustain prices but also keep a good thing going. We also sincerely hope, along with the rest of you, that input costs stabilize and drive your expenses down. It doesn't matter how plentiful the harvest when diesel is running more than \$5 per gallon. This is why we invest checkoff dollars into domestic, Missouri-made products to futuristically offset costs for our growers and put money back into the pockets of soybean producers in each of our districts.

In this season, we give thanks and blessings to the passage of HB 3. Missouri Soybeans joins fellow agriculture groups in celebrating a triumphant win for farmers and small-business owners across the state with the passage of the recent bill. During a time of record inflation, the bill will provide much-needed relief to Missouri's No. 1 industry — agriculture — and help drive economic development in rural areas.

HB 3, sponsored by Rep. Brad Pollitt (R-Sedalia), was the top legislative priority for MSA during the governor's call for special session and contains all agriculture provisions originally passed by the General Assembly earlier this year in HB 1720. The tax credits for biodiesel producers and fuel retailers will increase demand for Missouri-made fuel and drive down the cost of biodiesel blends to consumers, adding to Missouri soybean growers' bottom line.

We hope our gift to you this Christmas is the gift of peace of mind that we have you covered in Jefferson City. We will fight the good fight and do all we can to ensure you have a prosperous 2023. We encourage you to take this time to relax and set your mind right, and we pray you get to spend this holiday season with family and loved ones.

Here at Missouri Soybeans, we wish you, and your families, a happy, healthy Merry Christmas and Happy New Year.

God Bless,

*Gary Wheeler*

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



# SOYBEAN POLICY UPDATE



In June, I described the session as “unprecedented.” At the time, I didn’t realize that the description could be extended to describe the entirety of 2022.

Every two years, our country has the chance to remake itself. Through the electoral process, new officials are elected to office, legislators introduce new priorities and a new direction is set for our nation. With the assistance of non-governmental organizations (NGOs) and other groups, the same public servants spend the next two sessions working to meet those priorities in the form of legislation.

This fall, Missouri legislators once again returned to the state capital for a special session and voters took to the polls for midterm elections. The outcomes of both leave those of us at the Missouri Soybean Association (MSA) extra thankful this holiday season.

## State Legislation

### Special Session

On Oct. 5, the agriculture industry came together to celebrate the signing of HB 3, the omnibus agriculture bill sponsored by Rep. Brad Pollitt (R-Sedalia), after answering the governor’s call for a special session. The bill contains essential Missouri Agriculture and Small Business Development Authority (MASBDA) programs and tax credits identical to those in HB 1720. However, unlike the previous version, a minimum six-year sunset rather than two was included on

each of the following tax credits:

- Extending the expiration of the meat processing facility investment tax credit;
- Creating a tax credit program for Missouri retail dealers of higher ethanol blend fuels;
- Creating a tax credit program for Missouri retail dealers of biodiesel;
- Creating a tax credit program for Missouri biodiesel producers;
- Creating a tax credit program for establishing or improving urban farming operations;
- Extending the expiration of the Rolling Stock Tax Credit program;
- Extending the expiration of the Agricultural Product Utilization Contributor Tax Credit;
- Extending the expiration of the New Generation Cooperative Incentive Tax Credit;
- Extending the Wood Energy Tax Credit program;
- Exempting utility vehicles for agriculture use from state and local sales and use taxes;
- Creating the Specialty Agricultural Crops Act; and
- Amending the Family Farms Act to modify the definition of small farmer.

During a time of record inflation, the pivotal legislation will provide relief to Missouri’s No. 1 industry and help further economic development in rural areas. These tax credits for biodiesel producers and fuel retailers will increase demand for Missouri-made fuel and drive down the cost of biodiesel blends to consumers, adding to Missouri soybean growers’ bottom line.

### Election Recap

While Nov. 8 did not result in a “red wave” like many expected, Missouri

remains a very red state after the mid-term elections. Despite Democrats winning back seats in the state House of Representatives, the supermajorities remain strong in both chambers and all statewide offices remain Republican.

MSA-endorsed candidate, Eric Schmitt, won his U.S. Senate bid against Democratic challenger, Trudy Busch-Valentine, with a 13-plus point victory, earning him nearly 55% of the vote. During his victory speech, Sen.-elect Schmitt vowed to take on the Biden administration and fight for the rights of parents, small-business owners and working families.

Of course, Schmitt will be stepping into the shoes of Republican giant, Sen. Roy Blunt. After 12 years of service as a U.S. senator, Blunt leaves behind a nearly 40-year legacy of public service to Missouri. He has always been a strong advocate for Missouri agriculture, fought tirelessly to bring home billions of dollars of investment to our state and remains a true statesman.

### State Leadership Elections

Following the Nov. 8 elections, House and Senate Republican caucuses met to elect their leadership for the upcoming session. Rep. Jon Patterson (R-Lee’s Summit) was elected floor leader in the lower chamber. A physician by trade, Patterson has spent most of his time in the House focusing on health care issues and is seen as a moderate within the Republican caucus.

Rep. Dean Plocher (R-St. Louis County) was already elected to be the next Speaker of the House back in September.

Sen. Caleb Rowden (R-Columbia) was elected by his peers to serve as President Pro-Temp of the Senate. Rowden has been a strong supporter of Missouri Soybeans and the broader agriculture community. Cindy O’Laughlin (R-Shelbina) was elected majority floor leader for the Senate. O’Laughlin has been outspoken on education issues and is the current education committee chairman for the Senate.

MSA looks forward to working with each of these strong leaders in the future as we navigate important issues affecting Missouri soybean farmers.

## Federal Legislation

### SEC Rule

Farm groups are speaking out against the U.S. Securities and Exchange Commission (SEC) rule that requires scope 3 emissions

reporting, arguing the requirement could drive small farming operations out of business as the financial burden of data collection will most likely fall on private farmers. Supporters of the rule claim that most large companies will bring in consultants to estimate emission numbers. Notably, Rep. Frank Lucas (R-OK), former chairman of the House Agriculture Committee, has introduced legislation that would block the rule and/or guaranteed loan financing for renewable energy systems — and biodiesel is a qualifying renewable energy system.

### Ocean Shipping Reform Act

As part of Ocean Shipping Reform Act of 2022 (OSRA) implementation, the Federal Maritime Commission (FMC) issued a proposed rule on defining unreasonable refusal to deal or negotiate vessel space allocations. The proposed rule was met with critical public comments from both sides.

The Agriculture Transportation Coalition urges FMC to withdraw the proposed rule and ask for Congressional authorization to delay the implementation date — currently set for mid-December — so that a

new rule may be drafted. Industry groups believe that the provision in the proposed rule allowing for carriers to use profitability and compatibility with business development strategies as a reasonable reason to refuse a deal prioritizes the profitability of ocean carriers over the growth and development of U.S. exports. Carriers take issue with language in the rule that suggests regulators could view special treatment to regular customers as unreasonable, citing the Shipping Act that established authority for shippers and carriers to establish contract structure in a way that works for that customer.

Notably, the Department of Justice Antitrust Division weighed in, supporting the FMC’s proposal.

### Low Mississippi River Levels

Due to drought and a lack of rain, low Mississippi River levels have caused significant delays in transporting crops during harvest season. Agricultural exports across the country were down 3.2 million metric tons from 3.5 during the last week of Oct., with soybeans shipped by barge accounting for nearly all the drop. So far, the U.S. Army Corps of Engineers has kept a channel open down the middle of the river through dredging.

In late Oct., the White House hosted a meeting with U.S. Department of Transportation (USDOT) and transportation executives to discuss this issue. While there is little to be done, the corps is working continuously to dredge the river and the USDA is providing shippers with the ability to secure temporary storage for commodities that cannot be shipped downriver.

**“Due to drought and a lack of rain, low Mississippi River levels have caused significant delays in transporting crops during harvest season. Agricultural exports across the country were down 3.2 million metric tons from 3.5 during the last week of October, with soybeans shipped by barge accounting for nearly all the drop. So far, the U.S. Army Corps of Engineers has kept a channel open down the middle of the river through dredging.”**

**-Casey Wasser, Sr. Director of Policy**

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### Want to know more?

MSA federal and state PAC contributors gain access to an exclusive newsletter for monthly updates on policy and regulatory movement in Jefferson City, Washington, D.C., and anywhere Missouri soybean farmers stand to be affected. The newsletter also provides more details on Missouri elections and the role MSA and you can play to impact the outcomes. Visit MoSoy.org or scan the QR Code for more details. ●

*Casey Wasser serves as the Chief Operations Officer and Senior 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.*



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# Heating the Holidays

BY RON KOTRBA,  
RONKO MEDIA  
PRODUCTIONS

**Bioheat fuel offers exceptional heating and significantly reduces greenhouse gas emissions.**

There's no warmth like that from heating oil, whose flame burns hundreds of degrees hotter than natural gas or propane. But as federal, state and local governments fervently move forward enacting their (electrify-everything) climate agenda, the proverbial heat is on the oilheat sector to decarbonize.

"Our industry is faced with absolute extinction," says Charlie Uglietto, owner of Cubby Oil & Energy, a heating-oil dealer servicing greater Boston. "There are people who want to end fossil fuels and put me out of business."

Uglietto's father started the company in 1945. As times changed, the company began converting coal furnaces to heating oil. Today, Cubby Oil has 7,500 residential and commercial accounts.

Just like coal transitioned to heating oil, Uglietto was introduced to the future of heating oil in the mid-2000s by Paul Nazzaro, president of Advanced Fuel Solutions and longtime supply-chain adviser for Clean Fuels Alliance America (formerly the National Biodiesel Board).

Nearly 20 years ago, Nazzaro asked a simple question no one else had: If biodiesel was so great for diesel vehicles, then why not for heating oil, too?

Bioheat fuel was born thanks to Nazzaro and support from Clean Fuels, the National Oilheat Research Alliance (NORA) and funding from the United Soybean Board and Qualified State Soybean Boards (QSSB) including the Nebraska Soybean Board and Missouri Soybean Merchandising Council (MSMC).

"We need to recognize the human factor of Bioheat fuel," Nazzaro says.

"Bioheat enables family businesses that rely upon liquid fuels to sustain their businesses."

The vision for Bioheat fuel began small — 2% blends of biodiesel in heating oil, then 5% — but for the then-nascent biodiesel industry, this was huge.

Then there was a shakeup in how society viewed climate change, the carbon intensity of fossil fuels and the threat of greenhouse gases (GHG). Biodiesel has always been a low-carbon fuel, but the primary reasons for its growing popularity shifted.

In biodiesel's early days, the major drivers were American energy independence and security, improving air quality in urban environments, job creation in rural communities and boosting depressed commodity markets by utilizing excess soybean oil.

As the climate movement took hold, however, people demanded less carbon-intense fuels than petroleum. Natural gas, a fossil fuel marketed as a "clean alternative," gained market share in home heating. But with biodiesel's ability to reduce lifecycle GHG emissions between 57% and 86%, a new and compelling purpose for biodiesel and Bioheat fuel was developed.

Low-level blends like B5, however, couldn't achieve the carbon reductions needed, so industry goal posts were moved. Over the years, higher blends like B20 have been thoroughly tested, approved and more widely adopted.

B20 is now considered a drop-in fuel



for legacy oilheat systems. The fuel specification for B20 heating oil has long been a part of ASTM D396.

"At NORA, B20 is a fait accompli," says Michael Devine, a longtime Bioheat fuel advocate and president of NORA. "All major burner manufacturers warranty B20 blends. We're focusing now on B50 blends and B100."

Bioheat Super Plus blends of B50 and B100 are the future of oilheat. NORA has created developmental fuel specifications for both, and it is conducting B100 field tests to see what adjustments, if any, are needed. The industry is also working with UL on a burner protocol for B0 to B100.

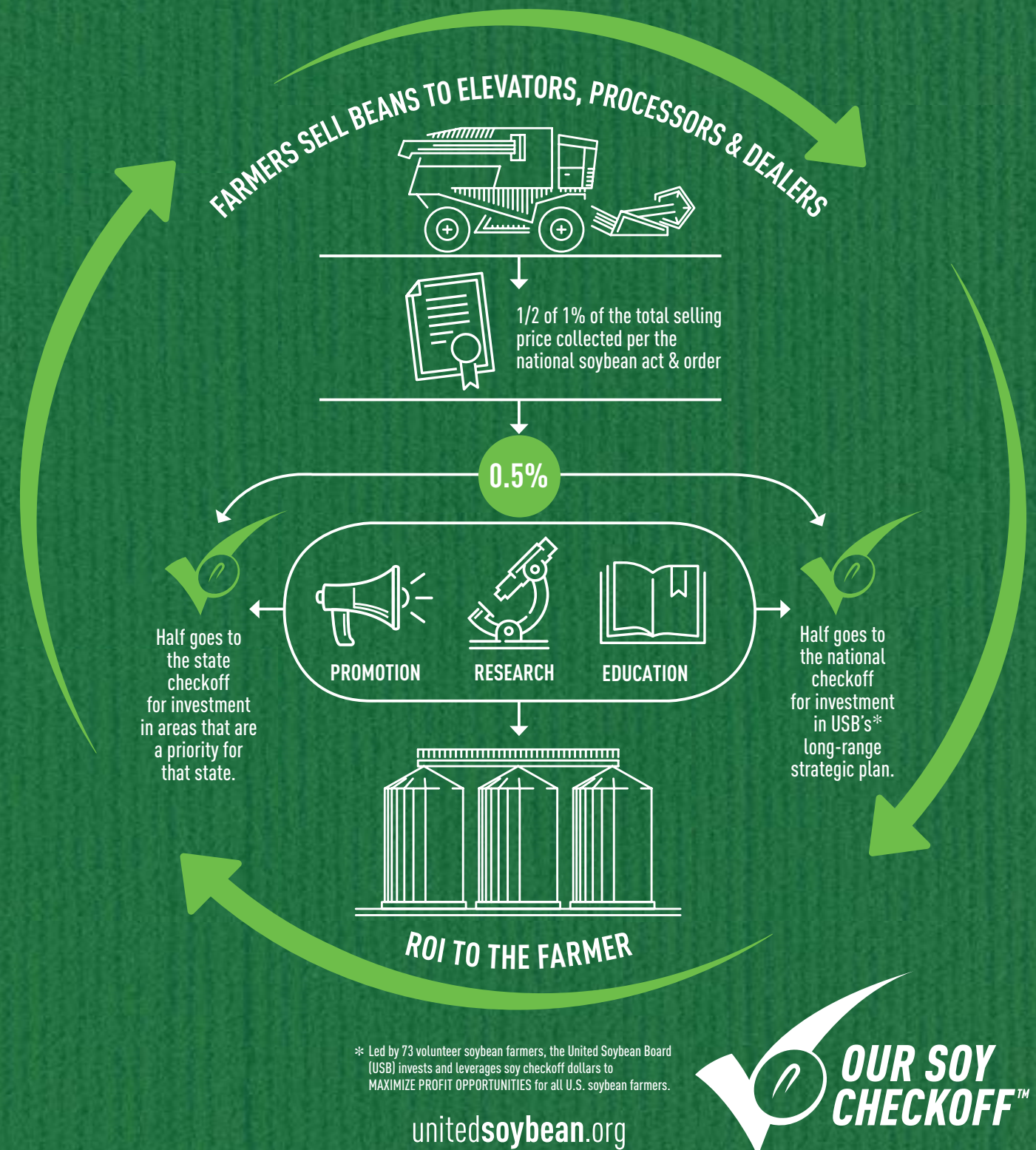
"Voting just opened," Devine says. "If this is successful, that'll be significant."

Through initiatives like the Providence Resolution, Northeast oilheat associations have committed to reducing GHG emissions from heating oil 15% by 2023 (B20), 40% by 2030 (B50), and to become net-zero by 2050 (B100). Furthermore, many Northeastern states have programs encouraging or requiring varying levels of Bioheat fuel.

"Thanks to efforts over the past 15-plus years, the heating-oil industry can meet the moment and decarbonize," Devine says. "This is trickier for natural gas and propane."

## 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.





In an entirely progressive move, Cubby Oil only delivers B50 to its 7,500 customers. The handful that didn't want it were advised to find another fuel dealer.

"We started at B5, then B10, B20, B30, B40 and eventually B50," Uglietto says. "We did a two-winter test with NORA and 16 B50 users. Six times a year, NORA teams sampled fuel and pulled burner heads. We became convinced immediately it wasn't a problem."

Cubby Oil has a few hundred customers with outside tanks. Biodiesel typically has higher cloud and pour points than petro-diesel. So, for B50 blends in outdoor tanks, preventative action must be taken.

"AFS designed an additive that drops the pour point of my B50 down to minus 30-degrees Fahrenheit," Uglietto says. "Secondly, in smaller nozzles there may be an issue with biodiesel's viscosity — it's a little thicker than heating oil. In those few cases, we increase the fuel-pump pressure to get better atomization. That typically solves the problem." If it doesn't, Carlin offers a nozzle-line heater.

Over the years, some have suggested cad cells may not detect Bioheat's lighter-colored flame and will shut down the system. "We've not noticed any problems with this," Uglietto says.

While a few alterations were made for a small number of Cubby Oil's residential customers migrating to B50, none of his customers with big commercial burners had issues.



"What we've done since 2008 has had a big impact for our customers," Uglietto says of adopting Bioheat fuel. "Our industry can't move without this piece. This keeps us in the discussions."

As the climate movement matured, the push to electrify everything has strengthened. The market-erosion threat to heating oil today is electric heat pumps.

"To me, the message to people is, we can accomplish GHG reductions at a fraction of the cost of installing a heat pump while keeping them comfortable—even on the coldest of days," Uglietto says.

Bioheat fuel provides immediate GHG reductions, which is important as the "time value of carbon" becomes more understood. A ton of carbon avoided today is worth more than a ton tomorrow because of how carbon emissions accumulate in the atmosphere.

"It's a pour-and-go fuel," Nazzaro says. "The government wants heat pumps in everyone's homes, but there are 25,000 reasons to stay with Bioheat fuel," he says, referring to the average cost of heat-pump installation.

Uglietto uses B100 in his own system and says soy Bioheat fuel is the most prevalent variety available in the Northeast. "I prefer it," he says.

Midwest soybean farmers and Northeast heat-

ing-oil dealers have much in common, such as multigenerational family operations and being dependent on the weather.

"Both have to be really smart in those things they can't control, which make up most of their business," Devine says. "They both understand their business front to back and have deeper relationships with people they do business with."

Uglietto extends great thanks to Midwest farmers for their support. "They had faith to invest in our industry before we saw the light," he says. "We look forward to collaborating well into the future."

Nazzaro says, "Through the generosity of QSSBs, they continue to invest in getting Bioheat fuel totally embedded in the liquid fuel supply chain."

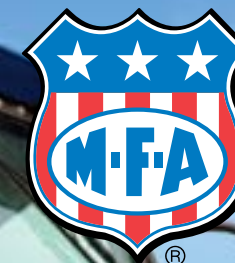
If California is the largest market for renewable fuels, then the Northeast Bioheat market is quickly evolving into the second largest. "Feedstock here is not scored like it is in California," Devine says. "There's a more level playing field for soybean oil to compete."

In an annual market between 5 billion and 6 billion gallons heavily concentrated in the Northeast, the opportunity is enormous.

Northeast fuel dealers don't just want biodiesel, they need it. "Without it, I don't have a future," Uglietto says. "I don't want to leave my boys without a future. The only thing that keeps us at the table is biodiesel." ●

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# Soy To The World

CONTRIBUTED BY USSEC

American grown, international impact. U.S. soybeans provide high-quality products domestically that have a large impact beyond farm gates. U.S. Soy can be found as a product in animal feed and vegetable oil or renewable fuels. Domestic use of U.S. soy makes up approximately 40% of the annual soybean crop, while the other nearly 60% is exported as solutions in the global supply chain.

Different regions across the globe have diverse uses for soy, creating opportunities for U.S. Soy to affect billions of lives. Regions such as the Middle East, North Africa and Europe drive demand for soy as a key ingredient in animal feeds. Places like Southeast Asia and the Americas use soy as a feed ingredient in their aquaculture industry. In Northeast Asia, U.S. Soy can be found in food and beverages. South Asia and China continue to demand soy as their populations grow, and a growing demand for protein leads to demand in Sub-Saharan Africa.

U.S. Soy is positioned to serve the

growing global market. It supports global vitality by meeting nutritional needs, supporting progress in global communities and by providing products that enhance quality of life.

## From Elevator to River

In the 2020/2021 market year, U.S. Soy set a record for exporting more product to international markets than ever before. In this market year, 61.65 MMT of soybeans were exported as whole beans, valued at more than \$28 billion in revenue for the industry. As meat, poultry and aquaculture production grow in varying regions across the globe, increased interest in processing their own soybeans grows. In fact, some countries have switched from importing soybean meal to whole soybeans with that growth. One such example is Egypt.

"One of the most common ways our U.S.-grown soybeans are exported is as whole soybeans," said Robert Alpers, soybean farmer from Prairie Home, Missouri, and Missouri Soybean

Merchandising Council board member, "Any trade partner is good for the American farmer and Egypt, who recently became the third largest importer of U.S. Soy, is one of them. I look forward to seeing where this growing market goes in the future."

Egypt's climb to the third largest importer of U.S. Soy is remarkable, but its cause is no secret. The booming chicken and aquaculture industries are leading the way for more soy to be crushed in the region. Egypt's recent switch from primarily imported U.S. soybean meal to whole soybeans has opened opportunities for U.S. Soy to do training in the region, as well.

## Meeting Specific Needs in a Region

While the bulk of U.S. Soy is shipped whole to its destination, certain countries need to have products already processed and ready for use.

## WISHH catches new markets for U.S. soy by advancing aquaculture.



ASA/WISHH is helping explore opportunities for soy-based feeds to grow aquaculture in 8 sub-Saharan African countries, including Ghana, Nigeria, Senegal, Togo, Burkina Faso, Uganda, Kenya, Tanzania

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WISHH is a program of the American Soybean Association and is funded in part by the United Soybean Board and state soybean board checkoff programs.

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"If the country doesn't have the infrastructure to do it themselves, they know they can lean on us for our high-quality soybean meal," adds Alpers. "They can always trust U.S. Soy to have a good end product for use in their livestock feed."

During the same marketing year, international markets purchased 12.3 MMT of soybean meal, with the Philippines being the top export market for the meal.

Consumers in the Philippines prefer fresh poultry and pork sources, meaning the country must meet the demand with domestically raised meat, rather than importing U.S. raised meat that has been previously frozen. Food security is of high importance for the Philippine government, creating an opportunity for U.S. Soy by providing soybean meal to be used to feed their meat animals. U.S. Soy, through the checkoff, has worked to create a preference for U.S. soybean meal within their animal industry. This leads to higher exports for U.S. Soy and increased food security within the country.

### Recognizing Soy Oil's Diverse Use

Much like U.S. customers, countries around the world have found use for soybean oil in food, industrial and fuel applications. When demand for oil within a country outpaces their domestic production, they will lean on the U.S. to provide oil to meet their needs.

"Our leading soybean oil export market is Korea," said Alpers. "Their

domestic consumption is outpacing their production, so our U.S. soy oil is meeting their needs for food and biodiesel production.

Korea's food industry has distinct preferences on how they use imported U.S. soybean oil versus their own domestic production and use of palm oil. Hotels, restaurants and institutions heavily rely on imported soybean oil, while locally processed soybean oil is generally for home use. Food processors still prefer palm oil for food manufacturing, however, as they view it as more functional.

Korea's rise as the No. 1 oil market for U.S. Soy oil was due to increased biodiesel production, something that increased its overall need for vegetable oil. Korea uses both soybean oil and palm oil in its biodiesel production, which has led to significant increases in demand for all vegetable oils.

Soybean oil exports are a great way to highlight the value of U.S. Soy to customers and continue to build U.S. Soy's reputation as a consistent supplier of quality soybean products.

### Second-Hand Soy

When looking at U.S. soybean exports, consideration should also be given to the U.S. Soy fed to U.S.-raised animals and then exported as finished meat products.

"We may not think of soybeans being exported through meat products grown and raised right here at home," said Alpers. "We often export cuts we don't typically use here and would otherwise go to waste. Exports add value to our

pork, beef, poultry and soybeans. We are very fortunate to have these trade partners."

U.S. Soy plays an important role in animal diets both globally and domestically. It provides protein in the animals' diets, which thus turns into high-quality, nutritious protein foods for human consumption.

### Continuing to Bring Soy To the World

The soybean checkoff helps fund efforts throughout the globe to drive profitability for U.S. soybean growers. Through the U.S. Soybean Export Council (USSEC), Missouri Soy helps to bring education and marketing efforts to a wide range of U.S. Soy customers. "USSEC works in various regions of the world every day to drive demand for U.S. Soy. They know what our trade partners need better than we as farmers do," said Alpers. "They tell us what is needed in particular countries so we can continue to drive demand for exports."

Global soy consumption has increased 53% from 2000 to 2022. For the past three years, global soy consumption has outpaced production, outlining opportunities for U.S. Soy to continue its growth as a sustainable protein source.

U.S.-grown soybeans and soybean products have a global impact in 82 countries, and the demand is only growing, providing more and more opportunities to deliver high-quality soybeans across the global marketplace. ●

***"We may not think of soybeans being exported through meat products grown and raised right here at home. We often export cuts we don't typically use here and would otherwise go to waste. Exports add value to our pork, beef, poultry and soybeans. We are very fortunate to have these trade partners."***

***Robert Alpers, MSMC Board Director***





# MISSOURI BIODIVERSITY PROJECT CONTINUES

In a collaborative partnership with conservation stewards, the Missouri Soybean Merchandising Council (MSMC), Missouri Corn Merchandising Council (MCMC), Missouri Department of Conservation (MDC), MFA Incorporated, Pheasants Forever/Quail Forever and the Ecosystem Services Market Consortium (ESMC) are once again offering a biodiversity credit program to the Show-Me State's growers.

In its second year, the biodiversity project provides opportunities for Missouri's corn and soybean farmers to earn biodiversity credits by expanding pollinator habitats as part of ESMC's national ecosystem services market program.

Missouri farmers working to create or enhance pollinator habitat within existing or new field borders, buffers, waterways or on other non-productive agricultural grounds are eligible. Once credits are quantified and verified, ESMC makes the credits available for purchase to interested buyers.

The average payment from last year was \$105 per acre for qualifying enrolled land.

"This program is a fantastic way for corn and soybean farmers to create some extra income on unproductive acres on their farm, all while providing crucial habitat for beneficial native pollinators and other wildlife," said Brady Lichtenberg, conservation programs manager for MSMC. "Missouri Soybeans is excited to offer farmers the opportunity to participate in a voluntary private market program designed to help improve the land and wildlife habitat for future generations."

Corn and soybeans are the most widely grown crops in North America. Though not essential to corn and soybean production, pollinators such as native

bees commonly forage in these fields. As more farmers continue to adopt precision technology to better utilize productive acres, information from the biodiversity pilot project can help make informed decisions on land management in less-productive areas.

"Creating healthy habitat for pollinators benefits people, crop production, soils, water and wildlife," said Jason Jensen, MDC community private lands field chief. "By working with like-minded partners and producers, we all achieve the goal of profitable farming through sustainable conservation practices. The biodiversity pilot allows producers to increase conservation practices on their working lands with relatively little investment or risk."

The biodiversity pilot project is the latest in a portfolio of more than 15 projects ESMC has launched to test and refine its market program. The pilots test ESMC's processes for credit generation and sales and ensure all other program aspects are operational and meet grower and buyer needs.

"Our members are seeking opportunities to credibly demonstrate increased biodiversity outcomes in their agricultural supply chains," said Debbie Reed, ESMC executive director. "We are excited by the interest from producers, producer organizations and buyers looking for credible biodiversity impacts from our market program. Based on the results of this project in Missouri, we will increase opportunities for ESMC's members to invest in biodiversity in agricultural lands throughout the country."

This is the last year of this biodiversity pilot, with only one year of commitment from farmers willing to participate. Incentive payments will be offered to interested farmers to offset initial costs and keep this a low-risk opportunity.

Missouri farmers interested in learning more about the biodiversity project and creating pollinator-friendly landscapes are encouraged to visit [www.mocarbonpilot.com](http://www.mocarbonpilot.com).

# WISHH graduates entrepreneurs from **global training** for high-quality foods and feeds.



**Connect with WISHH**  
**wishh.org**



*WISHH is a program of the American Soybean Association and is funded in part by the United Soybean Board and state soybean board checkoff programs.*



# The Solutions are Soy-Based: How One Commodity is Addressing Global Issues

CONTRIBUTED BY USB

It's no secret that the world is struggling – in more ways than one. With rising prices and pressing environmental issues, it's easy to question if solutions are possible. The answer? Well, it's growing in your fields.

"Farmers are constantly looking for new ways that our crops will be utilized, that we're not just waiting to see what happens to us from the world, but we're looking for ways that we can help," says Meagan Kaiser, soy checkoff farmer-leader and soil scientist from Missouri. She's convinced that full use of crops will make a positive impact on the future.

The agriculture industry is no stranger to risk. Farmers have found that some risk equals tremendous rewards. "In agriculture, we think generationally, and so we kind of accept a lot of risks because we feel so connected to the outcome," says Kaiser. With advancements in science and technology, U.S. Soy has matched many industries as they take a leap for a better tomorrow, providing functional answers today to a variety of challenges. Soy can be a solution in:

## Food

It's common to read the back label of packaged food and see soybean oil listed as an ingredient. It's also found in many food products as a complete source of protein, a fact that the checkoff promotes globally. Plus, efficient land, water and energy use from soybean farmers across the country have reduced greenhouse gas emissions and increased soil health tremendously. These sustainable practices help better our world while keeping food on tables.

## Packaging

Packaging is used for many different products and it's not new information that most materials used do not support the environment. Fortunately, soy can help here, too. "We can produce renewable, biodegradable plastics from our green crops," says Kaiser. The development of soy-based plastics is just the beginning; many common products can be created with materials derived from renewable, biodegradable soy. This results in 1,000+ soy-based products on the market today. From shoes to tires to artificial turf, your crop is helping solve a major environmental problem.

## Fuel

Soy is lending a hand to keep vehicles, equipment and planes running in a much cleaner manner, with biofuels. "I immediately think of the soy that we grow in our field being a drop-in replacement for biofuels into our tanks, helping not only mitigate the pain at the pump, but also help improve our carbon footprint," says Kaiser. As fuel demand increases so does the need for soybean oil, helping farmers lead innovation in the biofuel industry and contribute to a renewable option for people across the country.

As soy continues to expand in the market, you are addressing some significant global problems with soy-based solutions that are available today.

"We've got a job to do, and people are depending on us," adds Kaiser. Soy means sustainability, ultimately helping our world become a better place for generations to come. Get the latest information on how your soybeans are becoming the solution at The Soy Hopper. ●



## MORE TO SOY THAN MEETS THE EYE

Where some only see a handful of beans, we see endless possibilities. That's why, from cooking oil to candles, U.S. Soy can now be found in nearly every room in the house. Discover how soy could be used in your home below.



CHAIR CUSHIONS



PAPER, SOY-BASED INK



COOKIES



RUBBER-SOLED SHOES



VEGETABLE OIL



TOFU



LOTIONS



CANDLES



PAINT



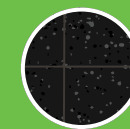
SOY GLUE



SEALANT



TIRES



ASPHALT



TURF

Discover the many ways your state and national checkoff dollars support the development of soy products in the home by visiting [unitedsoybean.org](https://unitedsoybean.org).





# MSA ANNOUNCES 2022-23 PLF CLASS

The future of American agriculture depends on sound public policy and involvement from farmer-leaders who share an appreciation for the legislative and regulatory process. The Missouri Soybean Association (MSA), in partnership with the Iowa Soybean Association (ISA), welcomes 14 Midwest soybean growers to the Iowa-Missouri Policy Leaders Fellowship (PLF) to witness and learn more about these processes firsthand.

The collaborative, one-year experience attracts young soybean farmers who possess a desire to learn more about government and the legislative process, all while improving leadership and advocacy skills on behalf of the soybean industry. Farmers were joined by legislative staff, industry leaders and key stakeholders during the program kickoff held Aug. 30 through Sept. 1 in West Des Moines, Iowa.

Participants from Missouri include six farmer-leaders:

- District 1: Joe Lau
- District 2: Rhonda Oesch
- District 3: Trevor Jaco
- District 4: Matt Moreland
- District 4: Austin Moreland
- District 5: Terrance LePage

Throughout the year, participants will gain a deep understanding of the policies, laws and regulations that affect agriculture; the soybean industry; and rural America at the local, state and federal level. Weaving travel and social interaction into the program curriculum, participants will become aware of the role policy advocacy and a unified voice play in the legislative process.

"It's interesting how many people have a common goal across the country," said Matt Moreland, a MSA member and

soybean grower from Harrisonville. "It's refreshing to see people from another state working toward that goal."

During the PLF annual kickoff event, participants toured the Farm Progress Show in Boone, Iowa, received briefings on farm policy and listened to a commodity outlook from StoneX Analysis during the programming. In 2023, PLF will attend the MSA winter and annual meetings, visit Commodity Classic in Orlando, Florida and connect with federal lawmakers from their respective states during a visit to Washington, D.C., while attending the American Soybean Association board of directors meeting.

Interested in learning more or becoming a member of the next PLF class? Please visit [mosoy.org](https://mosoy.org) or reach out to Baylee Asbury at [basbury@mosoy.org](mailto:basbury@mosoy.org).



## Missouri Biodiesel Incentives and the Rise of Clean Fuels

Missouri Gov. Mike Parson recently signed House Bill 3 (HB3) into law, boosting the biodiesel industry in the state with tax incentives for retailers and producers. Missouri's biodiesel industry adds significant value to the state's soybean crop and over \$1.25 billion in economic activity. This legislation ensures that Missouri gets more value from its homegrown fuels.

The biodiesel incentives are another hard-earned win for Missouri's soybean farmers, and more wins are on the way. The pieces are in place for tremendous growth in biodiesel, renewable diesel and sustainable aviation fuel. Clean fuels are expanding into marine, aviation and locomotive fleets, and a new crush facility planned for Southeast Missouri will have an annual crush capacity of 62

million bushels to help meet the demand.

The passage of HB3 demonstrates that soybean farmers are as critical now as when Missouri's visionary farmers created the biodiesel industry 30 years ago. The clean fuels industry needs farmers to continue to be advocates and leaders and provide their knowledge, perspective and fighting spirit to help us push into the future.

Farmers are a crucial part of the clean fuels industry, and this is an exciting time to get involved.

Join us at  
**Clean Fuels Conference 2023**  
for the next steps in the rise  
of clean fuels.

Register at [CleanFuelsConference.org](https://CleanFuelsConference.org)





# Harvest to Home

By Madelyn Warren

The frost-covered ground in Missouri makes it easy to forget that just a few months ago, soybean farmers worked late into the night, praying for triple-digit yields while harvesting their crop. Now, farm families gather in the warmth of their homes to celebrate the holiday season and look back on what Missouri Soybeans' hopes was a meaningful year for growers. Meanwhile, the recently harvested beans are already being crushed and processed into products that will soon hit shelves in the upcoming year.

From candles to car tires, soy products surround us every day. However, many of the soy-based alternatives we often rely on wouldn't be possible without the wisdom and forethought of Missouri Soybean Merchandising Council's (MSMC) farmer-leaders.

"Developing emerging revenue streams is a core tenet of the Missouri Soybean Merchandising Council," said Aaron

Porter, MSMC chairman. "Finding soy-based solutions for everyday household goods helps maximize Missouri soybean farmers' profitability and ensures that our legacies are felt within the home as well."

The impact of a producer's hard work is seen far beyond the field. As the year comes to an end, it is time to reflect on the efforts and achievements of the past. From harvest to home, you are Missouri soybean farmers and your roots run deep.

## ***You keep the earth clean.***

Generations of soybean farmers have been called to be stewards of the land and have taken up the mantle of nurturing the earth. Through regenerative agriculture practices, such as no-till and cover crop planting, growers are frontline soldiers in the efforts to reduce climate change and protect the land, air and water around

us.

Innovations such as biodiesel and sustainable aviation fuel (SAF) reduce the carbon footprint and provide a domestic option for energy independence. Biodegradable plastics ensure that waste is not left for future generations to clean. Soybean oil replaces petroleum in rubber to offer a more sustainably produced product.

## ***You provide thousands of jobs and keep thousands fed.***

Each year, the economic impact of the soy industry in our state far exceeds its \$3.5 billion production value. In fact, tens of thousands of Missourians are employed by soybean production and their stakeholders. Spanning the entirety of the value chain from production farms to feed mills, workers are empowered by the soybean industry to guarantee that soy is the preferred ingredient for protein and oil.

"Our farmers are steadfast in their efforts to feed the world," said Gary Wheeler, Missouri Soybeans CEO and executive director. "While the consumer may forget the countless hours of labor, research and innovation that went into making their meal, Missouri soybean farmers' promise to provide a sustainable product means more to them than their profit margin. It is about ensuring an abundant food supply, investing in the land and creating pathways for future successes. We are incredibly lucky to serve the farmers and assist them in keeping that promise."

New varieties of soybeans are produced each year by public and private breeding programs that move the industry forward. High-oleic, food-grade beans, including SOYLEIC soybeans, are the result of these programs and provide healthier options to traditional ingredients. Soy flour, a gluten-free alternative, is made from roasted beans that have been ground down into a fine powder. Finally, holiday dinners are made a little sweeter by incorporating soy lecithin, a key ingredient found in chocolate and a byproduct of the degumming process used to produce soybean oil.

## ***You make a house a home.***

Although the carefully selected scented candles and paint-covered walls bring the product from the field to our fingertips, it is the lessons, traditions and memories of farm families that make a house a home.

Farmers teach us that you should work hard for your achievements but remain humble when asked about them; that you should say grace before a meal and leave time throughout the day to bow your head; and that no matter how hard your life may seem, the opportunity to show kindness to your neighbor never comes at too high a cost.

In our homes, the value of a warm meal is never forgotten and the ritual of sitting around the dinner table is never missed. For farm families, a

child's first time behind the wheel comes much earlier than 16 and the farmer's retirement comes much later than 65. Because the love of the land is more than just a job, it's an investment in their legacy.

## ***You're fighting for the future.***

The story of soy goes much deeper than the monetary value it brings to farmers. Their investments illustrate the values and beliefs of the industry. Their practices connect tradition to innovation. Their new uses pave the way for preparation to meet opportunity.

Often times, it is easy to forget to look back at the year and appreciate the smaller moments — the ones that seem insignificant at the time but that add up to be incredible. However, this holiday season is exactly the time to do just that because these decisions have a much greater impact than you might ever imagine. The actions taken today reap hope for tomorrow.

*continued on page 26...*



***“Finding soy-based solutions for everyday household goods helps maximize Missouri soybean farmers’ profitability and ensures that our legacies are felt within the home as well.”***

***Aaron Porter, MSMC Board Chair***



*We're Missouri Soybean farmers.  
There's dirt under our nails,  
And on the soles of our boots,  
But we keep the earth clean.*

*We don't wear a suit and tie,  
Or work a 9-to-5,  
But we provide thousands of jobs,  
and keep thousands fed.*

*We're up before you wake,  
And sometimes we miss bedtime,  
But we make a house a home.*

*We keep tradition on the table,  
And our families at the forefront,  
Because we're fighting for the future.*

*We're teachers,  
And we're students,  
We're historians,  
And we're innovators,  
We're leaders,  
And we're servants,  
Because soy is bigger than us.*

*Because with soy, what we sow today will  
reap hope for tomorrow.  
Our roots run deep.*

## From Harvest to Home

Our farmers are our future, the work that you do to ensure the land is properly cared for, your legacy is sustained and your crop is bountiful is appreciated by all of Missouri Soybeans.

We are excited to share with you our appreciation for the work that you do day-in and day-out with our *Harvest to Home* video.

See our thanks at [mosoy.org](http://mosoy.org) or scan the QR code. ●



## Putting energy where it matters most

"I get my power from my co-op, so I can put my energy into my family. Touchstone Energy Cooperatives provide much more than a way to the keep the lights on – it's how you plug into the family, friends and neighbors that make up your local co-op."

**Touchstone Energy Cooperatives.**  
Your source of power. And information.







# Save a seat for soy

The tree is decorated, and the presents are wrapped. Stockings dangle from the mantel, and travel plans to visit family are set. Holiday magic is in the making, so as you plan your seasonal meals, don't forget to save a seat for soy at the table.

Whether your favorite part of the meal is the Christmas ham, pecan pie or hot cocoa at the end of the evening, soy foods can be added to boost your family's health.

Soy is a powerhouse protein for both humans and animals. It is considered a "complete protein," which means it contains all nine essential amino acids in amounts needed by the human body. Soy foods are a source of folate, potassium and fiber. Soy protein and soybean oil both carry U.S. Food and Drug Administration (FDA) heart health claims due to their cholesterol-lowering effects, and soy protein is the only plant-based protein to receive a "heart-healthy" certification from the agency.

Here are some easy ways to celebrate the season with soy protein:

- Pack your baked goods with protein by using soy flour.
- Boost your favorite hot cocoa recipe by using soymilk instead of hot water.
- Stir silken tofu in your mashed potatoes for added creaminess and protein.
- Use soybean shortening in your favorite pie crust recipe.
- Include edamame on your vegetable trays.
- Toss roasted soynuts in your homemade holiday snack mix.

There are many ways to use soybean oil, often labeled "vegetable oil," in your holiday dishes.

- Slather a U.S. soy-fed ham in a soybean oil-based marinade.
- Use soybean oil to roast root vegetables or fry your turkey.
- Make a homemade salad dressing by mixing soybean oil with your favorite vinegar and herbs.

No matter how you consume soy, you are supporting sustainable, nutritious soy grown by the hardworking men and women producing U.S. Soy. Be sure to save a seat for soy at your holiday table this year to celebrate U.S. soybean farmers and a healthy, happy family.



## ROASTED BUTTERNUT SQUASH

1 butternut squash sliced  
2 tablespoons honey  
1 tablespoon gochujang  
1 tablespoon soy sauce  
1 teaspoon sesame oil  
4 cloves of garlic  
Green Onion  
Roasted Soybeans

Preheat oven to 400°

Peel and seed the butternut squash

Slice squash in 1/4 inch slices

Mince garlic

Combine honey, gochujang, soy sauce, sesame oil and garlic

Toss butternut squash in honey soy sauce

Arrange squash in an even layer on a parchment lined baking sheet

Roast for 20 minutes, then flip squash and return to the oven for another 10 or until tender

Garnish with green onion and roasted soybeans and serve

If butternut squash isn't for you, try substituting with other vegetables!



## SOY GLAZED ROAST CHICKEN

*For the chicken:*

1 whole chicken, spatchcocked  
1/2 cup margarine  
1 tablespoon salt  
1 tablespoon pepper  
1 tablespoon garlic powder

*For the glaze:*

1 tablespoon brown sugar  
1 tablespoon soy sauce  
1 teaspoon chili flakes

Using poultry shears, remove backbone from chicken

Salt the chicken generously, place in fridge for 4 hours to overnight

Preheat oven to 400°

Once chicken is brined, remove from fridge and rinse off excess salt, dab dry

Mix softened margarine, salt, pepper and garlic powder

Rub margarine mixture under the skin of the bird

Combine brown sugar, soy sauce and chili flakes

Place in oven for 40 minutes and glaze, return to oven for 5 minute or until internal thigh temperature reaches 160°



## CRANBERRY APPLE WHEEL

*For the dough:*

3 cups all-purpose flour  
1/2 cup defatted soy flour  
1 package of active dry yeast  
1/3 cup granulated sugar  
1/2 teaspoon salt  
1/3 cup margarine melted  
1 cup soy milk  
1 egg

*For the topping:*

1 cup chopped cranberries  
2 large apples peeled and sliced  
1/2 cup chopped soynuts  
1/2 cup firmly packed brown sugar  
5 tablespoons all-purpose flour  
1 teaspoon cinnamon  
1/2 teaspoon ground nutmeg (optional)

Preheat over to 350°

Mix all-purpose flour, soy flour, yeast, sugar, salt, margarine, milk and egg in a mixer and mix until dough is soft and springy, let rest

Combine cranberries, apples, soynuts, brown sugar, flour and cinnamon in a bowl and mix well

Spread dough on oiled baking sheet to a 10-inch circle, place toppings on and let rise in a warm place for 30 minutes or until doubled in size

Bake for 30 minutes

Cool and serve ●

## Photos & Recipes by Ryan Siegel



# Firsts on the Farm

**MSA Board Member, Dane Diehl, shares memories from the farm and how he is creating new memories with his wife and daughter.**

**Q: Tell us a little about yourself.**

**A:** I'm a farmer from Bates County. I attended Butler High School and graduated from the University of Missouri. I met my wife, Erica, after returning home to the farm. We have a daughter, Levelle, who was born in July.

Outside of the farm, I have a deep passion for habitat development, love chasing mallards and the camaraderie in the duck blind in the fall. I'm also a big follower of Mizzou athletics and Chiefs football.

**Q: Tell us about your farm.**

**A:** It is truly a family farm with me, my dad and brothers being involved. I am a proud fifth-generation farmer who raises soybeans, corn and a few specialty crops. We also have a cow herd and finish most of our calves using grains grown from the farm.

**Q: What is your involvement in agriculture?**

**A:** I try to stay active locally. I regularly help our local 4-H and FFA programs, assist with putting on programs at local schools and donate meat to the MO Beef Kids, which provides schools with locally raised animals for school lunches. I'm also a proud member of the Bates County Cattlemen's and Farm Bureau.

**Q: Should tractors be red or green?**

**A:** Green. It's one of those things that has been that way for generations.

**Q: What is your favorite planting or harvest snack?**

**A:** I'm kind of a sweets guy. I love a Cherry Mash.

**Q: Tell us about your favorite memory on the farm.**

**A:** The first time Levelle got to ride in the combine this fall. It was a day I will never forget. My dad was in the field with us, and I knew he also had those memories of some of our first days in the field.

**Q: Who is your favorite farm influencer?**

**A:** I use Twitter for most of my ag information and follow Jason Mauck, Arlan Suderman, Silage Chopper and several grain marketing experts.

**Q: What are you listening to while working?**

**A:** I like a good variety of red dirt. I have also been on a big Joe Rogan podcast binge, along with waterfowl and outdoor podcasts.

**Q: Does your family implement any sustainable practices?**

**A:** We strive to continue to implement sustainable practices on the farm including cover crops, rotational grazing, strip and no-till programs, waterways, terraces, tile pipe and split applying fertilizers.

**Q: Who is your biggest influence?**

**A:** My dad. For everything he has done to allow the opportunity to farm, being receptive to new ideas and practices, still putting family first and having some fun along the way.

**Q: What would you tell your kids or other next-gens to encourage them to be involved in agriculture?**

**A:** It's a lifestyle worth fighting for and essential for everyone on earth. We must do a better job of telling our story and promoting the job we do. There isn't a better way to make an honest living and take pride in what you do.

**Q: How do you take your coffee?**

**A:** I hate to admit, I'm a doctored-up coffee drinker - cream, sugar and caramel. ☺







## LEGAL NOTICE TO MISSOURI SOYBEAN PRODUCERS

An election will be held to elect five (5) soybean producers to the 13-member Missouri Soybean Merchandising Council, which manages the funds collected through the soybean checkoff program. The terms of office will be for three (3) years and the election will be as follows: five (5) members are to be elected; one (1) each from Districts 4, 5 and 6; two members are to be elected from District 7. Ballots will be mailed by the Missouri Department of Agriculture on March 3, 2023, to each registered producer in the five (5) Districts. Ballots must be returned to the Missouri Department of Agriculture in Jefferson City, by

mail, postmarked no later than April 7, 2023.

Any duly registered commercial producer of soybeans is eligible to vote for the Council candidates from his/her District. Producers must be registered to vote. Current registered producers whose address has changed in the past five (5) years should re-register or contact the Missouri Department of Agriculture at 573-751-5611 or P.O. Box 630, Jefferson City, MO 65102 by Feb. 2, 2023, to receive a ballot. Non-registered producers must register prior to Feb. 2, 2023, at the USDA County FSA Office or online at:

[www.agriculture.mo.gov/councils/](http://www.agriculture.mo.gov/councils/) to receive a ballot for this election.

Any qualified producer may be nominated and have his/her name placed on the ballot, provided he/she presents the Director of the Missouri Department of Agriculture a nominating petition signed by at least 100 soybean producers prior to Feb. 2, 2023. Such petitions are available at the Missouri Department of Agriculture in Jefferson City, MO. Please direct any questions to Missouri Department of Agriculture, P.O. Box 630, Jefferson City, MO 65102, or 573-751-5611. ●

## 2023 WINTER MEETING DATES

### DISTRICT 1:

R/Farm Distillery  
Jan. 31, 6-7:30 p.m.

### DISTRICT 2:

Steve Howe Cattle & Grain  
Feb. 1, 6-7:30 p.m.

### DISTRICT 3:

4-H Community Building - Mexico  
Feb. 8, 6-7:30 p.m.

### DISTRICT 4:

Red Barn Ranch  
Jan. 26, 6-7:30 p.m.

### DISTRICT 5:

Marshall & Fenner Farms  
Jan. 11, 6-7:30 p.m.

### DISTRICT 6:

LINCOLN COUNTY  
DATE TBD

### DISTRICT 7:

Sandy Ridge Smokehouse  
Feb. 16, 6-7:30 p.m.



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YOUR LIVELIHOOD  
WHILE FOSTERING  
YOUR GROWTH:  
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Soybean Association**

Missouri Soybean Association members can now receive a **5% discount** on a CFM Insurance policy. Contact your local agent to learn more about this discount or get a custom CFM quote: [WeInsureMissouri.com/agents](http://WeInsureMissouri.com/agents)

For more information about how CFM works to safeguard Missouri farms, visit:

[WEINSUREMISSOURI.COM/PRODUCTS/FARM](http://WEINSUREMISSOURI.COM/PRODUCTS/FARM)

\*Discount applies to new & existing policies.

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You're where the rubber meets the road.  
And the engine. And the interior.

All soybean farmers, including you, are busy replacing petroleum with your soy oil. How? By pooling your resources through your soy checkoff. Learn how your soy checkoff is bringing tangible returns back to you and your operation at [unitedsoybean.org/hopper](http://unitedsoybean.org/hopper).



Moving Soy Forward.  
Moving You Forward.





# Fueling the Tigers with Missouri-Made Biodiesel

by Samantha Turner

## *Fuel a Cleaner Future with Biodiesel*

**M**IZ – SOY! In a collaborative partnership with the University of Missouri Athletics, the Missouri Soybean Merchandising Council (MSMC) teamed up with the Mizzou Tigers to fuel this football season with Missouri-made biodiesel.

MSMC is proud to partner with the University of Missouri Athletics to “Fuel a Cleaner Future with Biodiesel” by wrapping the Tigers’ bus and power the team with soy-based biodiesel.

“This collaboration is beneficial because it is a way we can connect to the agriculture industry of Missouri,” said Greg Hulen, University of Missouri chief revenue officer. “The agriculture industry is a huge part of the mission of the University of Missouri as well as the economic impacts it has on the state.”

This investment is the perfect opportunity to go back to where biodiesel was discovered – at the University of Missouri. In 1991, MSMC invested \$22,000 in a research project

led by Leon Schumacher at the University of Missouri-Columbia to test and demonstrate soybean oil as a diesel fuel replacement in a new Dodge pickup coined “Old Brownie”.

That novel idea, generated by farmer-leaders around a board room table is now a 3-billion-gallon industry.

“Fueling the tigers with biodiesel amplifies a longstanding 30-plus year partnership between farmers and the state’s land grant university that we continue to promote and help develop,” said Gary Wheeler, CEO and Executive Director of MO Soybeans. “It is the most fitting showcase of soy-based, renewable fuel, being back at the very entity that helped the soybean farmers’ idea come to fruition.”

Missouri is one of the leading biodiesel producers in the nation. Biodiesel is a renewable, energy-efficient, clean-burning fuel made from Missouri’s top agricultural commodity — soybeans.

“There are nearly 300 retail locations across Missouri offering biodiesel

blends, and biodiesel capacity has reached more than 240 million gallons of production,” said Aaron Porter, MSMC chair. “With demand continuing to grow, we will be able to get biodiesel into more tanks.”

Currently, there is a major drive to increase biodiesel accessibility in much of the Midwest, and this initiative is aiding in fueling that traffic to the pumps.

“The importance of biodiesel is being pronounced,” said Porter. “With college football, there is a lot of consumer attention, and we are capitalizing on this opportunity to promote biodiesel. It’s rewarding to see something I grow and use on my farm garner such attention.”

With the passing of HB3, Missouri brings promise of more biodiesel usage. The tax credits for biodiesel producers and fuel retailers will increase demand for Missouri-made fuel and drive down the cost of biodiesel blends to consumers, adding to Missouri soybean growers’ bottom line.

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"The Missouri legislature ensured that biodiesel remains a vital piece of the state's economic impact," said Wheeler. "The new law will help drive biodiesel demand, add value to Missouri-grown soybeans and provide citizens with a domestically made fuel that helps lower fuel prices for all."

Biodiesel is fueling the competitive spirit and pride of so many fans across the Show-Me State, and Missouri Soybeans is fueling Missourians, making sure trucks get to where they need to go.

"Fans love the bus," said Hulen. "It's been a key part of our Tiger Walk tradition as the bus leads the team to Faurot and creates connections with fans before home games. Plus, the bus is taken on the road and utilized by other teams. It promotes Missouri Soybeans, but also Mizzou across the state and country."

With more than a running banner on wheels traveling across the Midwest, the partnership includes in-stadium banner ads, tabling opportunities at the front entrance of Faurot Field, exclusive giveaways and social media engagements sure to reach thousands of fans.

"The team feels honored knowing that Missouri soybean farmers support their efforts, and to be honest, they really like the design of the bus," said Hulen. "Biodiesel is great way to utilize the resources we have in this state

effectively. The athletic department and University always want to do what is best for the state, and when we can combine taking care of our environment at the same time, it's a win-win."

According to Learfield, nearly 70% of college sports fans are proud to utilize the products and services of sponsors and feel better about the brands that sponsor an athletic program. Additionally, more than 80% of Tiger fans are more likely to be willing to pay more for sustainable energy and think that green energy is the future.

Biodiesel has numerous high-performance benefits for fleets and general consumers. It is also a low-carbon fuel, reducing carbon emissions and increasing sustainability for all. Today, many companies are working to build a more sustainable future by making commitments to lower GHG emissions, and biodiesel is the solution. Biodiesel produces 86% fewer lifecycle greenhouse gases, creates 47% less particulate matter and reduces hydrocarbon emissions by 67%.

Consumers and football fans can help bring awareness by touting these benefits and make a difference at the local level by asking municipal or county officials to switch to biodiesel.

With the help of University Athletics, Missouri Soybeans can reach these fans 365 days a year, whether they are in-venue, scrolling social media

or browsing the web. The partnership promises more than one million impressions to promote biodiesel through strategic communication tactics including co-branded ad placements, linkable logos and product placement on applicable sites including ticket purchases and merchandise buys.

The wrapped bus also made an appearance at the University's historic homecoming festivities and even rolled through the annual parade, capturing the attention of 50,000 attendees. And as of November, the bus traveled 5,000 miles on Missouri-grown fuel.

"As farmers are harvesting the very product that goes into that bus, it's nice for them to see this moving billboard travel past their farms across the Midwest," said Wheeler.

Biodiesel is here and ready to use now by farmers, football players and fans from state line to state line. As the No. 1 cash crop in Missouri, soybeans prove to be an integral piece to the Show-Me State, much like the staple that is Mizzou football.

This football season as you chant MIZ-ZOU across Faurot, keep an eye out for the Missouri soybean farmers who powered this season to "Fuel a Cleaner with Biodiesel."

Say it with us, MIZ-SOY! ●



**Checkout  
More About  
Our Partnership  
With Mizzou**

# MOSOY PARTNERS WITH STATE TECH

The Missouri Soybean Merchandising Council (MSMC) and State Technical College (State Tech) in Linn, Missouri, reached an agreement to introduce soy-based lubricants and biodiesel into their diesel mechanic program. The value-added partnership provides an opportunity to educate future diesel mechanics and technicians on the endless benefits and options of soy-based products.

"The agricultural industry relies on a talented workforce with technical expertise to keep the farm running and rural America alive," said Gary Wheeler, CEO and executive director. "In career education, State Tech continues to be a key resource for our company. MSMC is a committed partner in the College's efforts to develop new and enhanced

programs in agricultural technology and innovation."

State Tech also recently installed soy-based turf at its new state-of-the-art multipurpose event and entertainment center.

"We are so fortunate to be partnering with Missouri Soybeans," said Shannon Grus, State Technical College vice president of external relations. "This partnership includes funding support for our new golf facilities and brings our organizations together to ensure Missouri's future workforce understands the many innovative uses of soybeans."

State Tech is one of the country's fastest-growing technical schools, and

Missouri Soybeans anticipates that this newly expanded program will serve as a selling point for student recruitment and industry education.

"The partnership is great for promotion, education and market development, which is ultimately the mission of MSMC," said Wheeler. "We look forward to its future growth and the sustainability of next-generation agriculturalists in Missouri."

Support has already been demonstrated through a showcase of soy-based products within the curriculum, and financial support to equip students with these new technologies. ●



Photo from State Technical College



# IN MEMORY OF PENGYIN CHEN

## 1957-2022

Pengyin Chen leaves an outstanding legacy. His contributions to soybean breeding and genetics research and his student mentoring are commendable. During his tenure at the University of Arkansas and the University of Missouri Fisher Delta Research Center, he established two very strong soybean breeding programs bringing each program to a level of excellence. He is regarded as one of the best soybean breeders not only in the United States but also the entire world. He was a tireless worker and directed his research in practical ways to help soybean farmers.

Chen was a leader in discovering genetics to improve seed yield, seed protein and oil content, root knot nematode resistance, salt tolerance, flooding tolerance, drought tolerance and improved nutritional traits in soybeans to increase demand for U.S. soybeans. He was involved in the development of more than 50 outstanding soybean varieties and germplasm being used by many in the soybean breeding industry as parents in crossing for soybean improvement.

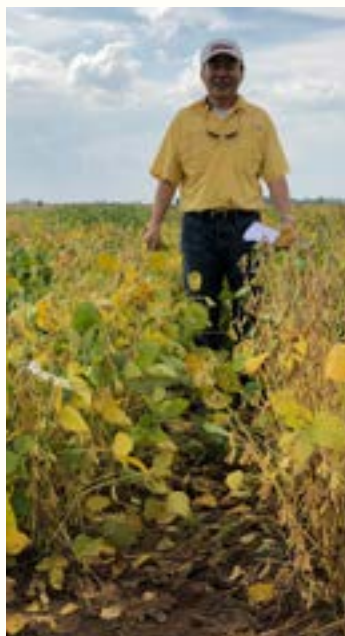
Chen was well respected by numerous people with whom he came to know and conduct collaborative research. He was the epitome of a selfless leader who loved helping others including farmers, faculty, students, staff, colleagues and the public in all aspects of life. He always made himself available to visit, discuss research or counsel others.

Chen took great pride as a teacher of many students. His guidance, mentorship and impeccable attention to detail helped shape so many in the soybean industry over the years. Once accepted as a student by Chen, you were forever his student. He was always available to advise, mentor or just listen to the many prodigies who called on him, well into their careers.

Chen's loss is devastating, but his contributions to soybean breeding research and his influence on others will always be remembered.



The image of Chen (second from the right) was captured on a research trip to South Africa in 2017.



# MORE CONTENT

## FROM MOSOY

*Learn more about what the Missouri Soybean Association and Missouri Soybean Merchandising Council have been doing during the past year!*



*Checkout the Missouri Soybean Seed Guide to learn more about the varieties funded by your checkoff dollars!*



## HELP US IMPROVE THE *MISSOURI SOYBEAN FARMER*

Missouri Soybeans is seeking YOUR help! We are looking for your input on the *Missouri Soybean Farmer Magazine*. Are you enjoying the stories? Do you have ideas for topics? Now is the time for your voice to be heard!

To do this, we ask that you take a short (5-minute) survey and express your opinions on our publication. Survey takers will also be entered to win a \$100 Amazon gift card!

Complete the survey by Dec. 31, for a chance to win a \$100 Amazon gift card. To be entered for a chance to win, include your name, email and phone number.

(You can still complete the survey without including your personal information, but you won't be entered to win.) ●

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