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- Bioretention Basin
- 50+ Species of Native Grasses and Flowers



# MISSULTI SOYBEAN FARMER

#### **Staff Contacts**

Executive Director / CEO Gary Wheeler gwheeler@mosoy.org

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

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

Director of Communications & Marketing 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 APRIL 2023 | VOLUME 27 | ISSUE 2



Closed-loop program creates more value per acre for Missouri farmers through high-oleic oil, high protein levels and low oligosaccharide profiles.



**20** Miami, Missouri, farmers Brian and Jodi Pomerenke, work to ensure that both people and animals have access to healthy, nutritious and sustainable soy food products.



**24** With major companies pledging to be "net-zero" in the next few decades, consumers need to look to the future of fuel. Clean fuels will help them meet their goal.



#### **«** Cover Shot

The cover photo of the April issue was captured by Samantha Turner. Pictured is Breven Zell, son of MSMC board member Marc Zell of Meadville, Missouri.



#### Missouri Soybean Association

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

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 $Contact \ Samantha \ Turner \ at \ (573) \ 635\text{-}3819 \ or \ \underline{sturner@mosoy.org} \ for \ advertising \ information.$ 

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# From The Field

#### MSA Board Members:

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#### Notes from Missouri Soybeans' Leadership Team



¬ pring is here. I love the sounds, smells and feels this time of year brings. Another sure sign spring is here are the sounds of tractor engines and heavy tires humming in the distance. There is also nothing quite like the smell of freshly tilled soil being prepared for the application of precious seed.

This time of year is also marked by much activity in Jefferson City. Many bills have been presented and debated on both the Senate and House floors. The hallways in the Capitol building are abuzz

with legislators, lobbyists and citizens scurrying about trying to do their part to make sure the great state of Missouri continues to be just that – great.

MSA has worked hard to do its part also. We are diligently working to ensure Missouri's producers remain protected at the state and federal level. We are supporting several pieces of key legislation, including a Farm Bureau insurance bill (HB 464 and SB 11) and a beginning farmer bill (HB 1023, SB 588 and SB 618). The house version of that proposal is sponsored by our very own MSA board member Dane Diehl.

In addition to Capitol conversations, we celebrate National Soy Foods Month, and I encourage MSMC Board Members: you all to participate in the Missouri Soybeans' events if you are nearby. With free soy lattes at local coffee shops and food trucks at our Center for Soy Innovation, we will have ample opportunities to take a taste of soy.

> We are privileged to live in what I consider the best state in the Union by far. I cannot think of a better place in the world to raise my four kids. I want to encourage each one of you to take note of what this state has to offer and get out to enjoy Missouri.

Matt Wright - Missouri Soybean Association President



f you were to go to the supermarket and survey consumers, they could probably tell you where most of their staple items can be found. Milk is found in the dairy cooler. Wheat is in the baking section or the bread aisle. Corn is on the canned vegetable shelf. And, of course, beef, pork and poultry reside in the meat section. But, if you ask a consumer where to find the soybeans, well that's a head-

Soybeans are probably the most misunderstood commodity. Though not obvious, this mighty bean can be found in almost every section

of the supermarket. It is either the basic building block for the protein we need to thrive, the emulsifier that makes the food look good and stick together or the oil used to give those chips or chicken wings that nice crispy texture and flavorful crunch. Between meal and oil, there just aren't many areas of our dietary lives that are not touched daily by the soybean.

One example, created by Missouri's farmers, is SOYLEIC soybeans, grown in large part to produce high-oleic soybean oil. SOYLEIC soybeans are a natural and sustainable variety grown on many acres across the country. The acid profile of SOYLEIC varieties is greater than 80% oleic acid and less than 3% linolenic acid. These acid levels give SOYLEIC oil heart-healthy characteristics that match that of olive oil.

Due to these properties, the oil exhibits a longer shelf life and cooking service life cycle than conventional soybean oil. This year, SOYLEIC soybeans are projected to be grown on nearly 100,000 acres in more than a dozen states. Soon consumers will have the choice to purchase a product that is healthy, sustainable, economical and grown on a farm near you, if not your own.

As this issue hits your mailbox, we hope you are in the field and enjoying weather conducive to a good planting season. Have a blessed Easter and safe planting.

Aaron Porter - Missouri Soybean Merchandising Council Chairman

# Letter from the Executive Director



G od's intent is for hungry people to be fed, and he calls his people to participate in providing the food.

Feeding the world is at the heart of what we do. Many of our farmers believe they are called to feed the population, both consumers and our livestock. With soy foods and soy products, we have the ability to diversely reach many through a safe, abundant food supply.

However, it's old news that consumers are pausing in the grocery story isles to check labels and read ingredients. Consumers are also not slowing down to combat the anti-agriculture marketing. Conversely, what has changed is the mindset post-pandemic with an accelerated focus on health.

Health is the top priority for governments and the private health care sector as they look to reduce healthcare costs by addressing conditions such as diabetes, obesity and heart disease. The interest in healthier foods is also driving the demand for plant-based protein alternatives. Protein demand will continue to increase around the world, and new products will enter the market to capture some level of market share – including soy meal.

As outlined in our Future State of Soy research shared last spring, there are three topics of prominence that rose to the top as it pertains to soy meal as a protein source. These include: 1) animal agriculture is by far the largest market for soy meal; 2) global demand for protein will increase as population and economic security expand; and 3) consumers are already looking at substitutes for animal protein.

We acknowledge that soy sits in an enviable leadership position among protein sources. Embracing both the animal and alternative protein markets will be critical, as will looking at the option of blended proteins in the future. We recognize that both the animal agriculture and the alternative proteins markets are valuable and necessary for an expanding population.

We often see one market pitted against another in agriculture, and the truth is, consumers rely on all of us for food. Be proud to grow such a versatile and valuable ingredient that can be used by so many in the food sector.

The soybean checkoff is investing in understanding consumer preferences on alternative proteins, researching and introducing new varieties for specialty and food-grade markets, and positioning soy as a versatile, cost-efficient ingredient.

In honor of April being National Soy foods Month, we encourage our farmers and consumers to invite soy to their table. Whether it be through soy as alternative protein or other soy-based product. Connect with a local soybean farmer to discover the magic bean's versatility. We want this month to be an educational campaign and showcase the myriad of ways Missouri soybeans are consumed. To find out more, always visit mosoy.org.

Join us, Missouri Soybeans, in helping feed the world with options and opportunity.

God Bless,

Executive Director/CEO

Gary G ) heelen

Missouri Soybean Association Missouri Soybean Merchandising Council

Foundation for Soy Innovation

# SOYBEAN POLICY UPDATE



e're at the halfway point of session since new leadership took over both

chambers in the Missouri General Assembly. Things appeared "on track" with the Senate passing some previously tough issues, but the Senate adjourned early for spring break due to a lack of compromise on a controversial piece of legislation, revealing the factions that still exist.

Seeing how new leadership deals with these factions after break will set the stage for the last half of session.

#### State Legislation

Many have described this session as slow or lacking in terms of getting actual work done. I disagree.

While the legislature seemed a bit on tilt the days leading up to spring break, it's not unusual. In the weeks prior, both chambers were passing their priorities and moving key topics including initiative petition (IP) reform, Parents Bill of Rights, crime reform measures and foreign ownership of land. The job of leadership is to pass issues that are priorities to the majority while balancing the interests and personalities of everyone. It's an impossible task and a ticking timebomb, but so far, I'm of the opinion that leadership has things well positioned to pass meaningful reforms by the time session is over.

#### **Beginning Farmer Legislation**

As discussed in the last issue, Missouri Soybean Association's (MSA) No. 1 priority this session is Rep. Dane Diehl's (R – Butler) HB 1023, the sale of farmland to beginning farmers.

After a month of collaboration with each ag group, meetings with CPAs and discussions with the democratic caucus, Rep. Diehl's first official bill was filed and read on the House floor on Feb. 1. The bill was then referred to the House Agriculture Policy committee where public testimony was heard with overwhelming support. The bill was unanimously voted to pass out of committee and was sent to the House Rules—Regulatory Oversight committee for approval. Once it is voted out of the Rules committee, the bill will be placed on the House calendar so that it may be debated before the full House.

As it stands HB 1023 authorizes an income tax cut for a landowner who sells, leases or crop shares with a beginning farmer or qualified family member. This bill authorizes an income tax exemption for:

- A percentage of capital gains of up to \$6 million per year, as set out in the bill, received by a taxpayer who sells all or a portion of his or her farmland to a beginning farmer;
- Cash rent income of up to \$25,000 per year received by a taxpayer who leases all or a portion of his or her farmland to a beginning farmer; and
- Income of up to \$25,000 per year received from crop-share arrangements with a beginning farmer on all or a portion of a taxpayer's farmland.

A beginning farmer is a taxpayer who:

- Has filed at least one but no more than 10 Schedule F forms since turning 18;
- Is approved for a beginning farmer loan through the United States Department of Agriculture (USDA) Farm Services Agency;
- Has a farming operation that is determined by the department of agriculture to be new production agriculture but is the principal operator of a farm and has substantial farming knowledge;
- Has been determined by the department of agriculture to be a qualified family member.

This piece of legislation is critical to tackling the issues our members face as the average age of a farmer nears 60 and the price of land is driven up by out-of-state investors and people who do not share our values of passing the land down to the next generation of Missouri famers.

#### Foreign Land Ownership

Last year's numerous slander campaigns against hopeful candidates and the rampant spread of misinformation, paired with a certain Chinese spy balloon crossing our nation, solidified the need for updated language on foreign ownership, particularly when it comes to ag land.

"This piece of legislation is critical to tackling the issues our members face as the average age of a farmer nears 60 and the price of land is driven up by out-of-state investors and people who do not share our values of passing the land down to the next generation of Missouri famers."

-Casey Wasser, Sr. Director of Policy

Rep. Mike Haffner's (R – Pleasant Hill) HB 903, the main vehicle for this language, successfully crossed chambers before the start of legislative spring break. As previously noted, this achievement helps gauge whether or not a bill is on track and truly a priority for the legislature.

The current version reduces the percentage of foreign ownership of agricultural land in the state from 1% to 0.5% and requires any sale or transfer of such land to be reported to the Attorney General and Secretary of State 30 days prior. Additionally, the bill prohibits businesses from specified countries from purchasing land entirely. Those countries are the following: China, Iran, North Korea, Russia and Venezuela. Finally, HB 903 transfers the reporting and enforcement of foreign ownership from the Department of Agriculture to the Secretary of State and the Attorney General.

For many, including Rep. Haffner, this issue is one of national security. However, the legislature needs to balance this concern with the need to not limit the agriculture industry's growth in the future. The truth is, no matter which side of the issue they find themselves on, policymakers will have to work extra hard to navigate the political land mines that will inevitably be held against them in future races.

#### **Federal Legislation**

Back in Feb., the American Soybean Association (ASA) invited soybean farmers from across the nation to join them in visiting with policymakers on the Hill. MSA board members met with members of the Missouri delegation to discuss their concerns and share their experiences about the following topics:

#### Waters of the United States (WOTUS)

The Biden administration's introduction of its new WOTUS ruling has been cause for concern for many farmers and land users alike. In addition to voiding the 2020 Navigable Waters Protection Rule, the ruling purposely uses vague language and expands federal jurisdiction over water back to Obamaera legislation.

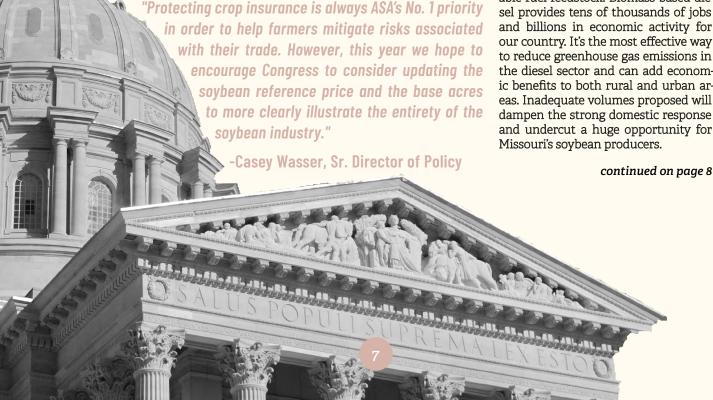
Rep. Sam Graves (R – MO), who chairs the House Transportation and Infrastructure Committee, joined the soybean farmers in expressing his dislike of the rule by introducing a joint resolution of disapproval under the Congressional Review Act (CRA). An identical resolution was introduced by Sen. Shelly Moore Capito (R – WV), ranking member of the Environment and Public Works Committee. The House recently passed, by a vote of 227-198, a resolution to roll back the U.S. EPA's broader definition of WOTUS. This was nearly

on party lines with Republicans voting to support the resolution, but nine Democrats joined their Republican colleagues. Even if this resolution passes the Senate, it's symbolic knowing President Biden has already suggested he'll veto the measure if it reaches his desk.

#### 2023 Farm Bill

Although it is still unclear whether or not we will actually have a farm bill passed this year, both the Senate and House have had preliminary hearings to discuss some of the issues that will be addressed. Freshman Missouri Congressman Mark Alford received a spot on the House Agriculture Committee. While in Washington, D.C., in March, our farmer-leaders had a productive meeting with him and believe he will be a strong advocate on the committee on behalf of Missouri farmers. It was also great to have him visit the ADM soybean processing facility in Deerfield where it's co-located with a biodiesel

While meeting and discussing biodiesel, we encouraged Rep. Alford and the rest of our delegation to join other members of Congress in signing a letter calling for EPA Administrator Regan to improve his proposed Renewable Volume Obligations. In recent rulemaking, the volumes proposed underestimate the soybean industry's response to the need for more soybean oil as a renewable fuel feedstock. Biomass-based diesel provides tens of thousands of jobs and billions in economic activity for our country. It's the most effective way to reduce greenhouse gas emissions in the diesel sector and can add economic benefits to both rural and urban areas. Inadequate volumes proposed will dampen the strong domestic response and undercut a huge opportunity for Missouri's soybean producers.



The USDA Risk Management Agency recently released 2023 projected prices for crop insurance. The projected prices are estimated to be the highest in history, with soybeans projected at \$13.76 per bushel and volatility at 13%, which could lower crop insurance premiums. The University of Illinois at Urbana-Champaign has researched these projections and estimate for 85% Revenue Protection polices, premium reductions could be between \$4 and 4% per acre. The researchers note that, "still, many operations could face losses before crop insurance guarantees can make payments, and that there are risks of losses on grain farms in 2023 even with crop insurance coverage." Protecting crop insurance is always ASA's No. 1 priority in order to help farmers mitigate risks associated with their trade. However, this year we hope to encourage Congress to consider updating the soybean reference price and the base acres to more clearly illustrate the entirety of the soybean industry.

#### 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.

# MISSOURI SOYBEANS STANDS OUT AS STATE'S ECONOMIC ENGINE

A ccording to a recent independent economic study, the soybean industry continues to remain as a top economic engine for the Show-Me State. The results of the 2022 study found that the Missouri soybean industry provides more than \$8 billion in economic output to the state.

"The study allows us to quantify the impact the soybean industry provides to the state, regional and county levels," said Matt Amick, director of market development. "As we visit with policymakers, stakeholders and consumers, this data is valuable to be able to showcase the incredible role of the soybean industry as an economic driver for Missouri and beyond."

The economic impact study is broken down into two core areas: soybean farming and soybean processing, such as crush, oil refining and biodiesel. Within this study, economic output is defined as sales, while value-added is defined as sales minus inputs.

According to the research, the Missouri soybean industry contributed \$8.093 billion in economic output, \$3.106 billion in value-added and \$386.3 million in federal, state and local taxes. Additionally, the industry supports 21,590 jobs and \$1.199 billion in labor income.

Missouri soybean farming contributed \$4.416 billion in economic output, \$2.521 in value-added and \$315.6 million in federal, state and local taxes, while supporting 18,046 jobs.

Soybean processing contributed \$3.677 billion in economic output, \$585 million in value-added and \$70.7 million in federal, state and local taxes, while supporting 3,544 jobs.

The top counties by economic output were Buchanan (\$691.6 million), Ralls (\$649.9 million), Audrain (\$629.8 million), New Madrid (\$612.3 million) and Jackson (\$396.5 million).

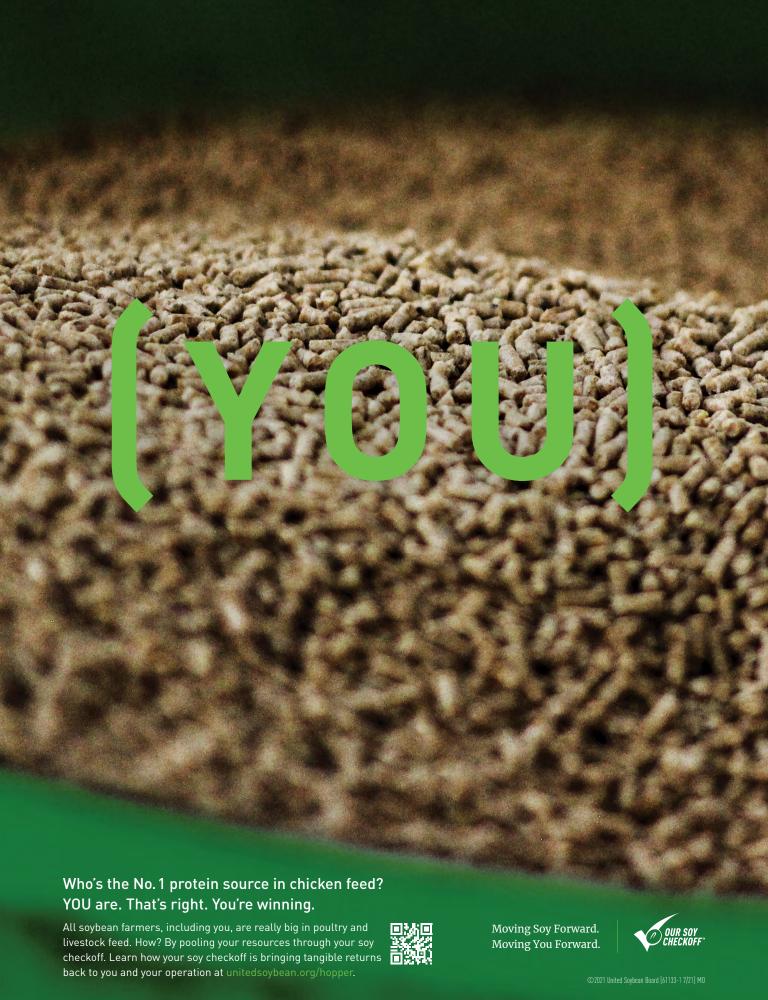
"The power is behind the numbers," said Gary Wheeler, CEO and executive director. "Our goal at Missouri Soybeans is to ensure soybean producers persist and prove profitable in their operations, while holding steady as the state's economic powerhouse. We want to put the right tools in their toolbox and devote dollars to research that ultimately aids in their ability to be this engine."

The study further breaks down numbers by county, Congressional district, state Senate district, state House district and grower district. You can find a full download of the information at mosoy.org.









# System the Chmerican Niet

#### By: Kaci Vohland, MS, RDN, LD

Many diseases that plague Americans today can be improved with the help of good nutrition. One tool in the dietary toolbox that may help combat some of these undesirable health outcomes grows in our farmers' fields.

Heart disease is the No. 1 cause of death in Americans, and farmers are no exception to that. Soy protein has been shown to reduce low-density lipoprotein (LDL) cholesterol by approximately 3% to 4% in adults.2 Each 1% decrease in LDL cholesterol is estimated to lower heart disease risk by 1% to 3%. Along with lowering cholesterol levels, lowering blood pressure is a way to reduce heart disease risk. As we age, our arteries tend to stiffen causing them to not dilate as they should, which increases our risk for high blood pressure. Soy isoflavones may help to slow down these changes in our blood vessel walls



by supporting their ability to relax and allow proper blood flow, reduce oxidative stress and related inflammation in cells that line blood vessels, and reduce arterial stiffness.<sup>3</sup>

The second leading cause of death in the U.S. is cancer, and in women, that most commonly comes in the form of breast cancer. Soy has been a controversial topic when it comes to breast cancer, however, many of these misconceptions originate from studies done on rodents in the 1990s. While animal studies give researchers a good starting point, only human clinical studies can truly show how humans are affected. Human studies have shown that even when amounts of soy in the diet exceed Japanese intake, breast tissue is not adversely affected. Human research has also shown that breast cancer patients can safely consume soy. The American Institute for Cancer Research and the American Cancer Society have come to the same conclusions. Research shows that soy may even be associated with a reduction in breast cancer development, although some evidence suggests that consumption needs to be during childhood and/or adolescence.4

For men, prostate cancer is one of the leading causes of death among all races and Hispanic origin populations in the U.S.<sup>5</sup> In soy food-consuming countries, prostate cancer rates and deaths are quite low. Soy foods are uniquely rich in isoflavones, which is the basis of the



research showing men who regularly consume soy are less likely to develop prostate cancer than men who don't.<sup>6</sup>

Protein is arguably the most important macronutrient in our diets. Protein is found in both animal and plant sources such as beef, dairy, beans and soy. While it is true that not all proteins are the same, animal protein is considered a "complete protein," meaning it contains all nine essential amino acids. Because of its similar amino acid makeup, soy is one of the few complete plant-based proteins. Protein is needed in our diets for many reasons, but one of the most popular is muscle building. Soy protein is a great option for those working to build muscle, despite the concerns that soy may feminize men. Research has confirmed neither soy protein nor soy isoflavones affect testosterone or estrogen levels in men.7

Soy is included as one of the top nine food allergens affecting Americans; about 3 out of every 1,000 adults is allergic to soy protein. According to Food Allergy Research & Education (FARE), soy allergies are more common in infants and young children – about 0.4% of children are allergic. Many grow out of their soy allergy by age 3 and a majority (~70%) by age 10.8 It is also important to note that allergens result from the protein in certain foods, so even those with a soy allergy can safely consume soybean oil.

Soy foods can fit into most eating patterns, including those that include meat. Adding more plant-based foods like soy can provide several nutrition benefits including fiber, protein, vitamins and minerals. Consuming two to four servings of soy daily (15-25 grams of protein) could provide potential benefits. Remember to eat a variety of foods to consume a wide array of nutritional benefits.





#### Breakfast:

- Choose soy milk or soy creamer to add to your coffee, smoothie or oatmeal.
- Add soy crumbles to your egg scramble.
- Try soy yogurt.
- Opt for soy nut butter for your toast or banana.

#### Dínner:

- Marinate meat, tofu or tempeh in a soybean oil-based marinade before grilling.
- Add soft or silken tofu to mashed potatoes for added creaminess and protein.
- Use half beef and half soy crumbles to make burgers, chili or spaghetti
- Crisp up tofu cubes or strips in the air fryer and serve with dipping sauce.

#### Lunch:

- · Add edamame or soy nuts to salad.
- Use soybean oil in a homemade salad dressing.
- Smash tofu with mustard and spices for a plant-based "egg" salad.
- Build a power bowl with tofu or tempeh.

#### Snacks:

- Add soy nuts to trail mix.
- Sprinkle edamame with sea salt, or puree the edamame to make a hummus-style dip.
- Dip celery, apples or crackers in soy nut butter.
- Use soft tofu in dips for added protein.
- Enjoy a soy-based nutrition bar.
- Make a shake with soy-based protein powder and soy milk.
- Swap some all-purpose flour for soy flour in baking.

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# PROVEN BENEFITS, PROVEN TASTE\*

\*WITH SOY FOODS

# Courtesy of the United Soybean Board

t's suppertime across Missouri, and moms from Bethany to New Madrid and everywhere in between are hard at work to get a well-balanced, healthful, satisfying and delicious meal on the table for their families. For many parents, meat and potatoes, spaghetti or Taco Tuesday are goto meals they can count on to meet the tastes and nutritional needs of their family. But there's one ingredient that's easy to incorporate, brings many added benefits and supports Missouri farmers — soy foods.

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"We often incorporate soy into our family suppers," says Meagan Kaiser, Missouri soybean farmer, mom of two and Chair of the United Soybean Board. "It's easy as our family likes the neutral flavor of high oleic soybean oil for cooking — especially for frying fish."

#### Proven Benefits from Soy

Soy foods offer potential benefits. And, even better, these benefits are proven! The 2020-2025 U.S. Department of Agriculture Dietary Guidelines for Americans, which focus on encouraging healthy eating and meeting nutritional needs throughout all stages of life, recommend soy as part of a healthy diet across the categories of dairy, oils, vegetables and protein foods.

Offering foods from protein sources to cooking oil, soy consumption is aligned with a wide range of benefits. Soy oil and protein may reduce the risk of heart disease, reduce inflammation, lower cancer risk, there's so much to gain from adding soy to your family's plate.

It's becoming well known that soy foods and soybean oil can contribute to heart health. The Food and Drug Administration (FDA) recognized the cholesterol-lowering effects of soy protein and soybean oil, confirming they may be able to reduce the risk of coronary heart disease. This is the most common type of heart disease in the United States, according to the Centers for Disease Control and Prevention.





Because soy is rich in isoflavones, soy foods may help to reduce the risk of certain types of cancers, including prostate cancer. These isoflavones are especially beneficial for women, as they may help to alleviate hot flashes and lower the chance of osteoporosis.

#### A Versatile Oil

One soy food that many people are already eating is soybean oil, which is often sold in grocery stores labeled as vegetable oil. This versatile, soy-based ingredient comes with health benefits such as a heart-healthy fat profile that has the ability to support bone health and skin health.

Vitamin K is vital to bone health, and just 1 tablespoon of soybean oil contains about 20% of the recommended Daily Value (DV) in a single serving. This vitamin is important in regulating bone metabolism and necessary for making proteins that are crucial for maintaining bone mass.

Another important nutrient found in soybean oil is vitamin E, an antioxidant nutrient that helps protect body cells, support healthy skin and aid proper nervous system function and protection. Furthermore, studies show that vitamin E may protect against skin damage and help treat certain skin conditions, such as acne and atopic dermatitis.

The soy industry is working to provide more soybean oil options, especially for the high-volume food industry. High oleic soybean oil is an innovation from the soybean industry and soy checkoff. This oil has no trans fats and is especial-

ly suited for use in the food industry with its high smoke point and emulsion stability.

#### A Complete Plant Protein

AAs a plant-based protein, soy is a top option. It provides all of the essential amino acids for human nutrition, making soy a complete plant protein similar to animal protein. Soy is a source of folate, potassium and fiber, and it's the only plant protein that carries the FDA's heart health claim confirming it may be able to reduce the risk of coronary heart disease. Soy provides high-quality protein and good fats, while modestly lowering blood cholesterol levels.

Human research indicates that breast cancer patients can safely consume soy foods. Observational studies in the Asia-Pacific region even show soy food intake is associated with a reduction in breast cancer risk. However, several lines of evidence support the hypothesis that consumption must occur early in life for soy to reduce risk.



While it's not always easy, it's important for parents and adults to model healthy eating habits for the children in their lives. Learning healthy eating habits can start early in life and may impact future chronic diseases. And, like with adults, soy foods can play a beneficial role in the diets of infants, children and adolescents. In younger children, fortified soy milk is the only plant-milk dairy alternative approved by health professionals for children ages one to five.

#### Deliciously Simple Soy Foods

When cooking for a family, moms are looking to add as many nutritional benefits to meals and snacks as possible — even if it means sneaking some

vegetables in where kids won't notice. But with many soy foods, sneaking isn't needed! Soybean oil, soy plant protein and even soybeans themselves are all ingredients that pack a nutritional punch and easily meld into everyday recipes. Soybean oil is easy to add into any meal. You can cook with it, stir it into a salad dressing or use it when baking. When it comes to plant protein, you can add some soy-based protein



crumbles to spaghetti sauce or taco meat. Serve some roasted edamame or crunchy roasted soybeans for a snack. The opportunities to add soy to a family's menu are endless.

Whether you are looking to start adding soy to your family's dinner table or interested in new ideas for incorporating soy into your menu, Missouri Soybeans can help. For soy food recipes and ideas, visit MoSoy.org.





Closed-loop program creates more value per acre for Missouri farmers through high-oleic oil, high protein levels and low oligosaccharide profiles

# Courtesy of Benson Hill

ne Missouri company is bringing to life what seemed like an almost insurmountable task for the soybean industry just two decades ago — creating more value for the entire food value chain (with soybean growers at the center) through a closed-loop production system.

Closed-loop systems empower farmers to move beyond getting paid simply for yield and instead embrace a composition-based model. The thought of earning more for what the bean composition is worth isn't new, but farmers actually capturing that greater value per acre is. Food-tech innovator Benson Hill, based in St. Louis, now has a robust farmer network that's delivering

Midwest-grown soy to new value-added markets around the world.

Recent breakthroughs in food science, plant science and data science help unlock on-farm benefits for farmers, building upon the natural genetic diversity of plants in ways we couldn't before.

"The natural genetic diversity of plants is our most significant untapped resource," says Matt Crisp, CEO of Benson Hill. "Breeding better soybeans at an accelerated rate is a function of CropOS, a proprietary data platform that combines millions of data points from seed to fork. We like to call it a food innovation engine, one that pushes the limits of biology and incorporates consumer

desires to create soybeans that are better from the beginning."

Raising value-added soybeans based on the demands of the end user creates an environment where Missouri soybean growers can contribute to the larger food system, with the potential to generate more revenue for the farm operation. Farmers who partner with Benson Hill can choose to grow varieties with higher oleic oil levels enabled by the Missouri Soybean Merchandising Council's (MSMC) SOYLEIC trait, higher-protein soybeans or other varieties that have a combination of high protein and low oligosaccharides.

High-oleic technology gives soybean oil greater potential for uses such as



baking, frying and sauteing in both commercial and home kitchens with a more favorable nutritional profile. The licensing agreement between MSMC and Benson Hill is just one regional relationship created to increase the accessibility of SOYLEIC high-oleic soybeans and healthier oil. In fact, St. Louis-based Schnuck Markets Inc. began using Benson Hill's Veri brand cooking oil in its 100 Schnucks grocery stores across the Midwest last year for a range of food service applications.

"Benson Hill has developed an oil with industry-leading sustainability benefits and a heart-healthy1 nutritional profile that matches up perfectly with our commitment to nourish people's lives," says Geoff Wexler, Vice President of Deli & Prepared Foods for Schnucks. "As a family-owned grocer headquartered in St. Louis, we are excited to be working with another St. Louis company whose values align with our mission. Together, we will introduce Veri for use in our prepared foods, while at the same time, maintaining the flavor and top quality our customers have come to know and love."

And food service is just one of the value-added markets that Missouri growers can access with Benson Hill. Plant-based foods is another. Consumers are demanding more nutritious, more sustainable food choices, driving rapid growth of plant-based foods. Benson Hill's customers include some of the world's leading ingredient and food manufacturers, such as Kellogg's MorningStar Farms, that want seed-to-shelf solutions that are domestically-produced and traceable – ultimately bringing consumers and farmers closer together.

# I appreciate a company breeding for things beyond yield, and protein is an important quality trait overlooked by other companies.

#### **Henry Buell**

"I appreciate a company breeding for things beyond yield, and protein is an important quality trait overlooked by other companies. I'm happy to celebrate my third year growing Benson Hill varieties in 2022," says farmer partner Henry Buell of Buell Farms.

Consistent performance with high-oleic and low-linolenic oil soybeans in combination with good agronomics creates an equation that delivers more value through the entire food chain. High protein combined with higher

continued on page 18



#### BENSON • HILL

#### 2024 **SOYBEAN CONTRACTS OPENING SOON** IN MISSOURI.

Missouri soybean farmers can take advantage of new value-added markets to grow high-protein, non-GMO varieties designed for rapidly growing industries such as plant-based foods, healthier oils, and aquaculture.

Benson Hill's end customers include some of the world's largest ingredient and food manufacturers. And the crush destination is often just north of Missouri, in Creston, lowa, where we operate our facility for producing white flake and high-value, texturized flour products from soy. Through this integrated model, Missouri soybean farmers are working to deliver options to consumers that are more sustainably produced and traceable – bringing consumers and farmers closer together.

Are you ready to play a pivotal role in helping to shape the future of food while optimizing your farm's profit potential at the same time?

Visit BensonHillFarmers.com or call (314) 594-7624 to EARN MORE.

yielding germplasm means that Benson Hill's soybean varieties can perform well in many regions. Different varieties are designed to deliver various levels of protein and low oligosaccharides for use in pet food and meat extension applications. Missouri farmers have also grown Benson Hill's High Protein, non-GMO, low oligosaccharide soybeans for the end market of aquaculture.



Aquaculture is the fastest-growing food production sector in the world. Benson Hill designed and patented its N2358 high-yield potential soybean variety with ultra-high protein and low oligosaccharides to deliver advantages for this booming market. Traditionally, soy has been linked with gut health issues in aquaculture diets attributable in large part to oligosaccharides present in the bean. Together with its U.S. farmer-partners, Benson Hill now provides some of the largest aquaculture companies in the world with superior soy ingredients that are both low in oligosaccharides and high in protein.

Another area of demand creation for soy is the human nutrition sector. Creating diversity in protein sources for the human food market gives digitally savvy consumers choices for how to get more protein into their diets. Soy has always been a powerhouse of protein for bars, shakes and meat alternatives. Benson Hill has designed soybean varieties with up to 20% higher protein right out of the ground², which can help deliver a cleaner product label and provide novel sustainability

advantages by skipping a water- and energy-intensive processing step typically associated with commodity soy protein concentrate. It's these consumer-driven, genetic innovations that are opening new value-added markets for Missouri soybean growers.

For more information on how to partner in creating more nutritious, more sustainable food ingredients, visit www.bensonhillfarmers.com or call 314-594-7624.





Footnote: [1] Supportive but not conclusive scientific evidence suggests that daily consumption of about 1½ tablespoons (20 grams) of oils containing high levels of oleic acid, may reduce the risk of coronary heart disease. To achieve this possible benefit, oleic acid-containing oils should replace fats and oils higher in saturated fat and not increase the total number of calories you eat in a day. One serving of high-oleic soybean oil provides 10 grams of oleic acid (which is 11 grams of monounsaturated fatty acid).

<sup>[2]</sup>Compared to average U.S. commodity soybeans.



# DELIVER YOUR INVESTMENT QUICKLY AND SAFELY



Deliver your seed investment quickly and safely during the narrow planting window with a patented self-filling **Seed Runner**® or **Seed Pro**® seed tender! SEED PRO®
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**SEED TENDERS** 

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PROFILE ith the leaves of the plants rustling around them, farmers often spend countless hours scouting beans and experiencing a unique sense of tranquility as they are lost between the endless rows of soybeans. However, for Brian and Jodi Pomerenke, the sales professionals turned farmers spend their weekends between the rows of urban farmers market stands instead. continued on page 22 REDJACKET

by **Madelyn Warren** 

# Join WISHH in the business of untapped protein potential.







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WISHH connects trade and development across global market systems, improves food security, and brings the power of strategic partnerships to our unique market-systems approach.

# 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. Since 2018, the Pomerenkes, or "Team Pomo," have operated a third-generation, diversified farm in Miami, Missouri, where they raise hogs, cattle, corn and soybeans. The couple focuses on ensuring that both animals and people have access to healthy and nutritious soy food products by raising high-oleic soybeans to feed to their livestock and playing in a slightly more unique market space – edamame sales.

We have a lot of repeat customers. My favorite part about the farmers market is having a dialogue with them, finding out about the things that they grow at home, hearing their recipes, learning how they do things and then transferring that knowledge to another customer. We are truly able to develop a relationship from those interactions.

#### Jodi Pomerenke

"My wife started growing edamame in the garden. We'd put a bowl out for ourselves, and before we knew it, we'd find that we'd finish eating the entire thing," Brian says. "I thought, 'You know, I really think we can sell this stuff at the farmers market.' We're fortunate because our product has been good, and people have been really pleased with it"





"It fit hand in glove with Brian's background of being a soybean farmer," adds Jodi. "The first year we were there, our core offerings were all soy-based products, so we became known as the soy tent."

An urban farmers market isn't where one would normally expect to find a soybean farmer, but the neon green shirts and bright smiling faces of Team Pomo have truly become one of the main attractions for the Overland Park farmers market regulars during the past two years. Their stand offers a variety of soy foods including frozen or fresh edamame, soy flour and soy nuts.

Brian and Jodi each play their own role in the operation. While her husband handles the manual labor behind the stand, Jodi is out front using her "city-girl" experiences to connect with Pomerenke

Provisions' potential customers. She expertly addresses any questions consumers might have and helps to promote transparency in the food supply.

"In our previous work lives, we were both in sales," Jodi says. "So, everything is designed with the customers' experience in mind. Being able to educate them about where their food comes from and trying to bring our farm to table is really the endgame for us."

The couple emphasizes the part that advocacy plays in their market endeavors.

"We bring an edamame plant to the farmers market, and you'd be surprised

by how many people have never seen a soybean before," Brian says. "I think to myself, 'Don't you look out the window when you're driving down the road?' But they're amazed by something so simple. It is very fulfilling to help educate the community on where their food is coming from."

"We have a lot of repeat customers," Jodi say. "My favorite part about the farmers market is having a dialogue with them, finding out about the things that they grow at home, hearing their recipes, learning how they do things and then transferring that knowledge to another customer. We are truly able to develop a relationship from those interactions."

The Pomerenkes often engage in more difficult conversations about soy nutrition, sustainability and conventional farming practices as well.



Utilizing a variety of techniques, including sharing soy recipes and meal plans, they help introduce new ingredients to their customers' diets with the goal of helping them to live happier and healthier lives.

"We highlight our sustainable practices on our banners at the market," Brian adds. "I get a lot of satisfaction out of sharing with consumers, and even some farmers, about how we utilize cover crops and plant our soybeans right into the wheat or cereal rye. You know, that's helping the environment, and I take a lot of pride in that as well.

"It is a non-GMO product that we sell, and that appeals to a lot of the custom-



ers at the market." he continues. "It allows us to get into that conversation. I do talk to them and clarify that while our edamame and other products at the stand are non-GMO, I am a soybean farmer and I grow GMO products on my farm, too. I share some of the benefits and what it means for helping to feed our country. Sometimes that can be a tense conversation, but I try to put them in my shoes and help them understand some of the struggles that farmers go through, especially with weed control."

Pomerenke Provisions is advertised across a variety of channels. Their efforts to leave the land healthier than they acquired it is emphasized in each one of them.

The couple was recently approved as a vendor for the Columbia farmers market and will begin their debut season on Wednesday evenings this summer. In addition to their normal products, they will be offering some of their homegrown pork as well.

"I am able to implement a zero-waste system by feeding my hogs all unsold produce and even the edamame plants that are left over after the pods have been picked," Brian says. "From birth to harvest, I know exactly what goes into the pork that my customers and I consume."

Brian roasts high-oleic beans on his farm and feeds them back to his hogs. The addition of the ingredient to his hogs' diet helps keep costs down by avoiding the need to purchase soybean meal. It also allows for further traceability in the end product, adding a whole new layer to their farm-to-table efforts.

As Team Pomo heads into its third market season, Brian and Jodi have grown their business and customer base to include several new products and countless loyal patrons. With a focus on great quality, advocacy and relationship-building, Pomerenke Provisions has proven to be a fulfilling reason to sometimes leave their rows of beans and sense of tranquility and instead stand in a store of soy, creating a lasting legacy.

I am able to implement a
zero-waste system by feeding
my hogs all unsold produce
and even the edamame
plants that are left over after
the pods have been picked.
From birth to harvest, I know
exactly what goes into the
pork that my customers and I
consume.

#### **Brian Pomerenke**





LEARN MORE ABOUT THE POMERENKES AND THEIR OPERATION BELOW!



**FEATURE** orporate sustainability commitments are shaping the future of clean fuels and may be the catalyst that takes our industry to the stratosphere. Studies show that a company's green practices increase consumer FUTURE trust, word-of-mouth recommendations, credibility, satisfaction, loyalty, perceptions of value and purchasing decisions. Consumers want to feel better about their purchasing decisions. They want to do business with companies that share their environmental goals, and decision makers at some of the United States' largest companies are responding. FUELS ARRI BY DONELL REHAGEN

The 2023 Energy Transition Outlook Survey Report, which surveys investors and CEOs of many major corporations, shows that 64% of investors and 54% of executives say their plans have shifted even more toward renewables in the past year.

Amazon is committed to 50% of its shipments being net-zero carbon by 2030. Walmart's goal is zero emissions across all of its global operations by 2040. Microsoft says it will be carbon negative by 2030 and will take steps to remove the equivalent of all the carbon the company has emitted since its formation in 1975.

With many companies committing to a carbon-neutral future, low-carbon transportation fuels will be vital to reaching their goals, which trickles down to their transportation partners and product suppliers. Any fleet over land, sea or sky will need low-carbon options if they want to do business with the biggest retailers in the world.

Cutting emissions is critical for companies that want to stay in business over the next decade, but it isn't simply a good business practice. It's the right thing to do.

In 2022, Trinity Consultants released the second phase of Clean Fuels' multi-year study, which examined 15 high-risk air quality communities across the United States. It models the health improvements those communities could experience by replacing diesel fuel with B100. The results show an astounding decrease in cancer risk, fewer premature deaths, reduced asthma and other significant health impacts.

Numbers matter. They help us quantify an issue, but sometimes when we're staring at numbers, we lose sight of the real people affected.

Recently, I read an interview with a woman named Lisa Loflin, who was 6 years old when construction on the Capital Beltway in Washington, D.C., began. She described traffic noise that kept the family inside, nightmares from frequent car crashes, increased crime and community ties that were severed by the highway. She also discussed the soot that killed their garden and coated the back of their house.

"When you look at the house," she said, "you can see what it's doing to your lungs."

What Lisa suspected while observing the residue buildup on the walls of her family home has now been backed by science. And the health risks may be even worse than she expected.

In many ways, the Interstate Highway System is a miracle, a work of ingenuity and ambitious in scale. It connected the country in ways previously unimagined and offered Americans new opportunities. But, as it connected the country, it literally divided many communities. While highways previously tended to go around cities, the Interstate Highway System was designed to take the main line through the populated areas it connected, uniting the urban core and the suburbs. Millions of people were suddenly living along an increasingly busy interstate, disproportionately affecting communities of color.

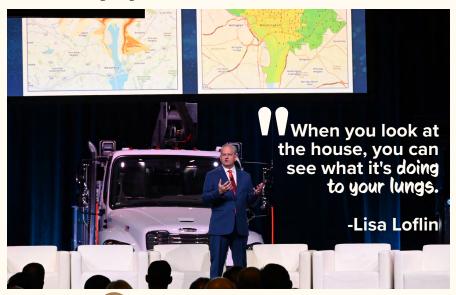
Jefferson City, Missouri, my hometown, has little in common with the major metropolitan areas analyzed in the Trinity study, yet Missouri's capital wasn't exempt from the trends of the times. The Rex Whitton Expressway, named after one of the pioneers of the Interstate Highway System, spans Jefferson City. When it was built more than 60 years ago, it cut through The Foot, a community that sprung up around the turn of the 20th century at the foot of the hill near the historically black college, Lincoln University. It was a thriving neighborhood with



businesses and storefronts, places of worship, a pool and a community center until the highway was built. Many of these establishments were bought and either bulldozed to make way for the highway or sold off for other renovation projects, while others were left with a highway in their backyards. They faced plummeting home values, intrusive traffic noise, and as we now understand, substantial health risks.

No one should have to wait for cleaner air, not when we can make a difference today. Carbon emissions show us how one person's actions affect so many others. Clean fuels can't solve all of these problems, but they can make a substantial improvement. Clean fuels are the one way for fleets to slash emissions overnight. Our fuels are the one sustainable way to power heavy-duty vehicles over land, sea and sky.

Consumers are demanding greener practices, and companies can see where the road is heading. Clean fuels are not a dream for a sustainable future. We're here now.



# SEE YOU NEXT YEAR!

#### WINTER MEETING RECAP

he Missouri Soybeans 2023 Winter Meeting series wrapped up March 2. Over the monthand-a-half long series, the organization was able to visit one-on-one with more than 250 farmers from Mound City to East Prairie and everywhere in between. The Missouri Soybean Association had District Director elections at five of those meetings, where MSA re-elected four Directors and welcomed four newly-elected Directors who will begin terms in July.

MSA would like to say a big "thank you" to all our hosts, partners and meetings sponsor FMC. The Association is looking forward to seeing even more

farmers throughout the year at Soy Socials, Harvest Lunches, and other events. Scan the QR code for more events!











#### GROW MAKE SERVE THRIVE

# Help 4-H provide opportunity for all.



Missouri 4-H programs like Crop Scouting offer young people opportunities to engage in fun, hands-on learning, while they develop the knowledge and skills needed to succeed in their future careers. Youth learn to identify common Missouri crops, insects, diseases, and weeds, as well as pesticide usage and safety.

Support from our donors like the Missouri Soybean Association allow the Missouri 4-H Foundation to enhance the 4-H experience and provide meaningful opportunities for young people to learn, grow, belong and succeed. Your gift could help change a life.





4h.missouri.edu/foundation f /mo4hfoundation







#### Dough:

3 1/8 cup (395 g) all-purpose flour, reserve ¼ c (30 g) for tangzhong 3/5 cup (75 g) of soy flour 1 tablespoon (12.5 g) salt 1/3 cup (60 g) sugar 2 ¼ (250 g) sticks of butter

2 ½ teaspoon (10 g) yeast 1/8 cup (45 g) cold water

1/8 cup (45 g) colu wa

3 large (150 g) eggs

3/4 cup (90 g) milk for tangzhong

#### Filling:

1/2 cup margarine (or butter) softened 1 cup packed brown sugar 2 tablespoons cinnamon

#### Icing:

8 oz block of softened cream cheese
¼ cup margarine softened
1 ½ cups powdered sugar
½ tsp salt
½ tsp vanilla or juice and zest of 1 lemon (depending on your preference)

Scan the QR Code or visit MoSoy.org/Recipes for more Soy Recipes!



#### Directions:

In a saucepan, combine 30 g flour and 90 g milk; stir on medium heat until texture of pudding is achieved. Let cool.

Bloom yeast with sugar and water until bubbles form.

In a stand mixer, combine the rest of the flour, soy flour, salt, eggs, cooled milk and flour mixture and yeast and mix on medium until dough is formed.

Slowly add in butter 50 g at a time until dough is smooth and elastic.

Once dough is smooth and elastic, cover and let rise in a greased dish for 1.5 hours or until doubled in size.

While dough is rising, combine softened margarine, brown sugar and cinnamon in a bowl and stir until evenly mixed.

Once dough has risen, remove from bowl and roll out to a 9x13" rectangle (about  $\frac{1}{4}$ " thick).

Once rolled out, spread filling evenly across the surface. Roll tightly lengthwise.

Cut into 1" rolls and place in a greased baking sheet to rise for 45 minutes, or until doubled in size.

Once risen, bake at 350° for 25-30 minutes until cinnamon rolls are golden brown.

While cooling, make icing by combining margarine, cream cheese powdered sugar and lemon or vanilla in a bowl and mix until completely incorporated.

Top warm cinnamon rolls with icing and enjoy.



#### **Pineapple Cubanos**

#### **Marinade:**

½ cup of pineapple juice ¼ cup soy sauce ¼ cup fresh cilantro 1 – 20 oz. can of cubed pineapple 5 cloves of garlic 2 tablespoons of salt 1 tablespoon of brown sugar 1 tablespoon of lemon juice Optional – 1 jalapeno or serrano

#### Filling:

1 – pork butt 2 tablespoons salt 16 slices of Swiss cheese 2 tablespoons of mustard Dill pickles ¼ cup melted butter Cilantro for garnish 1 bag of slider rolls Directions:

#### **Marinade Directions:**

Place all ingredients into a blender or food processor and blend until puree.

#### **Pork Directions:**

Cube pork butt into 1-inch pieces.

Place 1-inch pieces into a large bowl and salt, after seasoning pour in the marinade.

Let pork marinade for 2-24 hours in the fridge.

Preheat oven to 300° and remove pork from fridge.

Transfer pork and marinade in a large baking dish.

Roast pork covered with foil for 6-7 hours or until tender. (Crock Pot works too)

Once pork is tender, remove from baking dish and place back into a bowl, shred or chop pork until desired texture.

#### Sandwich Assembly:

Cut rolls in half, but be sure to keep the top and bottom portions intact.

Spread bottom rolls with mustard and top with slices of Swiss cheese.

Top cheese with shredded pork and then place pickles on top of the pork.

Close the sandwiches with the top rolls. Melt butter and pour over rolls.

Bake at 350° for 10-12 minutes until buns are golden and cheese is melted.

#### Frittata Cups

#### **Ingredients:**

12 eggs 2 tablespoons white miso 2 cartons of mushrooms 2 tablespoons of olive oil 1 teaspoon of sesame oil Salt and pepper to taste.

#### **Directions:**

Preheat oven to 350°

Sauté mushrooms in olive oil and sesame oil until cooked.

Season with salt and pepper and let cool.

Whisk eggs and white miso until combined.

Mix mushrooms and egg mixture.

Pour mixture into a greased 9x13 muffin tin.

Bake for 8-12 minutes until egg is set.

Serve and enjoy!



# MISSOURI SOYBEANS' SERVICE-LEADERS RECOGNIZED

uring the Missouri Soybean Association's (MSA) annual meeting in January, the farmerled board selected several of their peers to step up in leadership positions to serve Missouri's soybean growers.

To lead MSA, Matt Wright was reelected to serve as the president for 2023. Wright is a soybean grower from Emden representing District 3 on the board. Wright has been a board member for more than 10 years, serving in various leadership roles including vice-president.

"I feel incredibly honored to be elected to serve another year at the helm of the Missouri Soybean Association," said Wright. "As the policy branch of the organization, I am continuously impressed with the advocacy our board and staff puts forth and the work we get done for our growers across the state. As the leader of MSA, my goal is to create a strong future for soy."

Renee Fordyce, a farmer and rural health professional from Bethany, was also re-elected as the Association's vice-president. Renee represents District 1 and previously served as the MSA secretary. To round out the board's leadership is Brooks Hurst from District 1 as secretary and Cody Brock representing District 2 as Association treasurer.

MSA recognized two retiring board members, Matthew McCrate and Tom Raffety both of District 7, who have served the organization for 15 years. Both farmer-leaders served as past presidents of MSA and on the American Soybean Association (ASA).

"It has been an immense pleasure to serve on the Missouri Soybean Association board and lead the farmers to surety," said McCrate. "Not only have I served in various capacities on the MSA board, but it was also an honor to lead as the executive director of the Foundation for Soy Innovation to strive to enhance growth and innovation along the soybean value chain."

"I can't thank the soybean farmers of Missouri enough for entrusting in me to serve for more than a decade." said Raffety. "During my term, I had the pleasure to lead in several positions, promoting soybeans' diversity and ability to feed the world, as well as keeping the families of Missouri farmers on their farms through legislative action. I feel confident under this board's leadership that our farmers will remain in strong, resilient hands."

In June, MSA will onboard four new members to lead the Association.

"This board is pivotal in advancing not only the soybean industry, but also our nation's agricultural sector today and in the future," said Gary Wheeler, executive director and CEO. "I admire the board's leadership, hard work and dedication to the Association and look forward to working with these leaders to advance our mission at the state and federal level."

To find out more about the policy branch of the Missouri Soybeans organization or to activate your membership today, please visit mosoy.org.



2023 Executive Committee L-R: C. B. Hurst, M. Wright, R. Fordyce and C. Brock



Matt McCrate



Tom Raffety

# Farm Safety & Equipment Reach

Ensure that EVERYONE has received training on electricity safety procedures. Use these safety recommendations for yourself, your staff, seasonal employees, family members, and anyone else visiting your farm.

- ✓ Know the dimensions of any far-reaching equipment, such as chemical sprayers, tillage equipment, other extensions or augers.
- The length of a piece of machinery when it is extended both horizontally and vertically for transport is included.
- ✓ When moving loads, always choose the shortest (lowest) extension setting.
- ✓ These power-line safety guidelines also apply to other items and systems that stretch, lift, or have a wide range of motion, such as arms, booms, truck beds, and ladders.

Do not get out of the cab if your equipment does strike a power line, pole, or guy wire. Call 9-1-1 right away, tell people to stay away, and then wait for the utility crew to turn off the power.





# INVEST IN YOUR BOTTOM LINE

The Missouri Soybean Association has been committeed to the advancement of the soybean industry since 1966. Dedicated to improving the bottom line for soybean farmers and protecting their freedom to operate, the Missouri Soybean Association ensures farmers are heard at state, national and international levels.

While checkoff dollars are used solely for research and market promotion, your dues ensure the financial sustainability of Missouri soybean farmers by supporting and influencing legislative efforts.

MSA offers four levels of membership, ranging from farmer member to lifetime advocate member. Check out the details of membership below or scan the QR code for more information!



#### Annual Advocate Member

\$100

#### **Benefits Include:**

- 15% Discount to Okabashi Footwear
- 20% Discount to Biosynthetic Technologies motor oil
- 15% Discount to Cabela's
- Friends and Family discounts with Ford, Chevrolet and Chrysler vehicles
- Participation in MSA Events
- Regular Missouri policy updates
- Federal updates from the ASA

# 3-Year Advocate Member

\$250

#### **Benefits Include:**

- 15% Discount to Okabashi Footwear
- 20% Discount to Biosynthetic Technologies motor oil
- •15% Discount to Cabela's
- Friends and Family discounts with Ford, Chevrolet and Chrysler vehicles
- Participation in MSA Events
- Regular Missouri policy updates
- Federal updates from the ASA
- •\$50 discount on membership

#### Lifetime Advocate Member

\$1,500

#### **Benefits Include:**

- 15% Discount to Okabashi Footwear
- 20% Discount to Biosynthetic Technologies motor oil
- 15% Discount to Cabela's
- Friends and Family discounts with Ford, Chevrolet and Chrysler vehicles
- Participation in MSA Events
- •Regular Missouri policy updates
- Federal updates from the ASA
- Lifetime Membership Sign

#### **Farmer Member**

#### **FREE**

**Benefits Include:** 

- Participation in MSA Events
- Regular Missouri policy updates
- Federal updates from the ASA



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# From the Floorboard

# Recently elected MSMC board member, Marc Zell, shares his memories of the farm and working on a generational operation.

# Q: Tell us a little about yourself.

A: I am a fourth generation farmer in north central Missouri. I'm married to my wife, Brooke, and we have four boys. I attended college in Trenton and then transferred to Northwest Missouri State University, where I earned a bachelor's degree in animal science and agronomy. I enjoy farming, fishing, hunting and spending time with the boys.

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

**A:** I farm with my uncle and mother on our family operation. We raise corn, soybeans and wheat. I also run about 70 head of momma cows and calves comprised of mostly red Angus. In the summer, I bale about 500 bales of hay to keep the cows happy.

## Q: What is your involvement in agriculture?

A: Whether it was helping grandma fix lunch when I was little, to driving grain trucks or tractors back from the field when I got older, I remember I couldn't wait until I was old enough to join FFA. I learned so much through all of the programs in which you can be involved in. My wife and I have served on the county Farm Bureau board and are involved in the Missouri Young Farmer and Rancher program. I hope to continue learning and meeting new people through my role on the Missouri Soybean Merchandising Council.

## Q: Should tractors be red or green?

**A:** While we run mainly green tractors, I'm becoming less prejudice the older I get. They should be functional and affordable.

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

**A:** I'm a big fan of Little Debbie. If she makes it, it's good!

Also, I love a 100 Grand and Snickers.

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

**A:** I have been farming for as long as I can remember. I've rode countless hours on the fender of a 4020, sitting in the window of my grandpa's tractor, or in the floorboard of a combine observing everything that was going on. It's hard to pick just one memory from the last 39 years.

# Q: Who is your favorite farm influencer to follow?

A: Follow where?

# Q: What are you listening to while working?

**A:** I usually listen to KRES radio.

# Q: How do you take your coffee?

A: I don't.

# Q: Does your family implement any sustainable practices?

**A:** We have started using cover crops pretty extensively over the past few years. They have helped improve the soil by minimizing erosion, suppressing weed pressure and scavenging for nutrients that can later be used by the grain crop.

We also have built several miles of terraces on our farms to help stop erosion. We build mostly all broad base terraces so they can still be farmed.

## Q: Who is your biggest influence?

**A:** I would have to say my grandpa, dad and uncle. I have learned so much from them over the years, and they have given me many of the opportunities that I have been afforded. Although my grandfather and father have passed, I still use their knowledge and wisdom that they passed down every day.

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

**A:** The world of agriculture is rapidly changing. It's not just about driving a tractor anymore. There are so many jobs in the agriculture field that cover just about every job path. Get involved in FFA and see what's out there. You will probably find a career that suites you.















#### Missouri Soybean Merchandising Council's

# Where the Money Goes

#### **Statement of Activities, Fiscal Year 2022**

Transparency is paramount for Missouri soybean farmers and their checkoff, and the board of directors and staff carry that as one of the Missouri Soybean Merchandising Council's values. Each year, this financial report appears in Missouri Soybean Farmer magazine as part of that committment.

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 budget can be summarized under the following categories:

#### Research

This budget area provides for collaborative work on pest and disease resistance, flood and drought tolerance, and soybean breeding, as well as other work at the Missouri Soybean Association's Bay Farm Research Facility.

#### **Producer Communications**

This budget area includes the many ways checkoff funds are used to connect with soybean growers via radio, grower meetings, field days, educational tours, etc.

#### **Consumer Information**

The Consumer Information budget area is the home for efforts to connect Missourians not living on a farm or ranch to the importance of soy and agriculture.

#### 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.

#### **Industry Information**

Initiatives in this budget area include policy education, commodity support and working with industry partners to identify new management practices and uses for soybeans and soy products. This area encompasses business development and relationship-building programs as well.

#### **Promotion**

This budget area includes efforts to raise awareness within the market for Missouri soybeans and build demand for Missouri soybeans and soy products around the world. Scan to learn more about the checkoff!



34% PROMOTION

27% RESEARCH

17% Producer Comms

13% Industry Information

**8% Consumer Info** 

1% Administration

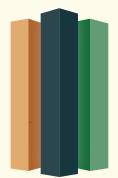




# Make Moves with U.S. Soy

Our founding farmers took action **22 years ago** to launch ASA's World Initiative for Soy in Human Health so WISHH could grow new markets for U.S. Soy. Today, WISHH is working with strategic partners that use soy for food or feed in **28 countries** across Asia and Latin America to sub-Saharan Africa.

Find out how WISHH's three pillars of trade, development and food security cultivate new markets for U.S. Soy protein.









# SOYBEAN SCHOLARSHIPS SHOWCASE SUCCESS

The Foundation for Soy Innovation invested in two students interested in soybean research for the 2022 scholarship.

#### BY SAMANTHA TURNER

The Foundation for Soy Innovation brings together soybean farmers, their partners in the industry and all along the soy value chain, working collaboratively toward a stronger future. Launched in 2018, one of the primary initiatives of the Foundation is to pursue grants and develop scholarship programs for hands-on work to advance innovation and create demand for soy.

The Foundation continues to support the future of soybeans with the selection of Sydney Stundebeck and Randi Noel, both of the University of Missouri – Columbia, for the 2022 Soy Innovation Scholarship. The scholarship will help fund the education and research conducted by these two individuals working to solve problems farmers are facing. The scholarship serves as an investment into the future of soybean innovation and empowers those working to further the soybean industry.

"The future of soy has tremendous opportunity," said Matt McCrate, chairman of the Foundation. "Through the Foundation for Soy Innovation, we're working to support those who need to be at the table to raise the bar on the work farmers are doing. Through this scholarship, we are investing in the next generation to discover new uses for soy and make Missouri a leader in soybean innovation."

The farmers behind the Foundation envision supporting early-career faculty and students in their work across the soy value chain through this scholarship program, established in 2018. Scholarship funds may be used for coursework, supplies, training and/or professional conferences.

Stundebeck is a junior at the University studying agribusiness management with dual minors in plant science and science and agricultural communications. Stundebeck is pursuing a career in agricultural sales to serve producers and help them run a profitable operation.

Through the Foundation for Soy Innovation, we're working to support those who need to be at the table to raise the bar on the work farmers are doing.

#### Matt McCrate, Foundation Chairman

"In the soybean sector, agricultural innovators are consistently working on breeding programs and developing cutting-edge technology to increase efficiency, so farmers can do more with less," said Stundebeck. "If I can put this technology into the hands of farmers as a salesperson, I will ultimately be playing a role in improving the bottom line for Missouri soybean producers." Stundebeck plans to leverage these funds to participate in more opportunities outside of her academic program-

ming. She will use this scholarship to attend agricultural conferences including Commodity Classic where she is assisting the American Soybean Association.

Stundebeck served as one of Missouri Soybeans' policy and producer outreach interns in 2022. Outside of her involvement with the soybean organization, she is an active member of College of Agriculture, Food and Natural Resources (CAFNR) student council, CAFNR ambassadors, Sigma Alpha, Collegiate Farm Bureau and is in the Little Leadership Scholars program.

Noel is pursuing her doctorate in plant sciences to learn more about agricultural and environmental systems. Through her program, her goal is to find ways in which these systems work symbiotically rather than in opposition to improve global food security.

Noel is using the scholarship awarded to sponsor her trip to Modesto, California to compete in a soil judging contest with the Missouri soil judging team, the Missouri Menfros.

"The California Central Valley, where our contest is held, produces more than 250 crops and is estimated to contribute 25% of the nation's food supply," said Noel. "That alone makes this an invaluable opportunity that I can now take advantage of thanks to the generosity of the Foundation for Soy Innovation."



If I can put this technology into the hands of farmers as a salesperson, I will ultimately be playing a role in improving the bottom line for Missouri soybean producers.

**Sydney Stundebeck** 



Noel shared that by learning firsthand about soils in natural systems, she can better understand how agriculture impacts the soil and how it can better support crops such as soybeans. Noel is planning to conduct research on how liquid smoke impacts the soil and affects soybean viability.

Noel started her undergraduate studies through her acceptance into an intensive program, Freshman Research in Plants (FRIPS). FRIPS introduced Noel to the complex interdisciplinary nature of research. She also works at the



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Plant Radiotracer Laboratory at the MU Research Reactor (MURR). Noel is also an active member in the MU Wildlife Society where she has served as vice president and event coordinator.

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. The Foundation is chaired by Matt McCrate of Cape Girardeau. To learn more about the Foundation for Soy Innovation, explore soyfoundation.org.



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