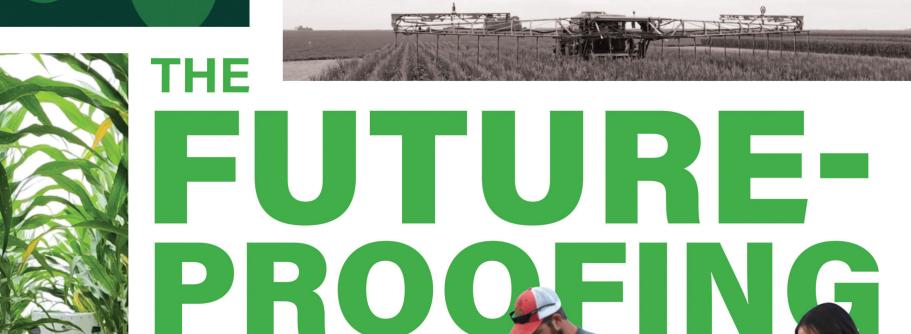
Illinois Field & Bean

A PUBLICATION OF THE ILLINOIS SOYBEAN ASSOCIATION









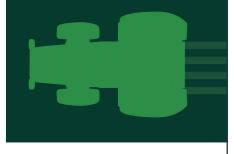
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COVER: Discover how to "future-proof" your farm in our latest issue, with practical strategies for long-term success, insights into climate-smart farming, and the importance of staying involved with Illinois' leading agricultural innovations and research. Other issue highlights include ISA's FY24 Year End Report, and a look at this year's Impact Award Winners.



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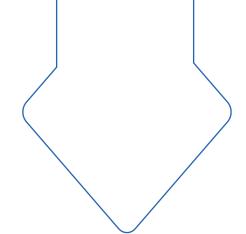
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FROM THE BOARDROOM | Funded by the Illinois Soybean Checkoff





STEVE PITSTICK | DISTRICT 2 DIRECTOR | ILLINOIS SOYBEAN ASSOCIATION

Future-Proofing Starts with Innovation

This past summer, after my mom passed, I found myself going through some archives and came across my FFA record books from the 1970s. My career began 50 years ago with three acres of soybeans, five gilts and a boar. Reflecting on six decades of farming is humbling, to say the least. The evolution from cabless tractors with radios mounted on the fender to today's semi-autonomous machines is a story in itself. These advancements didn't happen overnight or all at once - they improved gradually as society became smarter.

Over that timeframe, we have implemented several innovations that can deliver nearly 10 percent increases in productivity—herbicide-tolerant crops, GPS autosteer for machines those were the easy ones. Today, the focus on my farm has shifted to doing 10 things just one percent better. Each winter, we assess every part of the operation, finding even the smallest adjustments that can increase productivity or save time.

The main goal of my operation, one for every farming operation, is constant improvement. We can always do better, whether from implementing a newer piece of equipment, using new software or adopting a new operational workflow. Some changes come easily, others require a deep dive with analysis of the streaming data modern machines provide.

Every spring, farmers strive to grow the biggest and best crop possible. Yet, we often spend far less time thinking about what will happen to that crop once it's harvested. Instead, we rely on someone to buy and utilize it.

That's where initiatives such as the Illinois Soybean Association's Soy Innovation Center come in. The Center's mission is to uncover the next wave of uses for soy meal, protein and oil. Although major consumers of soy are well-established, the real opportunity lies in identifying the next 10 users who will each contribute to that extra one percent increase in demand. The aim is to integrate soy into the production of consumer goods, replacing environmentally taxing materials with homegrown solutions.

Future-proofing our operations starts with innovation, not only on our farms but also across industries. In this issue of *Illinois Field & Bean*, you'll explore the many ways farmers can prepare for the challenges and opportunities ahead. From regenerative farming to precision agriculture, satellites and beyond, there are countless tools and strategies available to help ensure the resilience and sustainability of farms for generations to come.

By increasing demand for soy and consistently improving, we're paving the way for a brighter future. Today, we are collectively smarter than we were 50 years ago, and while change often comes in small steps, even the smallest improvements can lead to better outcomes





You're in the Driver's Seat

The future isn't like a combine on autosteer, locked into a set GPS-guided path. It's more like an uncharted field, ready for us to map out, understand and explore. And though we can't predict every challenge as we progress through the planting, growing and harvest seasons of 2025, there is one thing we know for sure: Illinois soybean farmers will tackle complexities by embracing production innovations and technologies that have been thoroughly field-tested and proven effective.

Farmers can't always control what's next and, let's face it, this year there are sure to be obstacles including commodity prices, weather and global markets. But if we step back for a moment, we see we are positioned to handle them all. In Illinois, we continue to lead the nation as the top soybean-producing state. Although that sets an optimistic tone for this year, we also must consider that the choices we make now will help set the course for how competitive, sustainable and resilient our farms are in coming decades.

Staying Ahead of the Curve

Every farmer has his or her own vision for success—some dream of building multi-generational legacies, while others focus on efficiency or sustainability today. As the largest farmer-led soybean organization in Illinois, ISA is uniquely positioned to offer programs that ensure a promising future, including:

- **Research and Innovation:** ISA invests in everything from disease-resistant seeds to sustainable production practices, helping you stay ahead of the curve.
- Market Expansion: Through key partnerships, ISA works to secure new buyers and new uses for Illinois soybeans.
- Legislative Engagement: Whether it's communicating with legislators about the need for improved infrastructure or farmer-first policies, ISA stands ready to fight for the issues that offer the greatest ROI for Illinois growers.

Technology as an Ally

Ag technology can be a game-changer when implemented strate-gically, after it earns its stripes in the field. Across the state, a growing number of soybean farmers are incorporating precision agriculture tools and practices such as variable-rate planting, nutrient management and yield monitoring. These technologies aren't just for show—they're directly tied to both current and future increases in crop revenue and environmental stewardship.

As you create your future, the choice isn't whether to embrace technology but how to purposefully integrate it at the right time. Ask yourself: Does the technology pay? Is your farm capturing the full value of precision tools? Are you collaborating with trusted advisers to refine and tailor your approach?

What's the Role of Collaboration?

When it comes to creating your future, you must consider the marketplace, but you don't have to do it alone. Partnerships and networks



JOHN LUMPE | CEO | ILLINOIS SOYBEAN ASSOCIATION

strengthen our prospects for market success. ISA excels in connecting farmers with industry leaders, researchers and policymakers. For instance, our B20 Club is a collaboration between soybean farmers and fleet operators to expand the use of biodiesel. Every gallon of B20 consumed supports Illinois soybean demand while reducing greenhouse gas emissions by up to 20 percent.

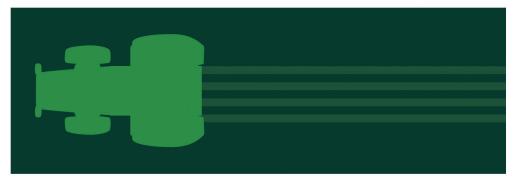
On a larger scale, ISA is seeding future opportunities through support of Soy Excellence Centers in partnership with the U.S. Soybean Export Council. Located in emerging markets for Illinois soy in regions such as the Middle East, North Africa, Southeast Asia, Sub-Saharan Africa and the Americas, these centers build relationships and grow demand. This helps ensure that Illinois soybeans stay competitive on the global market, which accounts for roughly sixty percent of our state's total soybean market. Each relationship abroad strengthens the prices we see at home.

Regardless of the future you want to create, the key to reaching it is to act deliberately. ISA's program areas are designed with this in mind and with you in the driver's seat. You select your journey forward and progress at the speed and time investment that works best for you.

The question isn't whether change will come—it's how we'll prepare for it. With the right tools, the right mindset and the support of your Illinois Soybean Association, we are on this journey with you in creating tomorrow's success!























Unlocking Regenerative Ag's Potential

Soil health mindset underpins efforts to boost productivity, sustainability and resilience

s Illinois farmers seek to enhance soybean productivity and environmental stewardship in 2025, regenerative agriculture can offer a holistic management framework worth studying. It's really a continuation of investments many farm families have been making for generations.

"I think of regenerative agriculture as a mindset—which can be summarized as 'doing the best you can, using all the tools in the toolbox, to leave the soil in better condition than when you found it," explains Ross Bricklemyer, **Ecosystem Services Modeling** Strategy Lead, Bayer. "There are many regenerative practices that farmers are successfully using today to turn that mindset into lasting change."

The push for regenerative ag reflects both agronomic and societal factors. Improving environmental resilience of farmland has become a priority amid increasing frequency of drought and heavy rainfall events, among other severe weather scenarios. Meanwhile, more consumers and other end users are seeking sustainably sourced food and feed than ever before.

"Across the food chain, from consumer to corporation, there is a recognition of the need to reduce carbon emissions and restore ecological balance in our food supply chain," Bricklemyer says. "Regenerative ag fits perfectly with this aspiration."

Defining Regenerative Ag

Although some people prefer terms such as climate-smart ag, Bricklemyer is partial to regenerative ag. As an ecosystem services expert who holds a Ph.D. in soil science from Washington State University, Bricklemyer thinks the science-based conservation

practices underpinning regenerative ag will withstand the test of time, no matter what terminology is in vogue or who is in office in Washington, D.C.

"Whether the incoming [Trump] administration chooses to shift current climate-smart agricultural programs from a climate focus to emphasizing conservation, the on-farm benefits of regenerative practices are independent of what lawmakers decide," Bricklemyer explains. "Additionally, meeting sustainability targets through voluntary carbon markets are a primary driver of agriculture value chain companies' desire to partner with farmers to adopt regenerative practices. The good news is that these sustainable ag practices are becoming more ingrained in today's marketplace because they deliver tangible benefits to farmers and the food value chain."

These practices include time-tested ones such as plant breeding, crop rotation, cover crops, and reduced or minimized tillage, Bricklemver says, Additionally, regenerative ag encompasses emerging practices such as supplementing commercial nitrogen fertilizer with manure, using precision nitrogen management including inhibitors and adopting biological crop protection or crop enhancement products.

When used in concert, such practices can bring numerous benefits, Bricklemyer says. Among

- Farm Productivity and Profitability: "Improving soil organic matter, nutrients and moisture can help farmers save on irrigation, fertilization and fuel consumption," Bricklemyer says.
- Soil Health: "Regenerative practices such as reduced tillage, cover cropping and rotation not only help absorb more carbon,

but they also reduce soil erosion, increase water retention, improve nutrient content and create habitats for other plants and animals." Bricklemyer points out. Increased soil organic carbon and reduced soil bulk density can also boost

Water Quality and Conservation: Rather than disrupting soil structure and exposing topsoil, regenerative ag practices keep the soil covered, rebuild soil structure, and can mitigate the risk of flooding, erosion and runoff by increasing natural soil drainage, while also preserving soil moisture during drier times. "This is especially important during extreme weather conditions, when healthy soils act as filters to trap pollutants and prevent them from leaching into groundwater," Bricklemyer says. "In irrigated systems, data-driven precision irrigation has the potential to conserve

water while maintaining optimal production."

- Reduced Greenhouse Gas (GHG) Emissions: Ag contributes significantly to global GHG emissions, though regenerative ag practices can both reduce emissions and store more carbon in the ground. A variety of carbon market programs are incentivizing farmers to adopt new practices, which can provide an additional revenue stream.
- Biodiversity: A host of living organisms can benefit from regenerative ag. Healthy soils contain millions of beneficial microbes that transfer vital nutrients to crops, while other organisms protect crops by warding off soil pests, Bricklemyer says. Conservation-minded activities also provide habitat to game birds and other wildlife.

(See Unlocking Regenerative Ag's Potential, page 8)



These Illinois no-till soybeans were planted following corn. Reduced tillage is one of the practices commonly recommended for farmers implementing regenerative agriculture. Credit: ForGround by Bayer and Coolfire Studios (St. Louis, Mo.)



Unlocking Regenerative **Ag's Potential**

(continued from page 7)

These kinds of outcomes can inform the strategies Illinois soybean farmers take to the field to balance productivity and sustainability during spring 2025 planting and beyond.

Key 2025 Trends to Monitor

Three aspects of regenerative ag-collaboration, data, and products and systems—are especially worth watching in Illinois, Bricklemyer advises.

Collaboration on environmental opportunities is on the uptick across agriculture, and many such programs offer direct payments, technical assistance and other resources to farmers. Bayer has globally launched 24 regenerative programs with 17 companies, he says. Meanwhile, the company's collaborations extend to growers across the regions with almost 4 million acres being incentivized for implementing regenerative practices.

For example, in 2022 the company launched a program with Perdue Agribusiness supporting farmers who adopt beneficial soil health practices. Farmers receive an additional revenue stream for carbon sequestration, access to in-field data and in-field support for timely decision-making plus Climate FieldViewTM for data collection. Perdue also benefits. The company sources grain from participating farmers and reports resulting GHG emissions reductions toward its Scope 3 targets using Bayer's ForGround platform. The ultimate goal is to bring consumers and food companies certified low-carbon chicken and low-carbon food oil options.

"Our support of regenerative agriculture, however, goes far beyond carbon to include soil health, biodiversity, and water quality and conservation," Bricklemyer says. "Though the market has struggled

to put a societal monetary value to these so-called co-benefits, all of these provide tangible benefits to farm operations, both in terms of productivity and sustainability. We've had farmers who have used regenerative farming practices for many years acknowledge that while it's not always easy, the results make it all worthwhile."

As the Perdue program illustrates, data as a regenerative ag decision-making tool remains a growing trend. Specifically, Illinois farmers will increasingly have access to data that can drive onfarm progress, versus historic data that simply recaps past activity. "Whether it's assessing crop health, soil conditions, carbon capture, seed performance or yield, data analysis, management and reporting is faster and easier than ever before," Bricklemyer points out.

Finally, the regenerative ag toolbox continues to expand, as evidenced by new products and systems hitting the U.S. market. "In the future, we could expect to see increased use of biological products and emerging technologies, such as enhanced rock weathering for optimal pH balancing, and livestock integration with cover crops," he says. It's early days for the biologicals and enhanced rock-weathering technologies, but preliminary results are promising for accelerating carbon storage and enhancing productivity.

Regenerative Starter Tips

Although every farm operation is unique, some common themes emerge among farmers who are successful in their use of regenerative ag practices. Some of the insights Bricklemyer shares

- Tillage Management Matters: "Reduced tillage (no-till or strip-till) is critical to access the many benefits associated with regenerative practices," he says.
- Cover Crop Regionality: Study which cover crops work in your region, including recommended windows for planting and termination. Keep your plan as

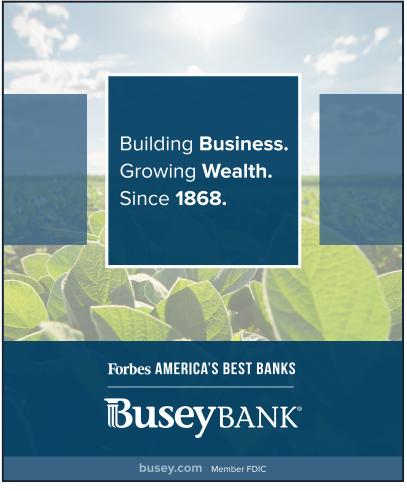
simple as possible and stick with it, recognizing "weather is almost always a confounding factor."

- Carbon Reality Check: Recognize that while carbon programs might provide additional revenue, dealing with their verification requirements takes time. "Keeping good management records and meeting reporting timelines is critical, so find a program that works best for you," Bricklemyer says.
- Ask Around Often: Reach out to agronomic experts, local university Extension agents, companies or all of the above. You can also quiz farmers who've been in your shoes for their recommendations.
- Take Small Steps: "Experimentation is key to finding the system that works for you. Start simple and build complexity over time."

Beyond the scope of an individual farm operation, Bricklemyer encourages Illinois soybean farmers to ensure their voices are well-represented with policymakers throughout 2025. Conservation advocacy can help safeguard federal investments in farmers' land and livelihoods.

"Budgetary pressures will be a major factor for Congress as it works to determine funding levels for all the programs that make up the Farm Bill," he explains. "It will be incumbent on farmers and the agricultural value chain to urge Congress to continue support and recognize that conservation programs that support reduced tillage and cover crops not only improve soil health and strengthen resilience, but also increase yields and improve the economic well-being of farmers in Illinois and the U.S."

Applying a regenerative ag mindset—to crop production goals, soil and water stewardship, and advocacy efforts—can have wide-ranging positive effects in 2025. Study the landscape, consider which step to take first and test the waters (and soil) to see what learnings are possible.







Farmers for Soil Health provides many benefits to enrolled farmers, including access to a one-of-a-kind, exclusive **Sustainability**Marketplace. This unique platform directly connects farmers with top-tier consumer packaged goods companies that support sustainably produced commodities.

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to take advantage of the next open Marketplace!

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Chairman's Reflection BETTER BY ASSOCIATION

"Throughout 2024, the Illinois Soybean Association (ISA) celebrated 60
Seasons of Success through a campaign highlighting our growth in key areas such as biodiesel, container exports and research. Each represents significant milestones made by the Government Relations, Market Development and Soybean Production committees.

At ISA, our mission is to uphold the interests of Illinois' 43,000 soybean farmers through advocacy, research and education. We continuously invest in expanding domestic and international markets, offer research-driven agronomic insights and amplify our collective voice in Springfield and Washington, D.C. Together, these efforts are designed to ensure the continued productivity and profitability of the Illinois soybean industry for years to come.

In this report, you'll discover more about the dedicated individuals and transformative projects driving our mission forward. The FY24 projects featured here are just a small sample of the numerous successful initiatives undertaken by ISA's staff and board committees. These efforts not only address current challenges but also anticipate the future needs of Illinois farmers. From innovative research that improves yields to strategic advocacy that shapes policies, each project is a testament to the vision that keeps our industry moving forward.

As Chairman of ISA, I want to express my gratitude for your essential role in our collective success. Your hard work and dedication to the land are the center of ISA's mission. I'm excited to continue this journey together as we forge new paths and build an even stronger future for Illinois agriculture.

Together, we are truly Better by Association."

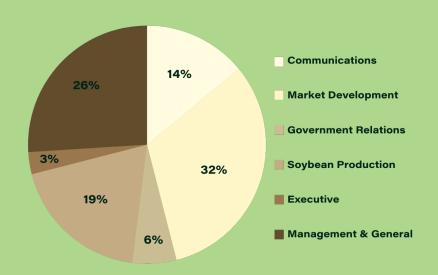


Financial Snapshot

FOR THE YEAR ENDING AUGUST 31, 2024

ON BEHALF OF THE ILLINOIS SOYBEAN BOARD (ISB)	
ASSETS	\$24,595,043
LIABILITIES & NET ASSETS	\$24,595,043
REVENUE	\$20,500,921
OPERATING EXPENSES	\$24,946,369

For more information, contact 309-663-7692.



Market Development

SOY INNOVATION CENTER

FY24 marked the first year of ISA's Soy Innovation Center, an initiative that aims to break down the barriers to the commercial availability of soy-based products. Through the Center, the Market Development Team identifies and supports innovative ideas, key products and research to drive new ways to use soy while promoting Illinois as the leader in soybean production. Currently, we are in discussions with potential partners to license our first bio-lubricant product.



IT'S SUSTAINABLY SOY

In FY24, ISA launched the It's Sustainably Soy Certification Program, which is designed to recognize organizations, companies and executives for switching to sustainable, soy-based solutions. The program allows ISA to promote the benefits of soy-based products while providing companies with a resource they can publish as part of their sustainability initiatives.



INTERNATIONAL BUYER ENGAGEMENT

We expanded our outreach to Chicago-based consulates, hosted several trade teams and, to close out FY24, ISA Market Development Committee members and staff joined the U.S. Soybean Export Council in California for Soy Connext 2024.

The event connected Illinois farmers with international buyers and industry leaders, fostering new opportunities for U.S. soy and promoting its quality and value in global markets.



ILLINOIS FIELD OF BEANS BBQ GRAND SLAM

The Illinois Field of Beans BBQ
Grand Slam was a four-part
competition series, presented
by ISA and the Kansas City
Barbeque Society, that
highlighted the crucial role soy
plays in animal agriculture. Teams
from across Illinois competed in
three categories: chicken, pork
and ribs – all soy-fed proteins.





Reflection

"FY24 was a pivotal year for the Illinois Soybean Association" (ISA) Market Development Committee, marked by key initiatives that advanced both domestic and international opportunities for Illinois soy. One of our proudest achievements was the launch of the Soy Innovation Center, which serves as a virtual hub to support the research and commercialization of innovative, soybased, value-added products. We are excited by the progress made so far, and the potential for more breakthroughs in the years ahead. We also introduced the It's Sustainably Soy Certification Program, recognizing companies for adopting sustainable soy solutions and reinforcing soy's role in environmentally conscious practices. Internationally, our efforts deepened and extended Illinois farmers' connection with global buyers and fostered partnerships that promote the superior quality of U.S. soy. Looking ahead, we are excited to continue driving innovation, expanding market opportunities and promoting Illinois soy across the globe."



TODD MAIN, DIRECTOR OF MARKET DEVELOPMENT

Soybean Production

ISA FUNDED RESEARCH PROJECT:

"INJURY POTENTIAL TO VERY EARLY PLANTED SOYBEAN FROM VARIOUS SOIL-RESIDUAL HERBICIDES/ACTIVE INGREDIENTS"

LEAD RESEARCHER: DR. AARON HAGER

Planting soybeans early often means cold, wet soil conditions that can delay seed germination and prolong plant emergence. These conditions can reduce the plant's ability to metabolize preemergence (PRE) herbicides, resulting in crop injury. This project is testing several herbicides and classes of chemistry to better understand which are more prone to cause crop injury under early planting conditions. Farmers and crop consultants can use this research to determine if they should be concerned about injuring the soybean crop. Certain products can result in greater early injury, avoiding these products should be a consideration, especially where conditions for injury and stand loss are more likely to occur, such as poorly drained fields.

ISA FUNDED RESEARCH PROJECT:

"EVALUATING LEAF NUTRIENT TISSUE TESTING AND RELATION TO SOYBEAN GRAIN YIELD"

LEAD RESEARCHERS: DR. CONNOR SIBLE & DR. FRED BELOW

Are today's tissue testing recommendations for soybeans still the best approach, or should new ways to sample be considered? This research looks at nutrient uptake and remobilization at the whole plant level, providing a more holistic view of the crop and better information for best management practices regarding foliar nutrient applications, ultimately leading to higher and more profitable soybean yields. As additional data from this project comes together, recommendations may change based on the grower's ability to test in-season application

technologies.







ISA FUNDED RESEARCH PROJECT:

"SOYBEAN STEM PESTS: SURVEY, IMPACT AND EDUCATION"

LEAD RESEARCHERS: DR. JASON BOND AND DR. NICK SEITER

Continuing work already underway across Illinois' soybean fields, this project aims to identify new and emerging stem disease and insect pests that negatively impact soybean production and yield. Pests of particular concern include dectes stem borer, soybean gall midge, red crown rot and stem canker. Researchers will use the insights to prioritize future research that will help determine best management practices. This multi-year research project is using a combination of approaches to assess perceived and actual occurrence and impact throughout the state. Grower surveys are helping gauge presence and population levels of stem pests and diseases. Samples are being collected from fields and evaluated within a lab environment to accurately identify pests and pathogens, as well as document symptoms.



Reflection

"We started the year with some amazing projects that are digging deeper into the research questions Illinois farmers are asking. One of the questions we ask each researcher in their final report is "How will this research impact or benefit farmers?" Every project that was funded for the FY24 season, along with the results, will be available to farmers to find on *fieldadvisor.org*, where users will learn more about those impacts and benefits. The three listed above are a few that focus on integrated pest management questions that can help provide perspective for 2025 management decisions. Throughout the year, Field Advisor provides progress updates about the research projects in real-time as well as reports from agronomists and University of Illinois Extension agents across the state. Current services such as free SCN testing and other opportunities can be found on Field Advisor. Farmers can participate in these opportunities now. The more collaborative research we have, the better tools we'll have for soybean production in the State of Illinois. Whether we're talking with farmers at field days or enrolling in our On-Farm Trialing Network, motivation to find better soybean system tools is never lacking. We're excited to share results from the FY24 projects and continue the work for superior soybean systems each year!"



Government Relations

LOYAL TO THE SOIL:

Loyal to the Soil underscores our ongoing commitment to sustainable farming practices. This dedication is essential for maintaining the long-term health and productivity of our soil. Through effective partnerships with American Farmland Trust, Illinois **Environmental Council, Illinois** Alliance, Soil and Water Conservation Districts, The Nature Conservancy, University of Illinois and other groups, we have made significant strides in advancing these practices and educating legislators. We've enabled farmers to adopt these practices effectively, supporting their success and furthering our broader environmental stewardship objectives. With this, we ensure that farmers receive the rightful recognition they deserve for being stewards of the land and being loyal to the soil.







ISG GROWTH:

Illinois Soybean Growers (ISG) continued to work toward expanding its reach through various in-person and virtual events. These events have fostered awareness of the policies ISG has worked on at both the state and federal levels. ISG staff traveled the state hosting regional town halls to provide updates on issues including changes to pesticide regulations and land ownership rights and also introduced regular webinars for members. This involved bringing experts to the table to answer questions about policy impacts on the farm. ISG also hosted its first formal members dinner and fundraiser during the 2024 Soy Summit. ISG hasn't only expanded its activities but also continues to grow its membership base. Membership grew by nearly 50 percent in FY24. Fundraising for the Political Action Committees (PACs) remains a primary focus for ISG. As such, the state PAC maintained the same large returns it saw in FY23, and the federal PAC saw increases of over 100 percent in its returns after more than doubling FY23 fundraising.





Reflection

"In 2024, we made great progress in building strong relationships with elected officials, positioning ourselves as a valuable resource on critical issues such as conservation, biofuels, inland waterways and the farm bill. Our Government Relations team has been dedicated to representing Illinois soybean farmers, working diligently to advocate for policies and regulations that support the agricultural community. As we look to the future, we are committed to building on these achievements and further enhancing our impact. Our focus will remain on fostering a more supportive environment for farmers, ensuring their needs are prioritized and their voices resonate in essential decision-making processes. The Government Relations team will continue to strengthen its role as a leading voice for soy."



ANDREW LARSON, DIRECTOR
OF GOVERNMENT RELATIONS & STRATEGY

LEGISLATIVE OUTREACH:

In FY24, the Government Relations team worked diligently to strengthen its legislative outreach by engaging directly with lawmakers at both the state and federal levels. The year saw significant efforts, such as ISA's collaboration on B20 visits, where lawmakers learned about the economic and environmental benefits of soy-based fuels. ISA also led tours for members of the Sustainable Fuels Caucus, including a visit to Incobrasa, further promoting the role of sustainable fuels in Illinois' economy. By inviting legislators to farm visits, we've provided them with valuable insights into the agricultural process, which has further reinforced our role as a leading advocate for the soybean industry. Our focus has been on influencing legislation that affects trade, environmental practices and farm support programs.

We also continued our advocacy efforts in Washington, D.C. During multiple fly-Ins throughout the year in collaboration with partners such as the American Soybean Association and the Clean Fuels Alliance of America, staff and board members met with nearly all members of the Illinois delegation to discuss ISA's priorities and initiatives.

Government Relations also hosted the successful Soy Latte Day event at the Illinois State Capitol, where over 100 legislative staff and assembly members were educated on the importance of soy in their everyday lives.





Chairman's Reflection BETTER BY ASSOCIATION

"Throughout 2024, the Illinois Soybean Association (ISA) celebrated 60
Seasons of Success through a campaign highlighting our growth in key areas such as biodiesel, container exports and research. Each represents significant milestones made by the Government Relations, Market Development and Soybean Production committees.

At ISA, our mission is to uphold the interests of Illinois' 43,000 soybean farmers through advocacy, research and education. We continuously invest in expanding domestic and international markets, offer research-driven agronomic insights and amplify our collective voice in Springfield and Washington, D.C. Together, these efforts are designed to ensure the continued productivity and profitability of the Illinois soybean industry for years to come.

In this report, you'll discover more about the dedicated individuals and transformative projects driving our mission forward. The FY24 projects featured here are just a small sample of the numerous successful initiatives undertaken by ISA's staff and board committees. These efforts not only address current challenges but also anticipate the future needs of Illinois farmers. From innovative research that improves yields to strategic advocacy that shapes policies, each project is a testament to the vision that keeps our industry moving forward.

As Chairman of ISA, I want to express my gratitude for your essential role in our collective success. Your hard work and dedication to the land are the center of ISA's mission. I'm excited to continue this journey together as we forge new paths and build an even stronger future for Illinois agriculture.

Together, we are truly Better by Association."



Financial Snapshot

FOR THE YEAR ENDING AUGUST 31, 2024

ON BEHALF OF THE ILLINOIS SOYBEAN BOARD (ISB)	
ASSETS	\$24,595,043
LIABILITIES & NET ASSETS	\$24,595,043
REVENUE	\$20,500,921
OPERATING EXPENSES	\$24,946,369

For more information, contact 309-663-7692.



Market Development

SOY INNOVATION CENTER

FY24 marked the first year of ISA's Soy Innovation Center, an initiative that aims to break down the barriers to the commercial availability of soy-based products. Through the Center, the Market Development Team identifies and supports innovative ideas, key products and research to drive new ways to use soy while promoting Illinois as the leader in soybean production. Currently, we are in discussions with potential partners to license our first bio-lubricant product.



IT'S SUSTAINABLY SOY

In FY24, ISA launched the It's
Sustainably Soy Certification
Program, which is designed
to recognize organizations,
companies and executives for
switching to sustainable, soy-based
solutions. The program allows ISA
to promote the benefits of soybased products while providing
companies with a resource
they can publish as part of their
sustainability initiatives.



INTERNATIONAL BUYER ENGAGEMENT

We expanded our outreach to Chicago-based consulates, hosted several trade teams and, to close out FY24, ISA Market Development Committee members and staff joined the U.S. Soybean Export Council in California for Soy Connext 2024

The event connected Illinois farmers with international buyers and industry leaders, fostering new opportunities for U.S soy and promoting its quality and value in global markets.



ILLINOIS FIELD OF BEANS BBQ GRAND SLAM

The Illinois Field of Beans BBQ
Grand Slam was a four-part
competition series, presented
by ISA and the Kansas City
Barbeque Society, that
highlighted the crucial role soy
plays in animal agriculture. Teams
from across Illinois competed in
three categories: chicken, pork
and ribs – all soy-fed proteins.





Reflection

"FY24 was a pivotal year for the Illinois Soybean Association (ISA) Market Development Committee, marked by key initiatives that advanced both domestic and international opportunities for Illinois soy. One of our proudest achievements was the launch of the Soy Innovation Center, which serves as a virtual hub to support the research and commercialization of innovative, soybased, value-added products. We are excited by the progress made so far, and the potential for more breakthroughs in the years ahead. We also introduced the It's Sustainably Soy Certification Program, recognizing companies for adopting sustainable soy solutions and reinforcing soy's role in environmentally conscious practices. Internationally, our efforts deepened and extended Illinois farmers' connection with global buyers and fostered partnerships that promote the superior quality of U.S. soy. Looking ahead, we are excited to continue driving innovation, expanding market opportunities and promoting Illinois soy across the globe."



TODD MAIN, DIRECTOR OF MARKET DEVELOPMENT





Rising input costs can pose challenges to profitability, but farmers can tap into effective strategies and solutions to navigate challenging times.

Inflation and the Farm: 5 Tips for Future-Proofing

he agriculture industry is facing a multitude of challenges, including climate change, water scarcity and market volatility. Inflation also has emerged as a significant concern.

Rising costs on inputs such as feed, fertilizers, fuel and labor, along with higher insurance premiums and inflated equipment prices, can make it difficult for farmers to make a profit. Food inflation, detrimental to both farmers and end consumers, can also exacerbate this trend.

It's an important topic to understand because of the potential and significant impacts on the future of the industry and your operation. "There's no doubt this is a difficult time, with the uncertainty of the new administration and the rhetoric of trade and tariffs," says Stephen Nicholson, Global Sector Strategist - Grains & Oilseeds, Rabobank.

So what's a farmer to do? Analysts say you do have options. We've put together five top areas that deserve serious consideration as you future-proof your farm through this uncertain economic cycle.

Budget

Start with a hard look at your budget, either reviewing or establishing a good, thorough budget, says Mike Gunderson, Chief Credit Officer, Farm Credit Illinois.

Categorize it by yields, expenses, inputs and more. Aim to create one budget per acre and another per bushel.

"There are lots of resources to start from, such as the University of Illinois," he says. "You'll have to customize it and make it specific to your farm, but it is much better than starting blank."

Lands and Rents

One area where advisers definitely see an opportunity to pull back is land buying and rents.

If you're buying land, "you're going to have to be a hard negotiator," says Nicholson. "You have to be willing to walk away if it doesn't pencil. And know that the one who doesn't walk away probably either won't be farming that land or won't be in business a year from now."

For many farmers, cash rents have increased along with input and equipment prices. Now is the time to revisit the rent conversation with your landlord. "That can be a good place to rethink," says Gunderson. "Don't be afraid to negotiate and have the hard conversations."

Equipment

Another spot to rethink: Is your equipment fleet rightsized? Are you running the right size and capacity of equipment for your





operation today? Did you upgrade and expand during high commodity prices, and could you downsize again without sacrificing efficiency?

"Are you sized properly per acre?" asks Gunderson. "Could you resize or right-size and still get the crop out effectively and efficiently?"

Inputs

Fertilizer and chemicals are the biggest variable expenses for farms. It might be time to rethink how they integrate into your production strategies.

"Reevaluate the application of fungicide and the payoff, for example," suggests Gunderson. "Is your soil health good? Can you adjust the amounts?"

Likewise, nitrogen application could be a place to adjust. If you're split-applying, could you consider a single application? Or could you sidedress some but not all acreage? Your agronomist and your retailer can be great resources to help assess soil fertility and adjust strategy accordingly.

Diversification

Consider seeking out new and different markets for soybean production. "Specialty soybeans are where you need to focus right now," says Nicholson. "Look at beans like high oleic beans or non-GMO beans for food and feed, where you're likely to get a premium."

Organic beans could also present opportunities, though Nicholson typically recommends beginning that venture during an upswing. "That's a three-year process," he says. "Ideally, you need working capital, and you need a cushion as you work through the process. But I do still have a lot of people looking into it now."

Carbon Sequestration

Climate change and the focus on carbon intensity creates new focus and new pressure, but also new opportunities.

"We see crops being paid on more carbon sequestration," says Nicholson. "Grain companies and food companies are looking for low carbon-intensity crops both to use and to market with."

Strategies to explore include biodiversity, cover crops, less tillage, better soil health, crop rotations and biologicals.

Whether you earn a carbon payment or a premium for the carbon intensity of your crop, it's an option worth exploring. "We've seen several grain companies and processors begin to focus on this opportunity," he says.

Renewals

From a financial standpoint, many operations are entering into the renewal period for their financing. This is the time for frank conversations with your lender.

"Ask key questions: How do you spread out financing? Your lender may say they can give you the credit line you have now and more. How do you deal with the financing size you have?" says Nicholson.

Another suggestion, he says, is considering financing from input providers such as your seed and fertilizer suppliers. "They tend to have lower interest rates," he explains. "Their end goal is to sell product; they aren't like a bank."

Quick, Decisive Marketing

The markets are in uncertain times because of everything around them in the world. That means farmers must be ready with a market strategy and target.

"You have to be willing to pull the trigger when there's an opportunity," says Nicholson. "Identify a target number and put your order in ahead of time at the elevator-it forces your hand to figure out where you need to be, and it pulls the trigger. It takes some of the emotion out of marketing."

What You Can't Control

Uncertainty is the name of the game with the new administration, analysts say.

Among the potential policies on the table, deregulation is a major focus, according to

Nicholson, "There is a reason for regulations, and deregulating can have large, unintended consequences," he explains. "Look at when we deregulated airlines: Yes, we had lower prices, but now we're also down to only four airlines." Rather than deregulating, he believes we should emphasize making processes smoother and having better outcomes.

Logistics might also impact the farm market, he says. The Suez Canal's current safety issues make costs higher, which depresses commodity prices and means farmers ultimately incur more cost to get product to market.

And though we might not see a large increase in prices for inputs and machinery, projections don't indicate they will decrease either. "However, we could see more discounting and better financing opportunities," Nicholson says. "That's something to watch for."

Certainly, the Federal Reserve cutting 25 basis points in late 2024 should help in 2025.. "I'm optimistic that the activities of the Fed in 2024 will help in 2025," says Gunderson. "That the Fed decreased rates again says they feel inflation is in a good place."

Still, the Fed, even while lowering rates, did signal fewer rate decreases in 2025. "To assume the Fed will make more cuts in 2025 [than in 2024] would be optimistic, and the policies being discussed are all inflationary: tariffs; government spending

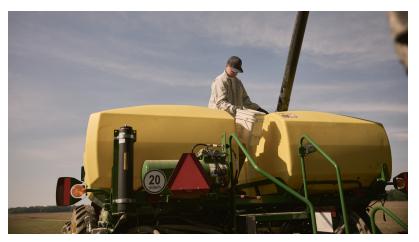
cuts; removing immigrants, which removes their cost but also removes them from the spending base and from farm labor."

Analysts agree that we're unlikely to see significantly lower interest rates in 2025, particularly with the policies on the table. "The Fed has indicated they want to wait through the first half of the year to make more changes. This is a very disruptive environment to be dealing with," Nicholson says. "Markets don't like uncertainty; markets tend to be bearish. But markets can also go quickly in the other direction, like they did when Russia invaded Ukraine."

Although the potential trade and tariff policies are full of volatility and about one-third of our country's soybeans are exported, the news is not all bleak. Our state is in an excellent position, analysts say.

"Illinois is positioned well. You have a lot of crushing facilities and are not totally reliant on soybean exports to China should that export business be disrupted," says Nicholson. "While the Illinois river is important to the soybean export trade, you have rail out of Chicago, which is still sending quite a few beans to the edamame market in Asia."

Bottom line: If Illinois farmers are proactive and strategize with the long term in mind, incorporate new tactics and implement careful analysis, they can be successful even during this economic cycle.



Illinois farmers are well-positioned to withstand today's uncertain markets, and focusing on future-proofing their operations will be essential for long-term success.



NASA's satellite data helps farmers optimize their businesses by assisting them in calibrating equipment.

NASA and Agriculture? This Connection Might Surprise You

For 50 years, NASA has helped farmers to boldly grow

re you still operating status-quo even as the industry changes around you? Are you taking advantage of every opportunity to feed your business as you feed the world?

Have you ever stopped to think about what goes into accurate field monitoring and yield forecasting? Or what makes certain conservation practices in your fields work better than others? Or how irrigation systems know how to precisely apply water to hundreds of acres of row crops?

The answer is simple, right? Satellite data.

The phrase has become a cliché. But "satellite data" is actually more than a catchphrase—it involves more than just blips on radar. It's at the heart of just about everything related to precision agriculture these days. Satellite data is here to stay, and it's brought to you by NASA.

"NASA satellites are the world's premier satellites," says Bradley Doorn, Program Manager for the Agriculture Earth Action Program at NASA. "These satellite programs are funded by tax dollars, so they should be put to work to really, really benefit the taxpayers. On top of that, these satellite and data capabilities are extremely cool."

Generating satellite data is a Herculean effort' or something like that. Individual bits of information about the planet are harvested, beamed thousands of miles up to satellites orbiting in outer space, then beamed back down to Earth. From there, that data is interpreted and used to affect big-picture issues

such as improving agricultural sustainability, lessening food shocks, mitigating the effects of climate change, and even helping determine agricultural trade policy.

Satellite data gives modern farmers an edge that their predecessors simply didn't have.

On the ground and in the field, satellite data can be used to calibrate equipment, improve irrigation timing, monitor soil health, detect crop disease, manage pests and schedule fertilizer application.







Infomation is Ag's New Secret Weapon

Agriculture has come a long way in the past 50 years, and recent technological changes have the industry moving at warp speed.

Prior to satellite data availability, farming depended on the analysis of past patterns and events and suggestions from trusted sources such as Extension, Decisions about what to plant, when and how much, were driven largely by farmers keeping records on paper and talking to other farmers before making decisions about the next year's crop.

Today, NASA satellite data makes it possible makes it possible to observe conditions directly and nearly in real time. Instead of relying on information about what has happened, decisions are now made based on what is happening. This move to high-quality, up-to-the-minute information is a game-changer.

Data Can Lower Costs, Instill Higher Confidence

"In precision or digital agriculture, NASA science and research is at the foundation of information used by equipment manufacturers and commercial satellite and data providers," says Doorn. "By tapping scientific advances developed by NASA for space programs, manufacturers and providers are ultimately able to provide products and services at lower costs to consumers than if they developed this technology independently. This is cost-effective for the producers, and it's something they can have confidence in."

Plowing Through the Data

Technology is always evolving. The beauty of this is that new data can be fine-tuned and tailored to improve technology for Illinois soybean growers.

"We've had discussions with all the commodity groups, including the American Soybean Association," says Doorn. "In fact, one of the things we do at Commodity

Classic is to set up times for my leadership at NASA to meet with the commodity associations to hear their concerns and challenges."

"Different commodity producers have different issues and needs. Some might be extremely concerned about water issues like drought. Others might be focused on disease and pest control. It's important that we hear them out, take time to really listen to their concerns," Doorn says. "Plus, we can share insights on what we see coming online, the things that might impact their production decisions,"

With so many moving parts, the information-sharing doesn't

"This collaborative approach helps keep NASA laser-focused on doing what's relevant and important to those associations and their stakeholders," Doorn says. "Plus, by hearing about the innovations or new technologies or complementary research they're doing, we can be more in sync with each other, and not redundant."

In other words, these sophisticated technologies and solutions depend on free and open communication—actual discussions among humans.

"Let's say we NASA folks have an idea. If we can detect and understand a particular issue really, really well, then we'll want to test our idea out. So, we get it in front of Extension, consultants, commodity groups, the folks on the ground. They might come back and say, 'That will help us.' Or, 'This is great for big farms, but it doesn't work here.' Or this works for the big irrigators, but not for the rain-fed.' That's why it's so important to make sure we're having the right discussions at the right levels," Doorn says.

'One Small Step for Man'

"One of the things that we need to work on in the coming years is to take this information and technology out of the research realm and put it into

the hands of practitioners on the ground, the producers and decision-makers. Once they start playing with it, it won't be theoretical for them anymore. They'll get to experience it as the cool ride that it is. They'll get to experience what they didn't know was even possible. Plus, they can play an important part in refining and improving it, working out the kinks, to make it even more useful," Doorn says.

"But first, we've got to get this information in front of them. We can't simply send out briefings and expect this process to work. We need to work shoulder-to-shoulder with these

groups," Doorn says. "That's the big challenge coming up in the next few years."

"The big takeaway here is that your nation's space program has an agriculture program. And the farming community—the producers and associations and agricultural stakeholders-should take advantage of it," says Doorn. "There are a lot of different players involved, and the opportunities are infinite if we just collaborate and work together."

With insights from NASA's public data, the right collaborations and the practicality of making it all work at the farm level, these advances can take agriculture to infinity and beyond.



Cutting-edge research is underway in these University of Illinois collaborations with NASA

Illinois is the leader in soybean production in the U.S. It's also a leader in key research and innovation focusing on soybeans. NASA and the University of Illinois are teaming up to apply advanced NASA technology and satellite data to soybean research that addresses critical agricultural challenges.

- Through the NASA Acres program, the University of Illinois is working with nine other universities to focus on 14 programs designed to convert satellite data into useful information for farmers.
- Researchers from the University of Illinois collaborated with Darren Drewry of NASA's Jet Propulsion Laboratory on an advanced vegetation model to show how soybean plants could be modified to produce higher crop yields with lower water consumption while also offsetting greenhouse gas emissions.
- University of Illinois researchers are using NASA satellite data together with ground sampling and hyperspectral imaging to determine optimal nitrogen levels for crops. Kaiyu Guan, professor and chief scientist for NASA Acres, is leading the project.
- University of Illinois researchers worked NASA's Drewry on sophisticated modeling to study how photosynthesis in soybeans is enhanced by variations in chlorophyll levels.



CONGRATULATIONS TO OUR 2024 IMPACT AWARD WINNERS.

Since 1964, ISA has looked beyond the rows to help farmers grow more opportunities from every acre. But we've never done it alone. Our third annual Impact Awards commemorate the people who have gone above and beyond in their commitment to Illinois soybean farmers and their leadership in the industry.

These distinguished leaders have been diligent in supporting our mission to invest in promotion, advocacy, research and education to create profit opportunities and drive preference for soy from Illinois.

Together, we are truly Better by Association.

2024 Impact Award Winners

ISA CHAIRMAN'S AWARD WINNER

Mark Gebhards

Mark Gebhards is the Chief Strategy Officer and Adviser to the President of Illinois Farm Bureau (IFB). He works to ensure the IFB and County Farm Bureaus are positioned in the future to deliver the programs and services members want.

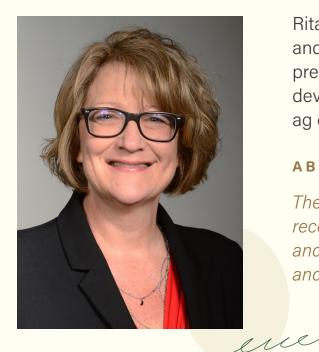
ABOUT THE AWARD

The Illinois Soybean Association Chairman's Award recognizes an individual who has gone above and beyond to serve the state's soybean interests. It is the highest award given by Illinois Soybean Association (ISA) and is presented in appreciation of one's dedication, leadership and years of service to the soybean industry.



ISA EXCELLENCE IN MEDIA AWARD WINNER

Rita Frazer



Rita Frazer serves as Audio News Manager for the IFB Marketing and Communications Division. Known for her warm, genuine presence, she leads a committed team of broadcasters who devote their days to telling farmers' stories and serving the Illinois ag community.

ABOUT THE AWARD

The Illinois Soybean Association Excellence in Media Award recognizes a member of the media who promotes Illinois soybeans and agriculture through coverage in print, broadcast, social media and beyond.



Jonathan Coppess

Jonathan Coppess is an Associate Professor and the Director of the Gardner Agriculture Policy Program at the University of Illinois Urbana-Champaign. His work specifically addresses contemporary issues related to risk management and natural resource conservation.

ABOUT THE AWARD

The Illinois Soybean Association Champion of the Year Award honors an individual in Illinois who has demonstrated outstanding leadership and dedication in advancing the interests of soybean farmers. This award recognizes efforts in shaping policy, influencing regulations and supporting initiatives that benefit the soybean industry. The recipient is celebrated for their proven track record and unwavering commitment to championing the agricultural community and its crucial issues.





The Moore Family



Ron, Deb and Michael Moore farm 1,600 acres of soybeans and corn on their family farm in Roseville, Illinois. Known for their long-standing commitment to agriculture, Ron and Deb have both served numerous organizations dedicated to building strong commerce and strong communities. The family also welcomes urban consumer tours to their farm, showcasing the realities of modern farming and sustainable practices.

ABOUT THE AWARD

The Illinois Soybean Association Farm Family of the Year Award recognizes an Illinois farm family who is actively engaged in ISA's membership program, shows commitment to ISA programming and has demonstrated a significant impact in the soybean industry and their communities.



Dr. Aaron Hager

Dr. Aaron Hager is a Professor of Weed Science in the Department of Crop Sciences at the University of Illinois Urbana-Champaign. He develops innovative weed management approaches with an emphasis on addressing contemporary weed species infesting corn and soybeans in Illinois.

ABOUT THE AWARD

The Illinois Soybean Association Friend of Illinois Soybean Farmers Award recognizes a friend to the organization in any capacity. The award is presented in appreciation of one's efforts in championing the success of Illinois soybean farmers.





MASTER ADVISER AWARD WINNER

Jeremy Wilson





Jeremy Wilson has been an independent Pioneer sales representative for 13 years. He owns and operates Wilson Seed, through which he offers agronomy support and serves as a crop insurance agent. As a small business owner, he takes pride in giving back to the community through various foundations.

ABOUT THE AWARD

ISA created the Soybean Master Adviser award in 2016 as part of its mission to help Illinois soybean farmers be the most knowledgeable and profitable soybean producers in the world. The award acknowledges the significant role Illinois Certified Crop Advisors (CCAs) play in improving soybean production by offering insight and advice on practices to improve yield and profitability. Any Illinois CCA whose certification is active, is interested and involved in soybean management, and works with farmers can be nominated for the Soybean Master Adviser award.



Brandon Hall

Brandon Hall has been the Location Operations Manager at West Central FS in Wataga, Illinois for more than 11 years. He earned his Certified Crop Advisor certification in 2018, and has studied soils across the United States and around the world. In recognition of his commitment to soil management, Brandon was named Illinois Farm Bureau CCA of the Year in 2023.

ABOUT THE AWARD

The Dave Rahe Excellence in Soils Consulting award is named in honor of 2019 CCA Soy Envoy, Dave Rahe, who authored blogs for Field Advisor covering topics such as soil compaction, micronutrient management, cover crops, and more. Rahe passed away suddenly in 2020.



Looking to the future. Together.

ISA has never been more committed to supporting farmers and forging industry partnerships that drive profitability into the future. Thank you again to our Impact Award winners, and to everyone hard at work supporting soy from Illinois.

Watch how ISA has made an impact for Illinois farmers over the last 60 seasons.











20 UNDER 40 FARMERS

Cody Book ★ Bryce Brockelsby ★ Dakota Cowger ★ Heather Dollinger ★ Rhett Ellis

Shay Foulk ★ Clint Gorden ★ Jonathan Griffel ★ Drew Groezinger ★ Alex Head ★ Lena Head

Kaylee Heap ★ Mathew Heberling ★ Daniel Herriott ★ John Howell ★ Corey Johnson

Blake Lanphier ★ Wyatt McGrew ★ Jenna Severs ★ Benjamin K. Wurmnest

These young farmers operate in a league of their own. They're raising the bar on the farm and in their communities, committed to growing the future of our state and our industry. And they're just getting started.







Tips to Make Smart, Informed Ag Tech Buying Decisions



armers see it every day:
a new technology tool or
service that promises to
revolutionize crop production.
Scores of tech companies—young
and old, large and small—vie for
farmers' attention and dollars
alongside more traditional machinery, equipment and agronomic service companies.

And it's for good reason: New technology is a fundamental way to advance input efficiency, crop yield and quality. But while it's generally a growing part of every year's crop budget, innovation is often an early exit from farmers' wish lists in years when crop revenue slips and budgets tighten.

Crop Prices and Tech Spending in 2025

That's what's expected in 2025, potentially slowing technology investment for Illinois soybean farmers and others like them around the country. It could advance a multiyear trend of sluggish tech adoption. Data from the U.S. Department of Agriculture

(USDA) in 2023 showed that only about one in four farmers has fully embraced technology such as precision agriculture in general, though adoption of a few specific technologies has grown by double digits over the past two decades.

Illinois farmers are among the nation's leaders in adopting precision ag technology. And in general, the larger the farm, the more likely it's able to see the benefits of adding technology given increasing economy of scale across larger acreage, according to a U.S. Government Accountability Office (GAO) report summing up USDA's latest survey of precision ag adoption.

Large farms often have "access to more favorable credit terms, which are often needed to finance the purchase of sophisticated, expensive equipment; and larger numbers of managers, permitting the kind of specialization of managerial labor that could lead to greater awareness of, and expertise

in using precision agriculture technologies," according to the GAO report.

The trend of growing technology adoption as farm size grows validates what some experts say is the driving force behind such purchases—and their potential slowdown in the coming years. Especially in times such as these, when grain markets are bearish, spending on things like technoloav slows. In general, slow adoption often isn't because of a lack of interest but rather because of a pragmatic evaluation of return on investment (ROI) with the addition of each new crop input, one expert said.

"During the tough period for the grain markets from 2014 to 2019, we saw capital purchases much lower. 2025 looks to be a tough year, so it will be important to preserve working capital," said Michael Langemeier Purdue University Center for Commercial Agriculture Associate Director and Agricultural Economics Professor.

Different ROI Variables to Consider

But identifying the ROI of ag technology isn't always a simple equation. It often requires consideration of a range of economic and operational factors tying back to a farm's year-over-year crop production costs. Langemeier said there are four variables that contribute most to the ROI discussion with any technology:

- Farm expansion plans. If growth is in your future, you're more likely to see financial benefits from adding new technology through economies of scale.
- Cash flow availability/needs. If you're in a solid position with cash flow and overall liquidity, you're more likely to see quicker financial benefits from adding new technology.
- Interest rates. Higher rates tend to stifle the adoption of and spending on new technology, especially given the impact of high rates on overall liquidity. Falling rates might open the opportunity





Funded by the Illinois Soybean Checkoff

to add new technology if it pencils out financially.

 Technological advantages. Adding a new tech tool or service can positively influence crop yield and quality. Make sure anything you add has a defined positive impact on your crop potential and, in turn, overall farm financial standing.

Look Beyond Your Farm Gate

It's also important to take a broader view of technology as just one piece of overall crop budgets, especially accounting for overall machinery costs. Langemeier said the latest data show per-acre machinery investment rose from \$550 in 2020 to \$700 in 2023, and he expects that trend to continue. This increase stems not just from new purchases but also from rising repair costs. So any new technology addition should be examined both for its impact on an operation's bottom line as well as how it specifically affects general machinery spending as it relates to overall crop ROI, whether positively or negatively.

"Machinery costs play a large role in crop breakeven prices, both in terms of the cost of a new machine or due to repairs. When crop prices are low, more farmers will look to the used machinery market to cut expenses versus buving new, and that may influence the adoption of technology that's increasingly more common with newer machines." said Langemeier, co-author of Purdue's monthly Ag Barometer Index report. "There's a definite advantage of new technology in its potential to increase yields and reduce costs, but you have to have cash-flow needs covered before you make a new purchase."

Consider a Wider Time Window and Other Factors

Applying a well-grounded, ROI-focused strategy stretching over multiple crop years can help ensure you're getting the most from your crop technology spending while helping maintain the liquidity and cash flow necessary

to make ends meet, even when crop prices sink into the red.

In addition to thinking through ROI, Langemeier advises, broaden your perspective when thinking about adding new technology to your operation, including to:

- 1. Develop a comprehensive, multi-year machinery investment plan. You're likely financing any new machinery and technology over multiple years. So it makes sense to consider the functional lifespan of any technology you purchase, which often spans multiple crop years. Think about all technology spending in a multi-year context and the regular intervals for replacing other machinery and equipment.
- 2. Maintain financial flexibility. Especially in a down year for grain prices, it's important to think about any big-ticket purchase including technology-through the lens of what it will mean to both short-term cash-flow needs as well as long-term operating capital. It's much more financially sound to invest in new technology for your farm if you have your cash-flow needs covered and can maintain long-term equity.
- 3. Stay informed about technological advancements. New ag tech sometimes grows and evolves in leaps and bounds, and whether it's a new software platform or an autonomous machine, stay informed on how technology is changing even if you aren't buying. Doing so will help you stay on the leading edge once you have the liquidity to invest in new technology.

Think About Current Tech Use and Comfort Level

Although it might sound obvious, consider your existing machinery- and technology-buying. strategy in thinking through how you might make changes to get more bang for your tech-spending buck. If you're accustomed to buying new machinery, you're likely used to the newest technology that it includes. But if you're more likely to buy used machinery, you're likely less accustomed toand dependent upon—the newest tech tools.

If you are opting for used versus new machinery to cut overall spending but you want to maintain the latest technology in the cab of the tractor, for example, think about the cost to retrofit older machinery with newer technology. Just make sure you're maintaining the pace of tech adoption that matches your operation and budget.

"If you have had variable-rate capabilities for applying fertilizer for a while, for example, are you going to retrofit a used machine with it, or will it be too cost-prohibitive to do that? If you depend on variable-rate technology, you may not be able to give it up," Langemeier said. "I think we adopt technology much more quickly when it's on new machinery. That could become an issue for you if you normally buy new machinery and switch to used to save money."

But if you find yourself in a situation where adding new

technology becomes too much of a financial drag on your operation, don't be too wary of getting out of step with the general trend of technology integration into your next tractor, combine or sprayer. Technology adoption is generally slow for farmers—a trend USDA researchers recently validated—so foregoing an innovation for your farm for one year won't necessarily doom your ability to keep up with the latest ag technology, Langemeier said.

"Agriculture is one of the industries where there's more innovation out there than what you can adopt on your farm at once. It just takes longer in agriculture. It makes sense that technology adoption moves slowly for farmers because it needs to make sense on a balance sheet and accomplish what it says in the field," he said. "I think we tend to simplify ROI to the point where it's like a one-to-one conversation. But there are a lot of moving parts, and it's really a holistic decision."



Join us online for a discussion designed to assist farmers and farm families with developing a succession plan for their future generations.

REGISTRATION

To register for one or multiple sessions call **618.443.7692** or email mblock95@siumed.edu No cost to attend. Space is limited, please register early.

Visit **siumed.org/farm** to learn more about this event and the Farm Family Resource Initiative.

Thursday, February 13 6:30 pm - 8:30 pm PLANTING THE SEEDS: The Process of Farm Succession Planning Basic steps for creating a plan and what to consider along the way

Thursday, February 20 6:30 pm - 8:30 pm

CULTIVATING COMMUNICATIONS: The Farm Meetings

Types, purpose, who is involved and navigating differences

Thursday, February 27 6:30 pm - 8:30 pm CHANGING ROLES: Who is Driving the Tractor?

Gaining experience to mentoring future generations

There is no charge to participate thanks to the generous financial support provided by the Illinois Department of Human Services, the Division of Mental Health.

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