AMERICAN
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People. Policy. Profitability.
A PUBLICATION OF THE AMERICAN SOYBEAN ASSOCIATION

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AMERICAN soybean

VOL 8, NO 4 SPRING 2021

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FEATURES

DEPARTMENTS

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ASA American Soybean Association®

The American Soybean Association (ASA) represents U.S. soybean farmers on domestic and international policy issues important to the soybean industry. ASA has 26 affiliated state associations representing 30 states and more than 500,000 soybean farmers.

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ASA leadership corner

Kevin SCOTT

Kevin Scott, ASA President

Greetings to all of you from South Dakota! As I pen my first Leadership Corner, I am excited that this quarter the magazine theme is Sustainability and Conservation. What perfect timing for this topic, and what a great opportunity to share soy's collective efforts.

Among President Biden's very first executive orders upon taking office was one specific to addressing the climate crisis and how agriculture can and must fit into the solutions. Farmers have long been dedicated to farming practices and technology advances that lend to improved sustainability and that support conservation. Yet, we have not always done a great job of vocalizing and sharing that narrative. The current national attention on the importance of these efforts means we need to tell more of our on-farm achievements—and work together on important legislative successes.

ASA's farmer-leaders recently went through a thoughtful input process to establish and approve a set of Soy Sustainability Policy Principles that will serve as a living guide for ASA advocacy efforts. These principles are broken into six subject areas: carbon markets; conservation and precision agriculture; energy and infrastructure; farm policy; pesticides and biotechnology; and trade.

Along with other like-minded groups, we have joined the Food and Agriculture Climate Alliance, or FACA—the latest in a growing list of coalition partners we have considered and decided to join in an effort to advance soy and agriculture interests. We do not take these coalition decisions lightly: each group with which we choose to associate must have overarching missions and values that align with our soy policy principles and that help advance our industry priorities.

Through FACA and other alliances with interests similar to soy, ASA will have a collaborative voice to help steer policy recommendations and thus guide development of federal climate legislation.

Recently, ASA and other agriculture-based groups supported an AEM-led study on the environmental benefits of precision agriculture. The findings from that study make a powerful case for how far we have come in being good environmental stewards, all while improving profitability. AEM joins us as a guest contributor this issue, as does the National Biodiesel Board to talk about the role of clean-burning biodiesel, an important secondary soy market, in reaching a more sustainable future.

In this month's cover story, we will hear from policy leads Alexa Combelic on ASA sustainability priorities and Ariel Wiegard, who we welcomed to the Government Affairs team in January, on conservation priorities. Each member of the ASA policy team is involved in this area in some way, shape or form, and each of them continues to impress me daily with all they do to accomplish these and other soy priorities. Our ASA leaders and soy states share this same passion advocating for our beans.

I close by sharing a new resource available to you: a comprehensive look at soy efforts can now be found in a new Sustainability and Conservation section of the ASA website. This is a great way to stay up on the latest soy initiatives. ASA and soy farmers throughout the states, along with our coalition partners, allied soy groups, and others are truly making great strides in this space—and have long been demonstrating their commitment to sustainability. We look forward to sharing more with you in this issue.

NEWS soyS

ASA Directors and Staff to Serve on USSEC Strategic Utilization Teams

Brad Doyle, ASA Vice President

Several of ASA's farmer-leaders and staff are among those recently selected for the U.S. Soybean Export Council's (USSEC) Strategic Utilization Teams (SUT). ASA Vice President Brad Doyle (AR) will serve on the Human & Oil SUT, At Large ASA Governing Committee member Josh Gackle (ND) will serve on the Sustainability & Market Access SUT, and WISHH's Project Director for the Africa Division Chris Slemp will serve on the Animal & Aquaculture SUT.

USSEC's Strategic Utilization Teams are comprised of 12 industry members collaborating to provide insights, feedback and opportunity brainstorming for USSEC international marketing efforts. There are three teams, with ASA representatives serving two-year terms on each of the three. Teams will meet at a minimum of quarterly to establish goals and work on action items for their specific SUT. The full USSEC Board approved each applicant during its February 2021 meeting.

Source: U.S. Soybean Export Council

Josh Gackle, At Large ASA Governing Committee Member

Chris Slemp, Project Director, Africa Division, WISHH

'All Hands on Deck' in Face of Eastern Monarch Declines

In a recent report from the World Wildlife Fund Mexico, scientists noted a 26% decrease in monarch butterfly overwintering population numbers in southern overwintering sites. It is estimated that six hectares of hibernating monarchs are required to maintain a sustainable eastern monarch population. This report revealed that monarchs occupied only 2.10 hectares, compared to 2019 data of 2.83 occupied hectares. Scientists attribute this to the degradation of habitat in the Monarch Butterfly Biosphere Reserve and monarch breeding grounds throughout the central United States.

This news comes soon after the announcement of devastatingly low western monarch numbers. Researchers, industry partners, and advocacy groups are calling for a coordinated transnational effort to protect and support the monarch butterfly migration. They assert that Canada, the United States, and Mexico must work together if we hope to slow the dramatic losses seen in recent years. Through habitat investment monarch advocates aim to engage everyone in conservation practices. From individuals with small residential outdoor spaces to large land management operations like those of farmers and ranchers, there exist a wide range of interventions available for habitat restoration.

Farmers for Monarchs works to provide tools and resources necessary for this "all hands on deck" approach. Visit its State Resources page at farmersformonarchs.org to get the information you need to establish habitat on your land.

Source: Farmers for Monarchs

ASA in action

Soybean Growers Approve 2021 Resolutions

Members of the American Soybean Association have completed the organization's annual resolutions process to set the tone and direction for policy advocacy in the weeks and months ahead.

As is typical with any "out with the old, in with the new" activity, the organization aims each year to build on sound existing resolutions by adapting where needed and supplementing with new resolutions to address emerging priorities. One such example of a soy priority on which the organization is focusing more this year is climate and conservation.

Kevin Scott, ASA president and soybean farmer from Valley Springs, South Dakota, said, "Throughout this year's document we recognize the role that climate and conservation will play in policy discussions in 2021, from thoughtfully addressing development of public and private ecosystem services markets to promoting precision agriculture technology as a tool to improve environmental stewardship while providing economic returns for growers."

The ASA resolutions process involved a monthlong series of input from state delegates, ASA board members and other farmer-leaders and staff who serve on ASA's advocacy teams covering the various soy policy areas. Recommendations are funneled from state members into resolution subcommittees, which then hone the language that is finally voted on by delegates. The process is conducted in multiple stages to allow ample input, revisions and improvements from ASA membership across the soy states and culminates in the final voting process, held this year on Feb. 25.

Read more about ASA's 2021 Resolutions on soygrowers.com.

During ASA's March meeting in St. Louis, soy leaders gathered for dinner to honor John Heisdorffer (IA), who retired from ASA's board in December 2020, and recognize the achievements of past ASA president and current Chairman Bill Gordon (MN). From left: ASA Director Ron Moore (IL); John Heisdorffer (IA), retiring director and past ASA president; ASA Director Davie Stephens (KY); ASA Chairman Bill Gordon (MN) and ASA President Kevin Scott (SD). Photo Credit: Brad Doyle

At the 2021 Special Edition of Commodity Classic, nearly 6,000 people from 49 states and 24 countries enjoyed a week packed with digital sessions and unique opportunities for growers to learn and connect with their peers and leading industry experts, including association leadership and USDA Secretary Tom Vilsack, who delivered the closing General Session keynote address at the Commodity Classic. Pictured: (Top from left): ASA President Kevin Scott (SD) talks soybean policy with emcee Mark Mayfield and USDA Secretary Tom Vilsack delivers closing remarks.; (Bottom from left) ASA Executive Director of Government Affairs Christy Seyfert discusses policy issues with attendees and media at the ASA digital booth, and ASA CEO Steve Censky weighs in on policy priorities for 2021 during a session at ASA's "booth."

VILSACK KEYNOTE

ASA President Kevin Scott (SD) listens as USDA Secretary Tom Vilsack delivers the digital keynote address during the Closing General Session of the digital Commodity Classic in March. The next Commodity Classic is scheduled for March 10-12, 2022, in New Orleans, Louisiana. Photo Credit: Jannell Scott

The 38th class of Young Leaders met virtually March 11, 2021, for leadership training in agriculture and will continue their training with two in-person sessions later in 2021. The 2021 Young Leaders are: Wes & Vonda Kirkpatrick (AR); Joey Stassel (IL); Jake McCormick & Sarah Luecke (IN); Jeff & Kim Failor (IA); Kendall & Austin Heiniger (KS); Collin Cooper & Allison Dallas (KY); PJ Feldpausch (MI); Evan & Lucy Staley (MD); Kelli & Jeff Sorenson (MN); Reid Carter (MS); Kaitlin Flick & Klinton Holliday (MO); Cale Buhr (NE); Logan & Kristin Watson (NC); Andrew & Brittni Cossette (ND); Bennett & Liza Musselman (OH); Alex & Grace Tolson (SC); Taylor & John Elverson (SD); and Jason & Brandy Cherry (TN).

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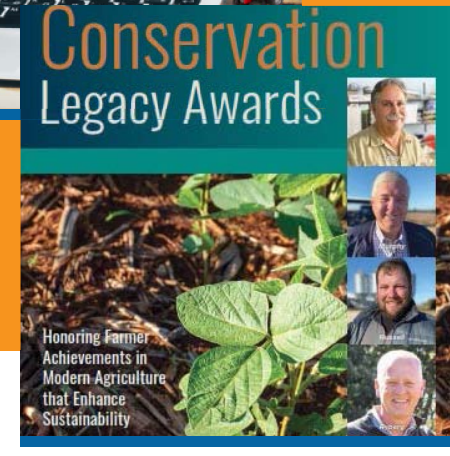
YOUNG LEADER PROGRAM
American Soybean Association

The two-day 2021 Soybean Leadership Academy program held virtually in January featured interactive learning opportunities with industry-leading speakers and soybean grower and staff leaders from across the country. ASA thanks the program sponsors: BASF, Farm Credit Council, FMC, REG and USB, along with state sponsors: Illinois Soybean Association, Indiana Soybean Alliance, Iowa Soybean Association, Kansas Soybean Commission, Kentucky Soybean Association, Maryland Soybean Board, Michigan Soybean Committee, Minnesota Soybean Research and Promotion Council, Missouri Soybean Association, Nebraska Soybean Board, North Carolina Soybean Producers Association, North Dakota Soybean Council, Ohio Soybean Council, South Dakota Soybean Research and Promotion Council, Tennessee Soybean Promotion Board and Virginia Soybean Board. A special thanks to the Soybean Leadership Academy Steering Committee: Janna Fritz, Kirk Leeds, Kirk Merritt, Hannah Vorsilak and Gary Wheeler.



ASA presented Brian Ryberg from Buffalo Lake, Minnesota, with the 2021 National Conservation Legacy Award during a virtual ASA Awards Program on March 16. Also recognized for receiving regional Conservation Legacy Awards during the virtual awards program were Brian Ryberg, Buffalo Lake, Minnesota (Upper Midwest Region); Jason Russell, Monticello, Iowa (Midwest Region); Danny Murphy, Canton, Mississippi (South Region); and Jim Isley, Palmyra, Michigan (Northeast Region). Along with ASA, the program is co-sponsored by BASF, Bayer, the United Soybean Board/ Soy Checkoff and Valent.

BOARD MEETING

(From left) During ASA's annual March board meeting, ASA Chairman Bill Gordon (MN), ASA President Kevin Scott (SD) and ASA Vice President Brad Doyle (AR) meet virtually with congressional leaders and legislative staff to discuss top soybean issues. Photo Credit: Jannell Scott

ASA in action

LEADERSHIP AWARD

ASA recognized John Heisdorffer, from Keota, Iowa, with its Distinguished Leadership Award during an awards ceremony broadcast March 16. The ASA Distinguished Leadership Award recognizes a soybean grower or association staff leader whose leadership has strengthened the national or state association, enhanced soy-related policy efforts and increased farmer education or engagement.

PINNACLE AWARD

ASA recognized Dr. Pengyin Chen from Sikeston, Missouri, with its Pinnacle Award during an awards ceremony broadcast March 16. Dr. Chen is a professor in soybean breeding at the University of Missouri Fisher Delta Research Center. The ASA Pinnacle Award is an industry-wide recognition of individuals who have demonstrated the highest level of contribution and leadership within the soybean family and industry through work involving a significant amount of their lifetime.

ISSUE update

By Ariel Wiegard, ASA Director of Government Affairs

Sustainability: Farmers Take the Lead on Climate Change

The last several years in agriculture policy have been dominated by trade disruptions, natural disasters and the COVID pandemic. As we close the books on the federal relief programs that have supported farmers through darker days, I know many of us who work on ag policy are eager to shift focus to fresh topics.

New leadership in Congress, in the White House, and at the U.S. Department of Agriculture (USDA) have been more than happy to oblige and have elevated climate change to become the number one topic of conversation. President Joe Biden lists "tackling the climate emergency" among his top priorities. USDA's former and current Secretary Tom Vilsack mentioned it in his general session address to the 2021 Commodity Classic, and he has stated that he believes farms can provide the Biden Administration with "early wins" on the climate front. The House and Senate Agriculture Committees each recently held their first hearings of the 117th Congress on the impacts that climate change has on agriculture and on ways farmers can lead in halting and mitigating climate change impacts.

These federal leaders and others are trying to figure out quickly what new policies will help the agriculture sector make the earliest and best on-the-ground impact—and with good reason. The sector accounts for about 10% of overall U.S. emissions, and the industry's land resources can sequester a significant chunk of other industries' greenhouse gases, essential to achieving the Biden Administration's goal of net zero emissions by 2050.

Our leaders are coming to the table with some big ideas, like establishing a USDA-backed, Commodity Credit Corporation-funded green bank that would somehow be involved with paying farmers to store carbon, or conserving at least 30% of all U.S. lands and oceans (including farmland) by 2030. To be sure, we need big ideas, but we cannot forget that we already have legislation on the books that's doing big things, right now.

The federal farm bill invests *more than $6 billion annually* in voluntary conservation of private lands. Already, more than 140 million acres of farmland are enrolled in federal programs that conserve land, water and habitat—equal to the total land area of California and New York. Sustainable soil use and resource conservation practices such as cover cropping and conservation tillage have increased by more than 34 million acres since 2012. Incorporation of ethanol and biodiesel into the fuel supply reduced greenhouse gas emissions by 71 million metric tons in 2018—equivalent to taking 17 million cars off the road. All told, U.S. farm productivity has grown more than 270% since the 1940s without using more resources, while concurrently helping to save water and soil, enhance biodiversity and conserve energy.

Thanks to past farm bills, our farmers are already leading when it comes to climate change. That's not to say we don't welcome the exploration of big new ideas, especially those—like carbon markets—that could provide a diversified revenue stream for our nation's farmers. But we need to be careful not to build new complex bureaucracies to do what can already be done with the programs we already have.

The next farm bill reauthorization is coming in 2023. Until then, ASA in Washington, D.C., will continue to promote existing farm bill policies that help farmers fight climate change. We know they work. That's something for which we're proud to advocate.

IT'S MORE THAN CONSERVATION

ASA pushes expanded soybean sustainability agenda

By Barb Baylor Anderson

No matter what you label it—conservation, environmentally friendly practices, regenerative agriculture, or something else—all these terms help define agricultural sustainability. It's a concept that U.S. soybean farmers have prioritized for generations, but not always publicized.

Times are changing, however, and soybean farmers realize they must share their sustainability stories. The general public and soy customers worldwide want to know more about food, feed and fuel production and their environmental footprints.

In answer to that thirst for more information, U.S. soybean farmers are making a concerted effort to be proactive and showcase their long-term commitment to sustainability. With the lead of the American Soybean Association, growers are pursuing partnerships and policies that can keep the industry on track for success into the future.

"ASA's in-house government affairs team is dedicated to soybean growers, focused on not only reacting to farm policy in real time, but also building out a vision for soy's role in sustainability," says Alexa Combelic, ASA director of government affairs, leading the portfolio for biodiesel and infrastructure and coordinating ASA's sustainability efforts.

"This is about more than conservation programs, although they are important," she continues.

"The general public and soy customers worldwide want to know more about food, feed and fuel production and their environmental footprints."

"It's sustainability for biodiesel, which has lower emissions than petroleum diesel. It's about transportation, where barges moving on inland waterways have less environmental impact than trucks. We are connecting dots between grower needs and the Biden administration's effort to affect climate change to show how soy fits into that larger picture."

ASA supports a definition of sustainable agriculture that encompasses profitable, intensive production, encourages consumer acceptance of biotechnology-enhanced products and satisfies food, feed, fiber and biofuel needs. ASA, together with the United Soybean Board (USB) and U.S. Soybean Export Council (USSEC), have outlined goals for sustainability improvements by 2025, including reducing land use impact by 10%, reducing soil erosion by an additional 25%, increasing energy use efficiency by 10% and lowering total greenhouse gas emissions by 10%.

Growers are already invested in making progress in meeting these industry sustainability goals. One ASA study, conducted in 2019 through third-party surveys and focus groups, found that growers reported an average of 14 longstanding conservation practices in place on their farms. Respondents had recently added new practices and intended to implement more, even with average expenditures of more than $15,000 per year. In addition, many said they had even paid for conservation improvements on rented land, and nearly three-quarters of them said they would implement more conservation measures if they thought it would be profitable to do so.

"As technology changes and social media becomes an even bigger platform for discussion, consumers locally and globally will continue to scrutinize what is being done by growers," says Ariel Wiegard, ASA director of government affairs leading the portfolio for conservation, precision ag, food and nutrition. "Soy has a good story to tell. We just need to tell it."

Putting partnerships in play

To help the nation's soybean growers share current sustainable practices and augment future activity, ASA is partnering with diverse groups seeking similar or complementary outcomes.

For example, USB funds research projects and participates in grower outreach supporting sustainability practices. One recent project is the 2021 U.S. Farmers and Ranchers in Action (USFRA) study on sustainable ag tech investment, which analyzes emerging soil health technology and the need for commercialization of climate-smart technologies through private funding. USSEC educates global markets about U.S. farmer commitments to sustainability through the U.S. Soy Sustainability Assurance Protocol (SSAP). SSAP verifies and documents sustainable production on a national scale.

"ASA has several partnerships in play," says Wiegard. "ASA recently joined the Food and Agriculture Climate Alliance (FACA), a new and unique coalition of conservation and ag groups that are united in principle around climate change. So far, there are 40 pages of policy proposals, covering everything from crop insurance to carbon sequestration to livestock biotechnology. FACA is stepping up and showing that the agriculture industry is a major player when it comes to conservation and sustainability policy."

She loosely defines conservation as "on-the-ground

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A new biobased polymer for asphalt made from high oleic soybean oil offers a lower-cost and cleaner alternative to the traditional binding agents used in asphalt. Photo Credit: United Soybean Board

sustainability." To advance conservation as part of the sustainability discussion, she says growers will want to talk more about precision ag.

"Agriculture is on the precipice of a new era of farming. With precision ag tools, soybean growers are already able to report their sustainable practices to the government and to their supply chain partners and back them up with data. As precision ag technology evolves, this will be a new area for us to share with policymakers," she says.

Forging previously unforeseen partnerships is also a priority for ASA. Potential ag and non-ag partners include wildlife, hunter and angler groups and general conservation groups that share common interests in habitat preservation, water quality improvement and mixed use of land.

For example, ASA is partnering with the Ecosystem Services Market Consortium (ESMC) to test carbon and water market protocols and is a Monarch Collaborative member, which is especially important since the butterflies are flirting with being listed as endangered. Because they migrate nationwide, land used for farming and habitat can be affected by a federal listing decision.

"We also support programs that expand biodiesel use and biobased product development," adds Combelic. "These sustainable soy uses increase soybean prices. Biodiesel lowers emissions and will remain in demand for liquid fuel for some time to come. ASA is also exploring opportunities to promote biobased products in federal transportation legislation using Soy Transportation Coalition research related to soy-based asphalt alternatives."

Making sustainability policy a priority

ASA will continue to work with these and other partners to develop policy and increase public awareness. ASA shares its efforts through its publications and social media and has an advocacy team devoted to conservation. Board members are active in public outreach, as well.

"Growers have been using different practices on their farms that have supported good soil health and maintained productivity for generations, and they want to preserve it," says Combelic. "When we talk with lawmakers on the Hill, many are not aware and have not been told that farmers are inherently sustainable. As farmers come to D.C. to discuss options for policy that makes environmental sense, they must also stress they need to be economically viable, too."

Soybean farmers share with ASA that they prefer voluntary incentive programs they can customize and implement within their individual operations. There is no one size fits all. ASA supports a suite of voluntary USDA programs that receive mandatory farm bill funding like the Conservation Stewardship Program (CSP), Environmental Quality Incentives Program (EQIP), and Regional Conservation Partnership Program (RCPP). ASA remains open to developing similar-type programs that can help soybean growers extend their conservation efforts.

"While there is some interest in developing a climate change bill, the truth is that the 2018 farm bill is a climate change bill. Farmers already know that CSP, EQIP and other farm bill programs provide more than $6 billion per year to support climate-friendly practices, and they want them to continue because they work," says Wiegard. "We could see early discussions about these programs begin soon for the 2023 farm bill."

Other current legislative issues on ASA's radar involve crop protection and biotechnology use and maintaining both tools to achieve conservation and broader sustainability goals.

Wiegard notes, for instance, that ASA is working within coalitions to counter the onslaught of pesticide ban bills that have been introduced in recent years. Eliminating key crop inputs from the grower toolbox would adversely affect such sustainable practices as conservation tillage and cover crop use and could increase U.S. agriculture's greenhouse gas emissions.

"Another legislative effort we are watching is the Growing Climate Solutions Act, which would set up a sort of government-based clearinghouse

for private carbon markets," she says. "Right now, the prospect for paying farmers for carbon storage is like the wild west. Many different companies are setting up markets, each with their own payment and verification schemes, and there are too many unanswered questions. This bipartisan bill might help solve that."

Adds Combelic, "When it comes to funding for domestic farm policy, we want more carrots than sticks. Voluntary, incentive-based programs remain the best alternative."

Getting farmers more involved

Currently, 95% of U.S. soybean growers participate in some USDA program to create and implement farm-specific conservation programs. And being actively engaged in these programs is an easy segue for soybean growers to expand into other sustainability efforts.

USDA conservation programs are the foundation for the U.S. Soy Sustainability Assurance Protocol mentioned previously. SSAP is based on U.S. conservation requirements, laws protecting the rights of workers and more to assure sustainability of U.S. soybean production.

Growers who choose to participate in SSAP sign up annually and are subject to comprehensive audit and data-collection systems, which verify sustainability through a third-party process. As more growers become involved with SSAP, the U.S. gains more of an edge in the marketplace.

"SSAP promotes environmental and social responsibility across the soy value chain, ensuring every link operates in a sustainable manner consistent with sound environmental objectives and embraces best agricultural practices," says Combelic. "Soy farmers have already incorporated many of these climate-friendly practices into their management plans as it is, including no-till or reduced till, cover crops, crop rotations, variable rate fertilizer application technology and other precision ag tools, animal manure applications and split nitrogen applications."

Biotechnology provides another avenue to help soybean growers boost their sustainability game. Biotech gives growers opportunities to grow more soybeans with less water and fewer trips across the field using less energy and fewer crop inputs.

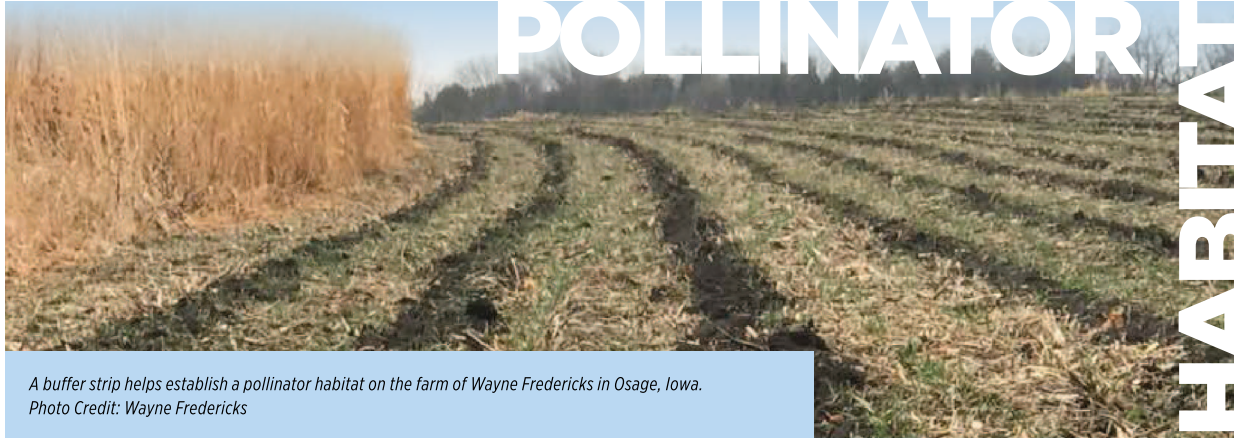
"Again, this is information that needs to be regularly shared on the Hill," says Combelic. "We can talk about how this meets environmental goals and propose policy in this area."

ASA relies on its annual policy resolutions to guide policy discussions. In February, the ASA Board of Directors passed its 2021 resolutions. "Sustainability is a huge priority for soybean growers, and that thread runs throughout ASA and this year's resolutions," says Wiegard. "Up and down the supply chain, every person involved has a stake in the federal policy and regulatory decisions for which ASA advocates. Soy is integral to a viable sustainability framework."

Combelic says the full policy team will continue working with grower-leaders to advance the conversation every step of the way. "We have an all-hands-on-deck approach," she says. "As we seek solutions, some programs will work, and some will not. We will see what sticks during this trial-and-error period. We will talk about where we are and how we move forward. It is an education process for all of us, and we are transparent in building policy ideas."

ASA members and stakeholders are encouraged to contact the D.C. staff and share ideas. And there is a new resource available online to those seeking more information: A new, robust "Sustainability and Conservation" section can be found under Key Issues on the soygrowers.com website.

"We are eager to work with everyone. Every region is different, so there are things out there that are working that we want to know about," says Combelic. "As political climates change, we will adapt and communicate openly to ensure what we pursue works because sustainability affects everything."



A buffer strip helps establish a pollinator habitat on the farm of Wayne Fredericks in Osage, Iowa. Photo Credit: Wayne Fredericks

FULL-CIRCLE RETURN

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

FARMERS SELL BEANS TO ELEVATORS, PROCESSORS & DEALERS

1/2 of 1% of the total selling price collected per the national soybean act & order

0.5%

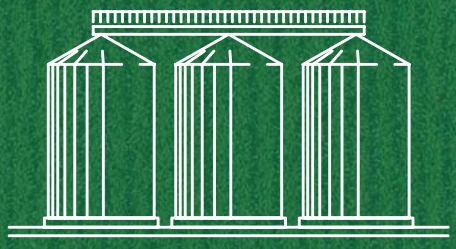
Half goes to the state checkoff for investment in areas that are a priority for that state.

PROMOTION

RESEARCH

EDUCATION

Half goes to the national checkoff for investment in USB's* long-range strategic plan.



ROI TO THE FARMER

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

unitedsoybean.org

OUR SOY CHECKOFF™

Investing in Tomorrow's Sustainability Tools Today

On your farm, you're both the chief technology officer and the chief sustainability officer. You make decisions about which of the scores of farm tools are worth spending money on and which parcels of land would benefit the most from cover crops or irrigation. And it's frustrating trying to make good decisions with incomplete or incompatible online data.

The 78 volunteer farmers who lead the soy checkoff know this frustration intimately—they face it on their farms. It's why the checkoff is making investments that help make ag technology more accessible and functional for farmers.

The Soy Innovation Challenge, a recent soy checkoff partnership with The Yield Lab Institute, asked leaders in private industry to bring forward their best ideas to remake the soybean value chain to create increased profitability for farmers. Nearly 90 ag tech startups and teams entered the challenge with solutions ranging from blockchain to greenhouse gas monitoring. The grand prize winner, Regrow, is an ag technology company that reduces headaches for farmers and, ultimately, their customers, including food companies like General Mills.

An all-in-one tool

With so many proprietary systems on the market, one more tool hardly sounds like the solution. But a small group of experts in everything from visual drone navigation to conservation research disagree—and challenge you to consider their all-in-one solution: Regrow.

"Regrow makes it easier for farmers to prove their good practices and capture value for them," says Anastasia Volkova, Regrow CEO and founder.

Kentucky soybean farmer and past chair of the soy checkoff Keith Tapp says that's a benefit for farmers and for U.S. soy customers.

"U.S. soybean farmers have led the way for decades, adopting conservation practices like cover crops, no-till and innovations in plant breeding to grow soybeans sustainably," says Tapp. "We don't always get credit for the benefits our farm practices have on the environment. That's a huge area of potential, and this challenge winner can help."

The checkoff, alongside organizations including Syngenta, Amazon Web Services and ICL Group, sponsored the Soy Innovation Challenge. The challenge, hosted by The Yield Lab Institute, paired innovative companies from around the globe with industry groups to advance innovation for the soy industry and bring more value to soybean farmers.

For Regrow, the challenge interested Volkova for the access to farmers it offered. Regrow had already forged partnerships with organizations focused on providing advice to farmers, enabling them to provide more detailed and tailored agronomic recommendations.

"Traditionally, we don't work directly with farmers, but with their support team. We supercharge

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Photo Credit: United Soybean Board

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Photo Credit: United Soybean Board

the work of crop advisors and agronomists," says Volkova. "The Soy Innovation Challenge was an interesting opportunity to work more closely with farmers and really demonstrate the value of Regrow to farmers themselves."

Volkova saw the connection to the checkoff as a significant benefit to improving their product.

"Through collaboration with the soy checkoff, we were able to further understand how to tailor our product so it could be used as more of a self-serve system for farmers who want direct access," she adds.

Regrow offers a decision support tool to farmers that doesn't require a ton of setup time or yet another app to open.

"We employ technology to monitor the farm objectively and deliver advice to farmers in-season," she says. "Regrow can help answer which fields are under stress and which ones need additional nutrients. And, at the end of the season, which of them need to be harvested in what order."

Volkova says Regrow is one of the most interconnected platforms in ag tech. Integrations with popular farm management systems such as Climate FieldView and My John Deere make using Regrow simple. For many farmers, it's just looking at the apps and monitors they're already using. Publicly available satellite and weather data can help fill in any record gaps, from crop rotation data to planting dates.

Through the Soy Innovation Challenge, finalists like Regrow had opportunities to pitch their ideas to real soybean farmers and get direct feedback.

"Every time we would pitch, we received a couple of comments that really helped us understand the perspective of the farmers," says Volkova. She remembers a farmer question from one of their first pitches that dug into the practicality of farmers accessing the system, as well as the potential to capture additional profit.

"Engagement like that indicates to me that farmers are looking for these opportunities," Volkova says. "They want something that doesn't burden them further but enables them to capture additional profitability. And they want it to enable their partners to have insight into the situation at scale."

Industrywide insights

At the other end of the supply chain from Regrow's farmer and farm advisor customers, the company also partners with a variety of organizations interested in understanding the sustainability of agricultural supply chains, from General Mills to The Nature Conservancy.

According to Volkova, because Regrow provides value to farmers as well as end users, the company is a valuable partner to organizations like the soy checkoff.

"Our primary value proposition to the checkoff and to other stakeholders along the supply chain is quantification and verification. We have the ability to measure and verify to make stronger claims about the provenance of U.S. soy, demonstrating the numbers behind the claims," Volkova says.

All of this is possible without a cumbersome data entry process for farmers or a requirement that farmers share identifiable data downstream.

"The data that goes down the supply chain is only what's required, and that's not direct farm management records," says Volkova. "We gather a lot of data from publicly available sources like satellite imagery and weather data. We analyze it using our tools to support companies like General Mills in understanding what the adoption of sustainable practices looks like."

Tapp says the data Regrow is able to provide could have a big impact on soybean markets in the years to come.

"The vast majority of U.S. soybean farmers already participate in the robust conservation programs available to reduce negative impacts like soil erosion and protect resources like water," he says. "Having the data to prove that impact to end users is invaluable."

Tapp served a critical role overseeing this year's challenge on the soy checkoff's Strategic Management Committee.

Source: United Soybean Board

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KEEPING THE FUTURE OF SOYBEANS BRIGHT

From researching new uses for soybeans to identifying new markets for U.S. soy, *the soy checkoff is working behind the scenes to create new opportunities and increase profits for soybean farmers. We're looking inside the bean, beyond the bushel and around the world to keep preference for U.S. soy strong. And it's helping make a valuable impact for soybean farmers like you.*

See more ways the soy checkoff is maximizing profit opportunities for soybean farmers at **unitedsoybean.org**

Brought to you by the soy checkoff.

INDUSTRY perspective

By Donnell Rehagen

Biodiesel: Better, Cleaner, Now!

Throughout the past couple years, the National Biodiesel Board (NBB) has touted that our industry is "Better, Cleaner, Now!" Our fuels are a better alternative, a cleaner choice and available now with proven performance. Biodiesel and renewable diesel now provide a viable choice for producers and consumers alike to significantly reduce greenhouse gas emissions (GHGs), becoming a leading player in the environmental sector.

We are entering a time when the environment and cleaner energy are finally taking their rightful place with consumers and policymakers, and we believe biodiesel and renewable diesel will play a huge role in this shift to lower carbon fuel. Our better, cleaner fuels can provide immediate and substantial air pollution benefits, including 80% reduction in both GHGs and particulate matter, over 40% reduction in carbon monoxide and significant reductions in other noxious pollutants, all of which are harmful to public health. These immediate and substantial emission benefits can and should be an important part in any state, regional or national climate program and part of an all-of-the-above strategy that facilitates decarbonization through advanced alternative fuels like biodiesel and renewable diesel.

States across the country have embraced sustainable fuels as part of their own efforts to mitigate greenhouse gas emissions within their borders. Currently, California is forging ahead with its ambitious low carbon fuel standard (LCFS). This program, with a goal of 20% carbon reduction, has been in place for over 10 years and, to date, has helped California reach about a 7% reduction. Biomass-based diesel has been one of the biggest contributors, providing nearly 45% of the credits generated last year. And, in gallons, it has been a remarkable story for our industry, increasing volumes 52% annually since the start of the program in 2011.

With states like California embracing commitments to sustainable fuels and more organizations adding their own carbon reduction goals, this industry is poised for growth. This past year brought a wave of corporations announcing their commitments to carbon neutrality. Major corporations including Amazon, Walmart, Ikea, Pepsi and McDonalds joined thousands of others setting aggressive carbon reduction goals. These goals will not just affect the operations of those corporations but also the operations of nearly all their suppliers. With a significant amount of GHGs associated with the transportation of consumer goods and raw materials, it is inevitable that the corporations and their suppliers will seek out cleaner transportation fuels, expanding the market for biodiesel and renewable diesel.

With these growing low carbon markets, we see the demand for biodiesel and renewable diesel more than doubling today's demand, reaching our 6-billion-gallon goal. This market expansion means we will heavily depend on today's and tomorrow's farmers and oilseed processors. Our modeling suggests a 6-billion-gallon market will demand more than 18 billion pounds of soybean oil each year—again, a doubling of current industry demand for soybean oil. U.S. farmers will continue to lead the way in producing the feedstocks necessary to provide a better, cleaner future.

Donnell REHAGEN

Donnell Rehagen is CEO of the National Biodiesel Board.

However, we know what is on everyone's minds—electrification. We know that as our nation shifts to a carbon reduction mindset, more people are talking about electric vehicles. As the bright and shiny new technology, they are often positioned as a miracle solution to reducing carbon offputs. We recognize that electric vehicles will play a very important role in the reduction of emissions on the road, especially in light-duty passenger markets. While innovators seek to address the challenges associated with an electrified transit system,

As consumers and policymakers become more concerned about the environment and cleaner energy, the National Biodiesel Board believes biodiesel and renewable diesel will play a huge role in the shift to lower carbon fuel. Photo Credit: National Biodiesel Board

biodiesel and renewable diesel will continue to reduce emissions year after year.

Farmers know better than anyone that major problems rarely have a magic bullet solution. This is why you would never bet the farm on a single technology before it has been proven to be commercially viable. Doing so wouldn't be a reasonable, science-based approach; it would be reactionary.

Because of this, NBB supports and relies on the best available science when making decisions and educating stakeholders on the products we represent. Through collaboration and support with national laboratories and leading land-grant universities, we focus on providing well researched and objective analysis to our audience. While taking this robust approach has not always been easy, it ensures that NBB and the producers and farmers we represent can deliver on the environmental and performance benefits we are promising.

With growth already happening in on road, off-road, air transportation, electricity generation and home heating applications, biodiesel is well on its way to continue providing better, cleaner fuel now and in the future.

My excitement for the industry is tied to the changing demands of consumers, policymakers and corporations. Our industry will finally have a place at the table with answers to long-pondered problems about carbon neutrality. I believe we are only beginning to see the sweeping policy changes at the state and federal level for biodiesel and renewable diesel. Increasingly, the nation's statehouses will be where carbon policy develops so I would encourage you to become part of that dialogue to ensure that agriculture, biodiesel and renewable diesel are looked to as part of the solution. This transformation may not be easy. The market opportunities won't just happen: It will take diligence and hard work.

I am positive that as an industry, if we remain together and continue to speak with one voice, our future looks great. We have so much to offer. I look forward to working alongside our industry's feedstock producers to grow our better, cleaner fuel now.

SoyFACES

By Kurt Lawton

On-farm Demos Aim to Boost Soil and Water Quality Practices

Brad Doyle inspects cover crop plots on his Arkansas farm. Photo Credit: Kurt Lawton

When innovative farmers and conservation-seeking partners collide, their synergy can extend benefits to soybean growers across counties, states and regions.

That is the hope and goal behind an American Soybean Association grant program with the Walton Family Foundation. Three farm families received conservation demonstration grants to implement projects that find conservation solutions that make long-term economic sense and contribute to improving the sustainability of U.S. soybeans.

All three grant winners have excitedly embraced this grant as an investment to improve their family farm operations while educating and encouraging other farmers to find a fit for such practices. Each farm project—from cover crop research, irrigation and nutrient efficiency, and tile water nutrient removal—embodies the spirit of conservation, soil health and water quality goals of ASA and the Walton Family Foundation.

The grant recipients were selected in late summer 2020 by a panel of conservationists, agronomists and natural resource professionals. ASA and Walton Family Foundation Conservation Champions and ASA's Conservation Legacy Award winners from the past five years were eligible to apply for the grant.

Check out these innovative grant project winners to see how their ideas could enhance your farm.

Arkansas: Brad Doyle and Joyce Berger Doyle, Berger Farms

Unlike cover crop growth in more receptive Midwest soils, northeast Arkansas farmers Brad Doyle and Joyce Berger Doyle face a challenge to find species that can thrive in their clayey hardpan soils better suited for rice and ducks.

Given their agronomy, soil and plant breeding research backgrounds, the Doyles understand the need for more cover crop research in their watershed area and how to conduct accurate tests. They developed a scientifically replicated test plot with 45 different cover crop species, combinations and seeding rates.

"We currently don't see a lot of cover crops in this area. Our goal is to determine the right species and blends, the right seeding rates, and a better understanding of biomass amounts that can reduce early weed growth while capturing carbon and recycling nutrients," Brad says. "Most importantly, we plan to use this plot as an education tool to encourage and expand cover crop adoption among farmers in this watershed."

Following an early October soybean harvest last fall, Brad

drilled 45 different 5x20-foot cover crop seedings in a furrow-irrigated one-acre plot, replicated and randomized like their crop plot trials. "We included cereal rye, black oats, wheat, triticale, numerous brassicas, annual and perennial clovers, Austrian winter peas and hairy vetch—seeded in different combinations and seeding rates to try a little bit of everything," Brad says.

The cover crops emerged by October 13, exhibiting good growth by October 30. After one month, he saw excellent growth with the cereal grains—rye, triticale, wheat and black oats. He's also seeing some good biodiversity of mixes coming through, some brassicas, clovers and peas. The plots also show some initial volunteer soybeans, which will die out once the hard frost arrives.

As a trained agronomist and crop consultant, Brad is excited about discovering what works best and what is the most economical. "If we can achieve cover crop growth like some of these plots to reduce early Palmer pigweed populations, that could save some herbicide input costs."

He likes the concept of adding living roots after cash crop harvest. The goal is to improve soil health and organic matter over time—perhaps even recycle some nutrients—as long as the cover crop can be terminated to allow successful cash crop planting and growth. "If the soil can improve and hold some water during dry spells, then we could irrigate less and save money," Brad says.

Any new practice like cover crops must fit into current agronomic practices to be successful, and it won't take off overnight. "As a plant breeder, I realize our results will be from one year, one environment, but we will have replications and combinations to start learning cover crop species for this area," Joyce says.

Andy (left) and LaVell (right) Winsor are experimenting with subsurface drip irrigation technology on their Kansas farm.

Kansas: Andy and LaVell Winsor, Winsor Family Farm

A focus on greater irrigation water and nutrient use efficiency since 2005 led Andy and LaVell Winsor to experiment with subsurface drip irrigation technology.

Farming the diverse contours, soil types and bottom ground in the Kansas River Valley between Topeka and Lawrence, Kansas, the Winsors are installing the final phase of a drip tape project that began in 2015.

"We've learned a great deal about water efficiency and timely nutrient delivery for crop needs," says Andy. "That's why we've reduced flood irrigation and increased our use of pivots with drop nozzles and subsurface drip irrigation. We're also fortunate to have well permits from the alluvial water table and some creek water rights in our river valley for the 20% of our acres that are irrigated. It's not a depleting resource, and we're not using the Ogallala aquifer."

So far, their experience with subsurface drip irrigation technology has proven numerous benefits. "As I've told many farmers, this drip tape technology is a good deal. It costs a little more than a pivot, but it offers so many more benefits," Andy says. "It can irrigate all areas of a field; water use efficiency is 15% to 20% better, you can change water rates by field zone, and put fertilizer right into the root zone for better plant use."

Time and labor savings with drip tape and significantly reduced stress are a huge benefit compared to pivot irrigation. Being able to plant, spray and harvest without moving the pivots, along with less maintenance and tire repair, is worth a lot of money, he says.

Andy also cites value beyond the product offered by Netafim.

(continued on page 22)

The final phase of a drip tape project is being installed on Winsor Family Farm. Photo Credit: Kurt Lawton

(continued from page 21)

"Their staff agronomists have built an online fertility tool to help figure out fertility needs and timing. It's almost like having a fuel gauge on your crop, so you know when your fertility will run out. You can be proactive and build fertility in the root zone to keep your crop from having a bad day," he adds.

Farm conservation and innovation practices have a long history with the Winsors' third-generation farm. Andy's grandparents and his dad were building terraces and waterways back in the 1950s and 60s. When Andy joined the farm full time in 1994, he continued this legacy by being an early adopter of grid soil sampling, yield monitoring and variable-rate fertility. Over the last nine years, he has honed his cover crops to improve soil health—even planting soybeans green into growing cereal rye.

Farming near urban areas, LaVell adds that neighbors have raved about seeing green fields growing after harvest. "Aesthetically, it is very pleasing to them, and we like to help them understand the health value that cover crops bring to our soils and water quality. It's a legacy we hope to pass on to our next generation."

Wisconsin: Charlie Hammer and Nancy Kavazanjian, Hammer Kavazanjian Family Farm

Decades before soil health became a recognized valuable science, Charlie Hammer and Nancy Kavazanjian launched their Wisconsin family farm in 1980 with the motto, "Our Soil, Our Strength."

"We've dedicated ourselves to doing what's best for our soils and our crops 41 years ago," Nancy says. "All of our conservation and agronomic efforts to build healthier soils continue to pay benefits. And we've always been very involved in water quality

Nancy Kavazanjian, left, and her husband Charlie Hammer, right, test tile water on their Wisconsin farm.

because we have many lakes here in Wisconsin. Now we've installed an innovative proof-of-concept system to remove phosphorus from tile water and keep nutrients on the land."

Charlie and Nancy were discussing the merits of an edge-of-field bioreactor during a family dinner. "My brother Ed Kavazanjian Jr., a geotechnical engineer at Arizona State University (ASU), asked why we weren't considering phosphorus (P) removal, which neither of us knew existed."

This innovative phosphorus-removal technology using a steel by-product—slag—was lab tested at ASU for more than a year. "Once we had proof of concept that it removed phosphorus from water in the lab while allowing for the use of a downstream bioreactor to manage nitrogen, our next step was a field demonstration. And, Nancy and Charlie agreed to host the field site," explains Nasser Hamdan, a Senior Investigator on the project for ASU's Center for Bio-mediated & Bio-inspired Geotechnics.

They selected the edge of a 70-acre field that tile drains into a wetland then into a nearby recreational lake. The phosphorus filter design includes a smaller geomembrane-lined, rock-covered filter pit that contains steel slag. Field tile lines, with shutoff valves, feed the water into this slag filter then into a larger open holding pond where the phosphorus precipitates out.

"Once the soluble phosphorus in the water hits the steel slag, a chemical reaction begins to remove the phosphorus out of the water," Charlie says. "We see positive phosphorus reduction already, but the engineers want at least six months of data."

Hamdan likes the current progress with this phosphorus removal system. "We've seen near-complete removal, which is impressive to achieve because it's more difficult to remove P in tile water that already has a low P level," Hamdan says.

Like his dad and grandparents, Charlie is proud of their farm's innovative practices over the decades. "What's even more important is to demonstrate the technology value to a wider network of farmers, watershed and conservation groups and our lake association neighbors. And, we plan to host a field day in 2021 to showcase the results."

The next step is to add a bioreactor to this system to remove nitrates and phosphorus from the tile water. "We'd love to perfect a combination system that brings us clean water so we can show the community that we are part of the solution," Nancy says.

Ahead of Growing Global Trends

WISHH shares science to trailblaze for U.S. soy trade

By 2030, consumer interest in protein-rich diets is predicted to grow to an $85 billion market, according Euromonitor International—and this increased global demand for protein is providing more opportunities for ASA/WISHH to highlight the science and benefits of U.S. soy protein.

"COVID-19 concerns give a boost to foods that deliver sought-after nutrients, so soy is well-positioned to deliver," said Sloan Trends President A. Elizabeth Sloan. "People are buying foods for their health benefits, and global sales of naturally nutritious foods are increasing."

From Africa to Asia and Latin America, WISHH is leading discussions with food and feed companies on the scientific research that supports U.S. soy's nutrition and quality.

"When U.S. soybean growers founded WISHH 20 years ago, they recognized the important role that U.S. soy could take in meeting the nutritional needs of the world's fastest-growing populations in developing and emerging economies," said Kentucky soybean grower Gerry Hayden, who serves as ASA/WISHH chairman and on the ASA Board of Directors.

Hayden added, "WISHH is currently working with strategic partners in 20 countries in Africa, Asia and Latin America that are making more protein available through soyfoods, breads and beverages, as well as fish, eggs and meat."

WISHH's work in Latin America exemplifies how WISHH conducts regional research to assist strategic partners in building their businesses with soy protein. Central America's food and beverage industry is projected to grow nearly five times faster than in the United States between 2019 and 2023, according to Statista.com.

In many of the Central American countries, food processing plays a key role in the country's economy and is one of the fastest growing sectors. In El Salvador alone, the food processing sector contributes more than 6% of the GDP and comprises 26% of the manufacturing sector.

WISHH's own research found that Latin American consumers are looking at food packaging labels to gain health information. The assessment also identified training needs so that manufacturers will grow their businesses with new soy-containing products, such as convenient grab-and-go snacks.

In response, WISHH hosted webinars, including two particularly popular programs, which shared the new market research that highlights that the region's consumers and retailers desire more soyfood choices. During those webinars, WISHH trained 83 food manufacturing executives, doctors and nutritionists from leading hospitals, university food scientists and other key decision makers. WISHH continues to build on this training with virtual programs and will execute in-person training when COVID-19 limitations end.

The release of the U.S. government's "Dietary Guidelines for Americans, 2020-2025" brought yet another positive for WISHH to highlight. As a globally-respected, science-based reference, the report recognizes soy in core elements of healthy dietary patterns.

The U.S. Departments of Agriculture and Health and Human Services issued the 164-page report. It recognizes soy's potential to contribute to a healthy dietary pattern and cites:

- Protein foods, including lean meats, poultry and eggs; seafood; beans, peas and lentils; and nuts, seeds and soy products
- Soy-fortified beverages and yogurts
- Oils, including vegetable oils

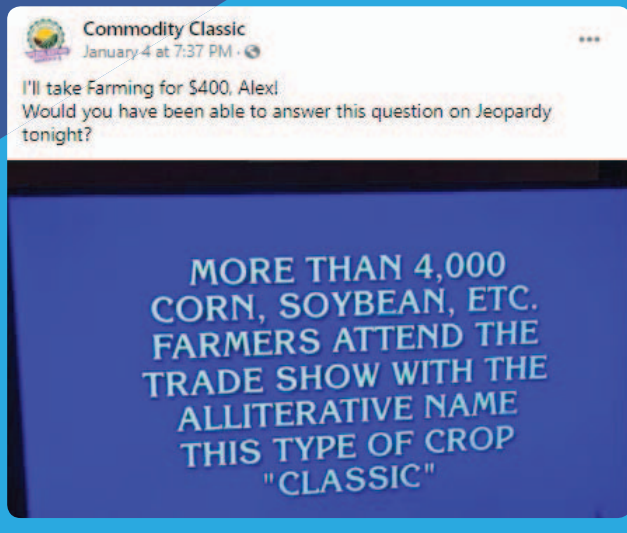
Knowing that protein plays an essential role in human nutrition, visionary U.S. soybean growers founded WISHH in 2000 to serve as a catalyst in emerging markets. WISHH brings the power of strategic partnerships to our unique market-systems approach. Local business leaders, governmental and non-governmental organizations as well as academic institutions join WISHH in increasing demand and fueling economic growth for the sustained availability of nutritious and affordable human foods and livestock feeds.

#soySOCIAL

Soybean growers may not have been able to physically meet lawmakers in Washington, D.C. in March, but they still made an impact with leaders on the Hill through virtual visits. Check out some of the posts from Congress and soy leaders supporting ASA during the virtual visits on this page!

Follow the American Soybean Association on: @ASA_Soybeans

Check out what's trending and what members of the soy family are sharing on social media!



What is Commodity Classic? In January, the annual trade show was featured in a question on the game show Jeopardy and shared widely on social media throughout the agriculture community.

ASA amplified **#NationalBiodieselDay** in March with a mini-social media blitz highlighting biodiesel facts and policy priorities throughout the day on March 18.

ASA celebrated women in ag on **#InternationalWomensDay** this spring.

/AmericanSoybeanAssociation /AmericanSoybeanAssoc @AmericanSoybeanAssociation

How Do You Improve Environmental Stewardship and Increase Yields? Two Words: Precision Agriculture

By Curt Blades

The mechanization of farming in the 20th century led to big changes in agriculture. Tractors, combines, harvesters and other farm machines helped each farm produce more and allowed fewer people to farm more land. According to The American Farm Bureau Federation, in the 1930s one American farmer produced enough agricultural product to feed a total of four people; today each American farmer feeds more than 165 people due to a combination of machinery and improved seeds and other crop practices. Farmers are proud to not only feed their families and fellow Americans, but also to produce crops to export to the rest of the world.

But the demands on farmers and farm fields are only increasing. So, what do we do?

Technology now affords farmers the ability to do even more—things that could never have happened before. A lot of GPS-driven technology is in place, giving farmers a whole new set of tools to help dial in the exact placement of seed, fertilizer and crop protection. This technology also helps farmers close the loop with insightful data that helps them monitor what they are doing to determine if there is room for improvement going forward.

The Association of Equipment Manufacturers (AEM), in partnership with the American Soybean Association, CropLife America, and National Corn Growers Association, recently released a study quantifying how widely available precision agriculture technology improves environmental stewardship while providing economic return for farmers.

For the environmental benefits of precision agriculture to take shape, soybean and other growers need to generate more yield and at least break even from a financial standpoint. As a farmer, if you are going to change a practice or invest in a new technology, the economic impact of that action has to be part of the conversation.

The study examined five key areas of the crop farming industry where precision agriculture can make both an environmental and economic impact:

- Productivity and crop yield
- Fertilizer use
- Herbicide use
- Fossil fuel use
- Water use

The study then examined five key areas of precision agriculture that can make an impact in those areas:

- Auto Guidance
- Machine Section Control
- Variable Rate
- Fleet Analytics (Telematics)
- Precision Irrigation

We are living in a new age of agriculture, and today's precision technology on equipment can have an enormous positive impact on farmers and the environment.

Over the past 18 years, the growth in corn and soybean yields, for example, has coincided with the widespread adoption of precision agriculture technologies. As precision agriculture technologies become more widely adopted, there is the potential for significant upward movement in yields and savings.

Curt BLADES

Curt Blades is Senior Vice President of Agriculture for the Association of Equipment Manufacturers

It's important to note that precision agriculture technology adoption is not solely about the immediate benefits of reduced fuel, fertilizer, herbicide or water use. It is also about evolving the U.S. agriculture industry to a more productive, competitive and sustainable state.

Every farmer is trying to do the right things, not just for the next season, but for the next generation. Thanks to technology, there are additional tools available that can help farmers achieve a goal they have always had: provide good food, energy and fiber to the public around the world. The beautiful thing about this new technology is that it doesn't force a choice between environment over economics, or vice versa. With today's precision agriculture technology, farmers can choose both.

If you are interested in more information and seeing a copy of the study, please visit newsroom.aem.org.

Building on the past...

Collin Cooper and his girlfriend, Allison Dallas, are young farmers – but they have generations of experience backing them up. Collin's family has been milking cows for generations, and Western-Kentucky based Coopland Farms is a multi-generational, diversified family farm.

The Coopers milk approximately 150 head of Jersey cows in addition to their diverse row-crop operation, which includes soybeans, corn, wheat and alfalfa hay.

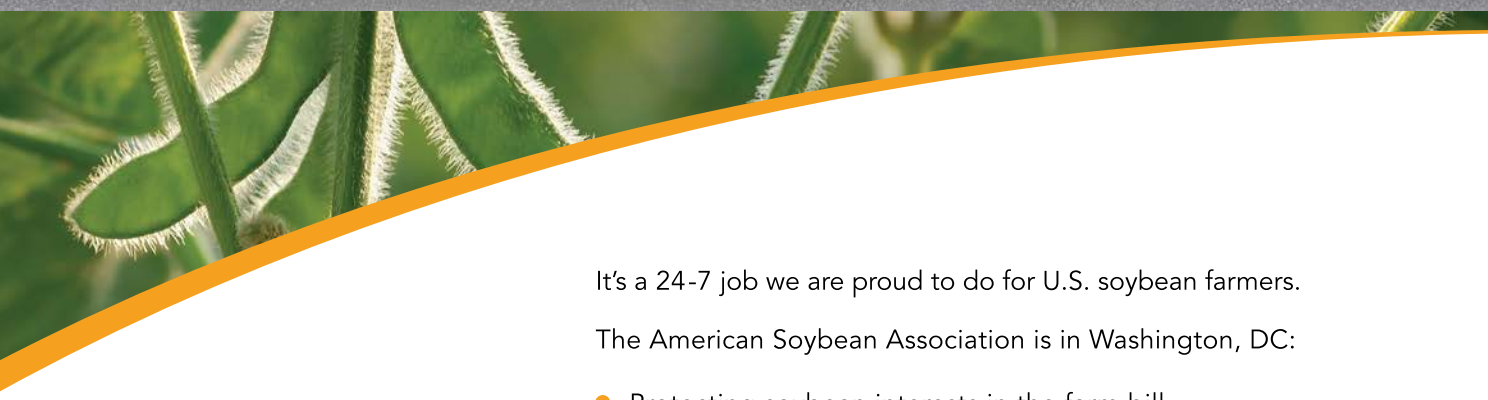
Kentucky Soybean Board
www.kysoy.org

Looking to the future...

Like generations before him, Collin has big plans for the continuation and expansion of this legacy operation. Bottling the farm's own milk, agri-tourism, a Community Supported Agriculture (CSA) program... the possibilities are endless!

The Kentucky Soybean Board is pleased to recognize Kentucky soybean farmers like Collin, and we are looking forward to seeing what this next generation of agriculturalists brings to the table. From innovative ways that farmers diversify their operations and income to scientists developing and discovering innovative new uses for our versatile crop, the future of soybean production is BRIGHT!

Policy makers take notice of ASA.



It's a 24-7 job we are proud to do for U.S. soybean farmers.

The American Soybean Association is in Washington, DC:

- Protecting soybean interests in the farm bill
- Fighting against burdensome EPA regulations
- Growing soybean trade opportunities

That's why ASA matters.

ASA
American Soybean Association®

Joining your state soybean association supports ASA's work in Washington, DC. | Visit ASA at Soygrowers.com