

AMERICAN soybean

FALL 2020

Vol. 8, No. 2

People. Policy. Profitability.

A PUBLICATION OF THE AMERICAN SOYBEAN ASSOCIATION

New ASA Policy Team Sows Seeds for Future Success



SOY FORWARD

Next Generation Scientists
Innovate for Biodiesel

SOY FACES

Farmers Leveraging Social
Media for Soy's Future



ISSUE UPDATE

Discord on Dicamba

INDUSTRY PERSPECTIVE

Farmer Technology
that's Blossoming

100 years
1920-2020
American Soybean Association®

JOIN THE PREMIUM CLUB

You put in work year-round to produce a crop that has high yield and impact on a personal, local and global level, and we think you deserve a greater return. SoybeanPremiums.org exists to simplify soybean premium programs and elevate your business, and we invite you to be a part of our Premium Club. Consider soybeanpremiums.org your go-to resource for insights and opportunities you can't access anywhere else.

Unlock greater potential in your soybeans

Visit SoybeanPremiums.org to see premiums available in your area and more.



Publisher Jill Wagenblast
Associate Publisher/Marketing Wendy Brannen
Editorial Director Wendy Brannen
Managing Editor Jordan Bright
Sponsorship/Ad Sales Michelle Hummel, Chris Luelf
Database Management Chris Merlotti
Production/Advisor David & Associates
Contributing Photographers Rob Banayote
Contributing Writers Wendy Brannen, Barb Baylor Anderson, Kayla Hedrick, Kyle Kunkler, Melissa Narins, Paul Schrimpf

ASA Staff Leadership
American Soybean Association
Brian Vaught, Interim Chief Executive Officer
World Initiative for Soy in Human Health
Liz Hare, Executive Director
ASA Farmer-Leaders
President Bill Gordon, Worthington, Minn.
Chairman Davie Stephens, Clinton, Ky.
Vice President Kevin Scott, Valley Springs, S.D.
Copyright © 2020 by American Soybean Association. All rights reserved.

FEATURES

10 COVER STORY 100 years later, breaking new ground

A dedicated, in-house ASA policy team is sowing seeds for future success.

22 SOY FACES Meet ASA soy program participants from Louisiana, Maryland and South Dakota who are leveraging social media for soy's future.

30 SOY FORWARD Five leading ag educators look ahead at the farm economy in 2020.

DEPARTMENTS

04 ASA LEADERSHIP CORNER Comments from ASA President Bill Gordon.

05 SOY NEWS Soy-related news from across the nation.

06 ASA IN ACTION ASA celebrates 100th anniversary at birthplace in Indiana, USDA deputy secretary and Indiana governor participate.

19 SOY CHECKOFF News from the United Soybean Board and soy checkoff.



24 ISSUE UPDATE The dicamba court ruling that sparked a legal, regulatory and agronomical firestorm.

25 INDUSTRY PERSPECTIVE A roundup of blossoming technology from Paul Schrimpf at Meister Media Worldwide.

27 SOY WORLD A close-up look at ASA international marketing activities.

28 #SOYSOCIAL ASA social media highlights advocacy.



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 300,000 soybean farmers.

American Soybean is published quarterly by the American Soybean Association, 12647 Olive Blvd., Suite 410, Creve Coeur, MO 63141. Phone: 314.576.1770. Web: SoyGrowers.com

 Facebook.com/AmericanSoybeanAssociation
 Twitter.com/ASA_Soybeans
 @AmericanSoybeanAssociation

ASA leadership corner

2020

2020 continues to present extremes ranging from health concerns to crazy weather patterns. Although this year has not been exactly easy to navigate, ASA has been here, continuing to represent U.S. soybean farmers. We started the year with some much-needed wins for agriculture; biodiesel tax credit, Phase 1 trade agreement, more favorable weather for planting in most areas—but then COVID-19 hit.

I do not believe that anyone had any idea what this world pandemic would do to trade, food consumption, food availability, and human health concerns. ASA has been at the front line of these issues, plus our “normal” duties representing soybean farmers. Let’s talk about trade. China still is and will be the largest player in soybean trade. Although the country did not immediately come back to the U.S. to purchase soybeans, it has now. Even though we, the U.S., ship soybeans worldwide all year, our major marketing period is August to March. This is when most of the U.S. crop is shipped, and this is the period when China buys its share of U.S. soybeans. Heading into this 2020/2021 marketing year, China has really ramped up its purchases of U.S. soy, and we are on a record export pace for new-crop soybeans. Even brighter news is that we are also on record-setting pace with the rest of our world trade partners.

Although trade seems to take the headlines most often, ASA farmer-leaders and staff have been working on a wide variety of issues. On the conservation front,

ASA is in a great position for information sharing and encouraging implementation. Soy farmer-leaders continue to step up regarding both sustainable and conservation practices. Likewise, ASA staff have been and continue to be leaders in providing information to policy-makers and non-governmental organizations (NGOs) on how soybean farmers are engaged and contributing to a brighter future for agriculture—and our planet.

Biodiesel received a much-needed boost when Congress passed the biodiesel tax credit, but with the threat of small refinery waivers reducing blending volumes, ASA has given this topic a lot of attention. ASA, with our partners, continues to express concerns on blending volumes and the Renewable Fuel Standard (RFS) with EPA and policy makers.

Infrastructure is key to the soybean industry in multiple ways. From locks and dams, dredging our waterway systems and expanding our port capacity to improving our roads, bridges and railroads, infrastructure issues touch every soybean. With the help of ASA staff and farmer-leaders, we are making much-needed headway in infrastructure, but we have a long way to go—and ASA will be engaged in these and other infrastructure topics.

Biotechnology and crop protection tools continue to be under attack. A court decision sent shockwaves into the 2020 growing season. ASA led the effort to work with EPA and other

BILL GORDON



Bill Gordon, ASA President

groups to keep one of our crop protection tools available. There will continue to be attacks on our crop protection and biotech tools, and ASA will continue the fight to keep these tools available.

All these topics and more keep ASA at the forefront of agriculture issues. Yet, with the onset of COVID-19 and government intervention, new issues have emerged. C-19 funding and legislation as it pertains to agriculture have created a whole new array of topics with which ASA is assisting. As we move into the tail end of this historic year, we reflect on how we at ASA have and will stay relevant. All the changes and improvements we have made at ASA have set us up to be the trusted go-to organization you all expect and depend on. The farmer-leaders and staff of your American Soybean Association pledge to you, we will continue the efforts and work hard to represent the U.S. soy family here at home and with our international partners. Everyone have a safe and bountiful harvest.

Clemson Researchers Closer to Developing Heat-Tolerant Soybeans

A team of Clemson University researchers led by Sruthi Narayanan, assistant professor and researcher in the Clemson department of plant and environmental sciences, have helped discover an “important milestone” in developing heat-tolerant soybeans.

“Our study found novel lipid metabolic traits associated with heat tolerance in soybean and the genes controlling those traits,” Narayanan said. “These genes can lead to the identification of molecular markers that will be useful for selecting for heat-tolerant soybean genotypes. Identifying tightly linked molecular markers for stress tolerance is an important accomplishment in stress-tolerance research and a milestone in variety development projects.”

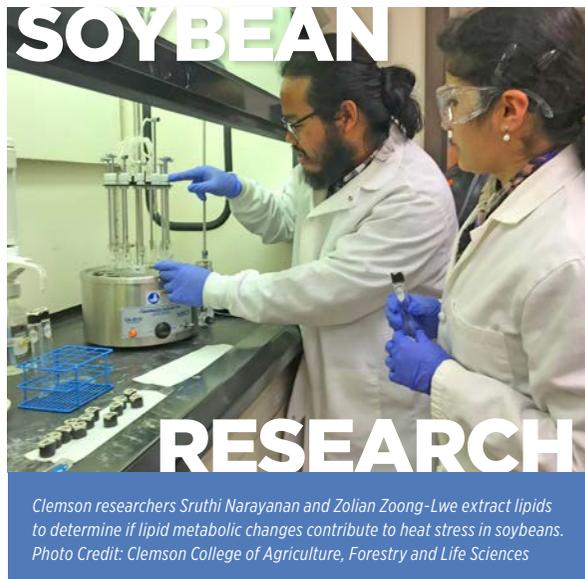
Soybeans typically are planted in the Southeast from May 10 to July 11 and harvested from Oct. 20 to Dec. 30. Some growers are adopting early-maturing varieties that are planted in April and harvested during the hottest parts of the summer. This Early Soybean Production System (ESPS) method originated in Mississippi and is gaining interest in other areas of the Southeast—but high temperatures at harvest can cause problems with seed quality, wrinkled seed, decreased germination and more, according to Ben Fallen, a former Clemson soybean breeder who is also working on the project.

“Early maturing soybeans will not wait around to be harvested,” said Fallen, who also breeds soybeans with the United States Department of Agriculture’s (USDA) Agricultural Research Service (ARS). “Seed quality will go down in a hurry, especially if the weather doesn’t cooperate with harvest. Not only that, but seed production can be a problem with beans planted anytime during the typical planting window, if the plants are setting pods during the heat of the summer and there is no rain in sight, seed quantity and quality will be a problem.”

During the study, the researchers investigated whether lipid metabolic changes contribute to differences in heat stress responses in a heat-tolerant soybean variety and a heat-susceptible soybean variety. The heat-susceptible variety was developed for the ESPS in Mississippi.

“The lipid trait and related genes that contribute to heat tolerance in [heat-tolerant soybeans] can be incorporated into other genotypes that can be grown in South Carolina,” Narayanan said. “This will be valuable for developing heat-tolerant soybean varieties adapted to our conditions.”

Researchers observed changes in soybean leaves when subjected to high temperatures and found a



decline in fats undesirable for biodiesel and cooking oil, as they reduce stability and keeping quality. On the other hand, high-fat soybeans have added value, primarily due to health benefits.

While the researchers consider this discovery as valuable for the soybean industry, they agree more research is needed.

“What we hope is that this translates to being able to develop more heat-tolerant soybean lines and as an added bonus, may also have an improved oil composition,” said Sachin Rustgi, a molecular breeder at the Clemson Pee Dee Research and Education Center who also is part of the project team. “There is more to gain from knowing the whole picture, which is why it is so important to work together as a team of scientists, in multiple fields, to work toward sustainable agriculture.”

Other researchers involved in the project include Zolian Zoong-Lwe, a graduate research assistant in the Clemson Department of Plant and Environmental Sciences, Nitant Gandhi of NCJ Diagnostics and DNA Technologies in Monmouth Junction, New Jersey; Ruth Welti of the Kansas Lipidomics Research Center at Kansas State University, and Rusty Smith of the USDA ARS Crop Genetics Research Unit in Stoneville, Mississippi. Learn more at newsstand.clemson.edu/.

Source: *Clemson University*

ASA Returns to Roots to Celebrate 100 Years of Advocating for Soy Growers

The American Soybean Association (ASA) was formed when brothers Taylor, Noah and Finis Fouts hosted the first Corn Belt Soybean Field Day at their “Soyland” farms in Camden, Indiana, Sept. 3, 1920. ASA returned to its roots in August to celebrate a century of coordinated efforts and ensuing successes on behalf of U.S. soybean growers. With support from the Indiana Soybean Alliance and the Fouts family who helped launch one of the nation’s strongest agricultural advocacy associations, ASA celebrated its 100th anniversary on the Indiana farm where it all started with a historical marker dedication, special program and tours of heirloom soybean plots.



ASA MARKER

ASA President Bill Gordon (MN), right, and Fouts family member Darrel Bowman, left, unveil the historical marker on Fouts Soyland farm that commemorates the site where ASA was founded 100 years ago. Photo credit: Rob Banayote

USDA COLLABORATION



USDA Deputy Secretary Steve Censky, who previously served as ASA’s CEO for 21 years, spoke about the long, successful collaboration between USDA and the soy family, which dates back to that first Fouts farm event in Indiana 100 years ago. Photo credit: Rob Banayote



On the original Soyland farm, descendants of ASA founders and brothers Taylor, Noah and Finis Fouts stand around the side of the new Indiana state historical marker that recognizes the contributions of the Fouts brothers to development of soybeans as a cropping opportunity. Photo credit: Rob Banayote



The ASA 100th Anniversary Committee planned the historic birthplace celebration for nearly two years and then quickly adapted to a smaller, socially-distanced celebration to mark the occasion. Pictured from left: ASA past president Ray Gaesser (IA); ASA Director Kendall Culp (IN); ASA Director of Publications & Special Projects Jill Wagenblast; ASA Director and 100th Anniversary Committee Chairman Charles Atkinson (KS); ASA past president Wade Cowan (TX); ASA Director Wayne Fredericks (IA); ASA Director Jerry Bambauer (OH); and Kansas Soybean Association CEO Kenlon Johannes. (Committee members not pictured: Brad Kremer (WI), Brandon Wipf (SD), ASA past president John Long (SC) and ASA past president Bart Ruth (NE).) Photo credit: Rob Banayote



Attendees view ASA history displays and have an opportunity to pick up a complimentary copy of the commemorative history book, "American Soybean Association: Our First Soy Century 1920–2020." Photo credit: Rob Banayote

From left: ASA Chairman Davie Stephens (KY), USDA Deputy Secretary Steve Censky, ASA President Bill Gordon (MN) and ASA Vice President Kevin Scott (SD) take a moment to catch up during the ASA 100th anniversary celebration on Fouts Farm in Indiana. Photo credit: Rob Banayote

ASA in action



ASA PRESIDENTS



Several past ASA presidents attend the 100th anniversary historical marker unveiling on Fouts Farm in Indiana. From left: Alan Kemper (IN); Ray Gaesser (IA); Davie Stephens (KY); Bill Gordon (MN-current ASA president); Wade Cowan (TX); John Heisdorffer (IA); Ron Moore (IL), Johnny Dodson (TN); and Charles Hamon (KS). Photo credit: Rob Banayote



Indiana Governor Eric Holcomb addresses the small gathering, expressing his appreciation for the hardworking and pioneering soy industry. Photo credit: Rob Banayote

ANTIQUE



TRACTORS

A variety of antique tractors and equipment was available for viewing during the ASA 100th anniversary celebration at Fouts Soyland farm in Camden, Indiana. Photo credit: Rob Banayote

SOYBEAN SONG



In a musical presentation at the ASA anniversary celebration in Camden, Indiana, ASA Directors Brandon Wipf (SD), Chris Hill (MN), Andrew Moore (GA) and Agriculture Communications Team (ACT) member/past director Bob Worth (MN) had collaborated for a virtual performance of "Growing Soybeans to Get Along," a song written by Taylor Fouts that Fouts and three other soybean farmers sang at the first soybean event in 1920.

HEIRLOOM PLOTS



At the ASA 100th anniversary celebration on Aug. 4, attendees toured heirloom soybean plots on the Fouts family's Soyland farm operation in Camden, Indiana. Photo credit: Rob Banayote

ASA is pleased to announce a publication in celebration of its centennial anniversary.

American Soybean Association

Our First Soy Century
1920–2020

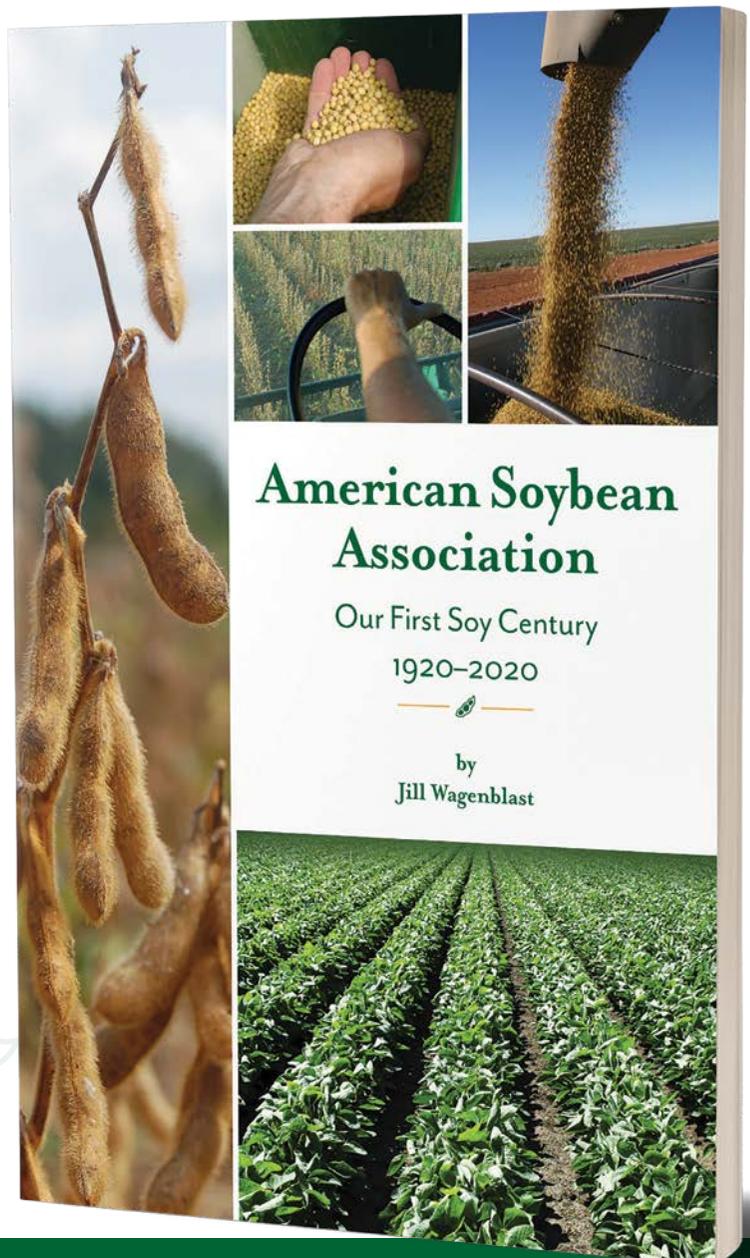


Discover the American Soybean Association in this new limited-edition book. This 6.375" x 9.375" 80-page volume takes the reader from the association's beginning to today, as the ASA continues to be instrumental in the growth of US soybean production, distribution, and utilization.

As ASA celebrates its one hundredth anniversary, this book tells the story of its life as an organization dedicated to soybeans as a crop and the farmers who grow them. During its one hundred years, ASA has stood at the forefront of building a US soybean industry that is strong and economically vital to our country.

Don't miss your opportunity to engage with ASA's history. Order a free copy today—quantities are limited!

To order your complimentary copy of *American Soybean Association: Our First Soy Century 1920–2020*, go to ASA100Years.com.



A Hundred Years Later,

BREAKING NEW GROUND

By Wendy Brannen, Senior Director of Marketing & Communications, and Kayla Hedrick

Dedicated, in-house ASA policy team sowing seeds for future success

In October 2019, a transformation took place in our nation's capital: The American Soybean Association (ASA) transitioned from a contract lobby model of D.C. representation dating nearly 30 years to a full-time staff focused solely on ASA priorities.

Since that time, new names and faces have come on board, reflecting a range of personal and professional experiences, diverse political and geographical backgrounds, and networks both on and off the Hill to position soy favorably.

Leading the policy shop is Christy Seyfert, executive director of government affairs. A sixth-



Christy Seyfert, ASA executive director of government affairs

generation farm girl from Georgia, Christy was introduced to politics with a college internship.

“That experience was a career changer for me. It showed the impact that public policy has on everyone, and I knew I wanted to be a part of it.”

Christy and her husband, Mike, are members of the Kansas Soybean Association, a state in which they own and operate a portion of Mike's family's fourth-generation farm—including a few soybeans.

In her time on Capitol Hill, Christy worked for the bipartisan House and Senate Agriculture Committees, specializing in farm policy and crop insurance. Her experiences on the Hill and as a crop insurance lobbyist have

prepared her well to serve as staff liaison to the Farm Policy Advocacy Team. In that role, Christy guides advocacy decisions affecting the farm safety net, crop insurance and commodity futures, to name a few.

Kendell Culp, a soybean grower from Rensselaer, Indiana, is chair of that advocacy team and spoke highly of her capabilities both in leading the policy team and of her work with the Farm Policy group.

“Christy continues to impress me with her knowledge of farm policy and how it benefits soybean producers at the farm level. She has a great deal of contacts with key Washington, D.C., influencers that have transpired into valuable relationships that enhance our advocacy efforts,” Culp says of Seyfert, concluding, “She has also done an outstanding job building out our new D.C. advocacy team.”

Tending to technology

Soybeans have significantly benefited from new technologies over the past 30 years, and that trend is not slowing down. However, these tools have also faced their fair share of challenges. With glyphosate and dicamba continuing to take punches in the court system, soybean growers are experiencing uneasiness on whether they will have future access to critical innovations.

“We have to change the narrative around pesticides and biotechnology,” says Kyle Kunkler, director of government affairs overseeing biotech and crop protection policy.

“These tools aren’t only for farmers. They already have a strong track record beyond the farm community and possess even greater potential for improving environmental outcomes and consumer benefits. Those results resonate with people and will ease adoption of the technology, but that story isn’t going to tell itself.”

(continued on page 12)

Growing the Policy Team

ASA members had the opportunity to meet Kyle Kunkler in person just before the COVID-19 pandemic at the 2020 Commodity Classic in San Antonio this February. Kyle was brought on board to serve as staff liaison to the Regulatory Advocacy Team and manage the biotechnology and crop protection portfolio, along with other essential ASA efforts.

“Kyle has a passion for regulatory issues and for helping the American soybean farmer navigate complex concerns such as chemical registrations, public perception of substances we use to control pests and weeds, and other pressing issues,” says Caleb Ragland, soy farmer from Magnolia, Kentucky, and chair of ASA’s Regulatory Advocacy Team.

Before briefly stepping into ASA’s physical office in D.C. pre-pandemic, Kunkler spent three years with Biotechnology Innovation Organization (BIO) managing federal government affairs on food, agriculture, energy and environmental policy. Previously, he served on the legislative teams for congressman Dan Newhouse and congresswoman Cathy McMorris Rodgers, as well as with the National Association of Insurance and Financial Advisors.

Similar to Seyfert, the College of Idaho political economy graduate has a little “farm” in his background—but on the produce side. His mother’s family farms potatoes and onions in eastern Washington state, where Kyle grew up.

KYLE KUNKLER



Kyle Kunkler, ASA director of government affairs for biotechnology & crop protection

“We are exceptionally fortunate to have someone with Kyle’s energy and the passion he possesses on our team. Kyle is such a hard worker and stays in touch almost daily working on the latest developments. I am so impressed with how he consistently goes the extra mile for our industry to not just get things right, but assure ASA’s comments and other correspondence to Congress, the administration—and the courts—are the absolute best representation of ASA,” says Ragland.

Kyle jumped in at a time when litigation surrounding some of those complex issues Ragland referenced were peaking in the U.S. Court of Appeals for the Ninth Circuit and elsewhere in the legal landscape.

“We are also very lucky that Kyle possesses the expertise on the legal side to help us navigate through the stormy waters of regulatory issues and protect our livelihood,” Ragland shared.

POLICY TEAM

Good genes

Kunkler is particularly excited about the future of genetic innovation.

“Using gene editing, developers can now simply activate, deactivate, insert or remove genes—much like a genetic word processor—but in ways that occur regularly in conventional breeding,” he says.

Kunkler explained that this process contrasts with traditional biotechnology where a developer often inserts genes foreign to a plant. In the case of gene editing, the resulting plant can be essentially indistinguishable from a conventionally-bred plant, except it can be developed in one generation instead of many. Additionally, there would be no trade-offs as often seen in the breeding process, such as improving disease resistance while sacrificing yield. He says it is possible in one generation to select existing genes that improve yield, flavor, protein content and nutrient uptake while reducing water usage and better controlling pests.

“This is the one technology that will fundamentally revolutionize agriculture if we can get the regulatory, market and trade angles right,” Kunkler cautiously offered.

News is good regarding positive development on the regulatory landscape for these tools. In May, USDA updated its biotechnology regulations to allow exemption for several categories of modified plants that could have resulted from conventional breeding. The Environmental Protection Agency published a draft rule in September that would allow for similar categories of exemptions from its regulations. Several prominent U.S. trading partners are adopting comparable approaches, which could ease access to foreign markets.

“There’s no doubt we have plenty of work left to do, but it’s

encouraging to see momentum building in the right direction,” Kunkler summarized. “We still need to make the case to consumers about how these tools have every potential to make food healthier, safer, better-tasting, longer-lasting, more sustainable and more affordable. That’s the story we need to be telling. Who wouldn’t want that from their grocery aisle?”

Guarding tools

ASA has long been a proponent of science and an evidence-based regulatory system for determining responsible use and the future of crop protection tools. Assuring those products studied and deemed safe are available to farmers to choose as they prefer has been an immediate priority for Kunkler upon joining ASA. Be sure to read his policy update on dicamba found on page 24.

Pandemic-unique ‘growing pains’

The COVID-19 pandemic brought unforeseen challenges to agriculture. Seyfert, as head of ASA’s policy team, was quick to mobilize for soy and led efforts including broad-based collaboration with allied farm groups to assure agriculture’s interests—imminent funding needs, transportation and other supply chain issues, and more—were being considered.

Meantime, the needs and responsibilities of managing a new policy office did not cease, and the pandemic also created hurdles in building out ASA’s policy shop. Seyfert and other ASA staff embraced technology—including virtual interview calls—to identify the right additions to the burgeoning D.C. team. Unlike Kunkler, who had a few brief weeks working in person, the next two Washington additions have never been inside the D.C. office.

Seyfert says of the unusual

hiring conditions, “In D.C., being adaptable is an asset, and we have certainly welcomed individuals who have this strength.”

Moving soy to market

Grower profitability does not end at production. Several outside factors play a role in the lifecycle cost of soy. One area that often gets overlooked is the multistep supply chain that is needed to provide growers with inputs and to move product to market.

For years, U.S. agriculture has relied on an extensive network of waterways, railroads, and interstate highways to deliver crops to both domestic and international markets. However, lack of sufficient funding to maintain a state of good repair in recent years has threatened the U.S. soy growers’ competitiveness in this arena.

Staying above water

Looking specifically at waterways, members of the soy family have spent the past several years advocating for a shift in the cost-share allocation for capital investment and major rehabilitation projects funded through the Inland Waterways Trust Fund (IWTF). Currently, these major projects are funded through a cost-share of 50% federal general funds and 50% IWTF dollars. ASA and others have advocated for a shift in this formula to lower IWTF contributions and stretch these dollars further, while also spurring more rapid project development. This adjustment has been realized in the 2020 Water Resources Development Act (WRDA) language currently moving through Congress, with an updated cost-share allocation of 65% federal general funds and 35% IWTF dollars—an acknowledgement to the ongoing advocacy of inland waterways users who require a modern, more

efficient waterway system to compete in the 21st century.

“The major opportunity with WRDA 2020 is the way waterway construction projects can be funded,” says Alexa Combelic, the director of government affairs for

ASA who oversees transportation and infrastructure, as well as other areas. “With the shift in cost-share that will more effectively utilize the industry-funded Inland Waterways Trust Fund, we will see improvements that will lead

to faster, efficient transportation when we need it most.”

Combelic went on to note that Brazil’s infrastructure improvements over the last several decades have made that nation more competitive in terms of the cost of transporting soybeans. Projects moving forward—like the dredging of the lower Mississippi River basin—will continue to make positive impacts on transit cost competitiveness, she noted.

POLICY TEAM

Growing the Policy Team

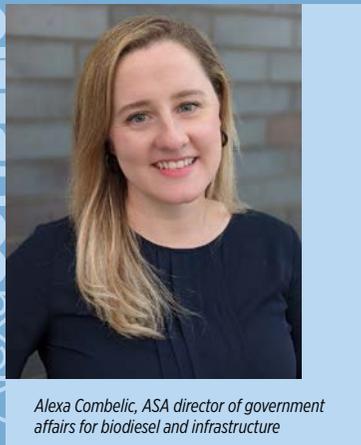
“I can count on Alexa to keep me informed on what is happening in D.C.—something that has been even more important during COVID-19,” says Rob Shaffer, soybean grower from El Paso, Illinois, and chair of ASA’s Biodiesel & Infrastructure Advocacy Team.

According to Shaffer, Alexa, who joined ASA in early May, “utilizes her years of working on the Hill both on the House and Senate side to push for important priorities including biodiesel, transportation and rural broadband.”

Alexa is among ASA’s new directors of government affairs, leading the biofuels and infrastructure portfolio, in addition to sustainability, transportation and broadband. Shaffer says it has been a pleasure for him to work with Alexa and that he is happy with everyone who has joined the policy team.

Serving in various Hill staff roles the past 10 years, Alexa most recently was legislative director for congressman Joe Courtney of Connecticut, her home state and where she earned a dual Bachelor of Arts degree in political science and history from the University of Connecticut. Combelic worked on an array of issues applicable to soy, among them agriculture, transportation,

AlexaCOMBELIC



Alexa Combelic, ASA director of government affairs for biodiesel and infrastructure

energy, appropriations, labor, trade, environment and nutrition.

“She’s not shy to speak up as to what she sees as the best direction for ASA, and taking into account the intricacies of D.C. that someone can only know when they are living and working in that D.C. world—things that we as farmers may not be aware of. I appreciate that Alexa has the inside knowledge of best practices in D.C. and among key legislative and regulatory persons to get the job done successfully,” says Shaffer.

He ends by putting it succinctly, “I don’t expect her to come drive my combine, and by the same token, Alexa can instruct us on best ways to advocate in D.C. that we may not have considered.”

Surface level

In addition to waterways, U.S. soy also relies heavily on surface transportation. Priorities at the federal level revolve around projects that can make bridges and roads stronger to allow for heavier trucks and open the door for more efficient transportation. Specifically, a long-term surface transportation reauthorization bill would provide state departments of transportation with the consistent, predictable funding needed to plan major capital investment projects effectively.

Fueling demand—efficiently!

While not directly related to soy transportation, the ever-growing demand for energy-efficient and low- and no-emissions transit options in our country has impacted a domestic market for soybeans, opening the door for more renewable fuel.

Consumer and market indicators continue to advance demand for renewable and zero-emission energy at home and abroad. As an industry, soybean growers are already poised to play a key role through the production of biodiesel. Biodiesel provides a litany of benefits in addition to being a zero-carbon fuel source: It provides a market for surplus soy oil, creates jobs, diversifies our fuel supply, and increases the value of soybeans.

Combelic described the importance of this secondary

(continued on page 14)

(continued from page 13)

market to soy, explaining, “The evolution of biodiesel underscores how innovative and shrewd the soybean industry is when taking on a problem—in this case, a soy oil surplus. Biodiesel has added incredible value to U.S. soybeans at \$52 per acre in additional income for the average producer, which is in no small part due to the support of the federal government through the Renewable Fuel Standard (RFS) and annual renewable volume obligations.”

At its strongest, Combelic says, the RFS provides a stability in markets, even when soybean producers face uncertainty abroad. However, at its weakest, an RFS that loses integrity through poor federal stewardship may stunt future growth of the biodiesel industry and shortchange soybean farmers—why she says ASA’s advocacy work, along with that of National Biodiesel Board and other interested groups, is so important.

Heating up

Looking to the future, there is promise and potential for the biodiesel industry. Bioheat®, which helps fuel 5 million homes that depend on heating oil, as well as carbon reduction strategies in select areas of the U.S., have helped fuel optimism within the industry. As consumers seek more efficient fuel sources, biodiesel will continue to play an important role, much to the benefit of the American soybean grower.

The global outlook

Trade continues to make headlines, and its impact on U.S. soybean farmers is nothing to dismiss. With more than 60% of the U.S. soybean crop exported to foreign markets, trade is one of ASA’s biggest policy priorities.

“Access to foreign markets is critical for the continued strength of the U.S. soybean industry,”

Virginia Houston, ASA government affairs director over trade said. “Whether that means working on existing markets such as China and Mexico or pursuing emerging markets in countries like Kenya, Vietnam or Cambodia, ASA will continue to advocate for sound and fair trade policies for our farmer members.”

China remains top of mind as the largest export market for American soybean growers. The COVID-19 pandemic and decimation of Chinese hog herds by African Swine Fever (ASF) led to slow soybean exports in the first half of 2020. However, as the end of the year approaches, orders are mounting, and there is optimism that Chinese purchasing will remain strong.

Trading on the future

New free trade agreements with Kenya and the United Kingdom are

POLICY TEAM

Growing the Policy Team

Rounding out the new additions to ASA’s D.C. team is Virginia Houston, who started in June. Virginia manages the trade portfolio, among other big responsibilities.

“Trade and international markets are among the key priorities we focus on at ASA. Virginia has joined the team as a knowledgeable and respected voice both on Capitol Hill and throughout the soybean and agriculture sectors on these important issues,” says Josh Gackle, soy grower from Kulm, North Dakota, and chair of the Trade Promotion and International Affairs Advocacy Team for ASA.

Virginia brought to the table a diverse background in many sectors of agriculture, including working most recently for the

American Seed Trade Association (ASTA) and, before that, the National Pork Producers Council and Animal Agriculture Alliance.

Gackle responded to the new D.C. team positively, offering, “Virginia has joined and become a part of a devoted group in D.C. that is working every day to ensure U.S. soybean farmers have a strong voice in government policy in order to continue the success of our farms, families, businesses and communities.”

The Mississippi native’s experience also includes work in USDA’s Agricultural Marketing Service and a Hill internship. Virginia has a master’s in professional studies from the Graduate School of Political Management, George Washington University, with a specialization in advocacy politics, and a B.A.



Virginia Houston, ASA director of government affairs for trade and international affairs

in political science from the University of Mississippi—a far piece away from where her colleagues grew up in Washington State, Connecticut, Georgia and other corners of the country—and again demonstrating the diversity and depth of the ASA-D.C. policy bench.

on the horizon, though it is unlikely either will be completed before the end of the year. The agreement with Kenya would be the United States' first free trade agreement with an African country and could lead to future deals with other countries on the continent. To take full advantage of new trade deals, differences in ideology related to gene editing, biotech and sustainability practices must be addressed.

As we move into 2020 and the election season, there are a few question marks outstanding in the agricultural trade sphere. The industry has pushed for the U.S. to rejoin the Trans-Pacific Partnership, a multilateral deal negotiated under President Obama between the U.S. and 11 other Pacific Rim nations. Since the U.S. withdrew from TPP under President Trump, the remaining parties have ratified the agreement as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP, or TPP-11). And, Vice President Joe Biden has recently spoken out against joining CPTPP, so it is unlikely that the U.S. will join that agreement in the near future. Looming on next year's Congressional calendar is the expiration of Trade Promotion Authority's fast track. Under TPA, the president has the ability to send a trade agreement to Congress for a yes or no vote, and current authorization expires July 1, 2021. While TPA does not need to be immediately renewed—and there is precedent for not renewing immediately after expiration—it is highly unlikely that future free trade agreements could be ratified without TPA in place. Houston says the 2020 election will have an impact on whether there is political willpower to tackle TPA in summer 2021.

Seal of approval

Data privacy and security are constant problems in all industries, and farmers remain cautious about which companies they do business with. One effort that ASA is leading is the Ag Data Transparent effort that audits companies' ag data contracts.

Bev Paul, consultant on the ASA D.C. policy team explains, "Much like the Good Housekeeping seal of approval verifies compliance with Good Housekeeping's standards, the Ag Data Transparent seal recognizes compliance with ag data's Core Principles—the basic guidelines that ag tech providers should be following when collecting, using, storing and transferring farmers' ag data."

More than 20 companies have been certified as "Ag Data Transparent," and soybean farmers are encouraged to begin at AgDataTransparent.com when considering a contract with an ag tech provider.

Soy as a sustainable solution

Another area in which ASA is committed to the future is sustainability and conservation. Paul points to the Ecosystem Services Market Consortium's (ESMC) recently-formed Producer's Circle, a farmer and rancher advisory group to which ASA directors Charles Atkinson (KS) and Andrew Moore (GA) were appointed. Atkinson and Moore are among soy farmer-leaders devoting considerable time to assure ASA is an active part of the ecosystem services market conversation.

EPA estimates that agriculture accounts for 9.9% of U.S. annual greenhouse gas (GHG) emissions (USEPA 2018). However, agriculture and forestry are also

Bev PAUL



Bev Paul, consultant

A Veteran in the Field

Bev has worked on soy policy issues for ASA since 2002 and long demonstrated great dedication on topics ranging from conservation, nutrition and the checkoff program to research, data and more. Aquaculture is another portfolio standout which Bev has long championed. As a part of the ASA D.C. team, Bev continues to draw on a wealth of experience and knowledge to advocate for ASA across this broad portfolio.

Jim Kukowski, chair of the Conservation & Precision Ag Advocacy Team and grower from Strathcona, Minnesota, says, "I love working with Bev. She is a very intelligent person. Also, she is fun and easy to work with. She really knows the issues, which makes working on the Conservation and Precision Agricultural Advocacy team easier. We are very happy to have her help and guidance."

POLICY TEAM

(continued on page 16)

(continued from page 15)

significant carbon sinks—together offsetting approximately 12% of total U.S. GHG emissions (USEPA 2018). While forestry and forest soils account for the lion's share of that carbon sequestration, cropland soils also contribute.

Improved soil carbon sequestration improves agricultural resilience by reducing soil erosion from wind and water and by improving water-holding capacity and resistance to drought. ESMC's goal is to launch a voluntary, national-scale ecosystem services market to sell both carbon and water quality and quantity credits for the agriculture sector by 2022.

Says Paul, "When such a non-profit market evolves, recognizing and paying farmers for their ecosystem services, ASA will have been at the table since day one."

A foundation beyond retail superstores

ASA is excited about its new partnership with the Walton Family Foundation, focused on a shared goal of improving water quality in the Mississippi River Basin.

"After a robust series of focus groups and surveys to identify farmers' knowledge and challenges to adopting conservation practices, we are now putting work on the ground," says Paul.

Initial results involve projects across the soy states. The Walton Family Foundation grant has helped the Indiana Soybean Alliance expand its introductory cover crop program to additional farmers and the Ohio Soybean Association to begin a similar project.

"And, exciting!" Paul adds, "The effort has provided grants to three farmers to cost-share the demonstration of new, next-level conservation practices on their farms."



ASA will share the results of the Walton Foundation collaborative work in an effort to help more soybean farmers learn from these experiences.

Next 100: Sowing seeds for the future

This year during which we have paused to reflect on ASA's past is now coming to a close. With the organization's special 100th anniversary year waning, there comes the opportunity to pivot and look to the future. That organizational future and the future of soy policy, with this team in place, has all appearances of being bright.

"Our entire ASA D.C. policy team is one of the best assets as farmers and as an industry that we have," says Gackle.

The issues outlined in this article are but a very few that ASA's cohesive policy team is

carefully sorting through every day in D.C., sowing the seeds for soy's future. Both Gackle and Ragland say it is important to support ASA and participate in the advocacy work this team is leading so the organization can continue to grow and be even more effective.

Speaking from his combine in rural Kentucky, Ragland says thoughtfully, "As farmers, I think we can very easily—and quite often do—take for granted these passionate folks who are actively working on our behalf on these issues that are so important to us running a successful farm. We forget these people are in D.C. working early and late every day, and we don't always think about that devotion that helps us on our farms. Whether out here in the fields or there in D.C., we all have an important job to do to stay successful."

Congratulations to



on 100 years of
U.S. soybean industry growth
and advocating for soybean farmers.





unitedsoybean.org

INVESTING IN NEW MARKETS FOR U.S. SOY

From promoting the profitability of using high-quality soybean meal in India to training animal producers on nutrition in Colombia, the soy checkoff is working behind the scenes to develop more market opportunities for U.S. soy. 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. 

©2018 United Soybean Board. Our Soy Checkoff and the Our Soy Checkoff mark are trademarks of United Soybean Board. All other trademarks are property of their respective owners.

SOY checkoff news



‘Soy’ Much to Offer Roads and Other Infrastructure Jobs

From left: Sarah Mark of the City of Moline discusses opportunities to use soy-based asphalt with USB Chair Jim Carroll and Vice Chair Dan Farney. Moline has started to demonstrate multiple soy-based products in cooperation with USB, Illinois Soybean Association and the American Lung Association.

More than 4 million miles of paved roads in the United States present opportunities for U.S. soy to supply a sustainable solution for construction or maintenance of high-performance highways, as well as rural roads. In fact, U.S. soy might already be in an infrastructure project near you.

The United Soybean Board (USB) and state soybean checkoffs support research for U.S. soy to serve as a natural choice for asphalt and concrete sealants and as a new dust suppressant for roads and construction sites. Infrastructure projects require heavy duty equipment, which can count on biodiesel, hydraulic fluids, greases, and more products made with soy.

“U.S. soybean oil is a great product to use in roads and fleet services,” says USB Chairman Jim Carroll. “As USB continues to support research, we find new things every year.”

Infrastructure is a big market opportunity. The U.S. Department of Transportation’s (DOT) “Status of the Nation’s Highway, Bridges and Transit” analysis released in December 2019 shows that all levels of U.S. government spent

a combined \$222.6 billion for highway projects in 2014. DOT finds rural roads, highways and bridges face a \$211 billion backlog of repairs and improvements.

USB, Iowa Soybean Association, Asphalt Paving Association of Iowa, and a team of researchers at Iowa State University debuted a cost-effective asphalt biobased polymer using high oleic soybean oil in 2019. This summer, they demonstrated it with multiple municipalities. The product is also in its second year of a three-year evaluation at the National Center for Asphalt Technology at Auburn University in Alabama.

Each mile of a typical four-lane highway would use the equivalent oil from approximately 1,500 bushels of high-oleic soybeans and an additional 1,500 bushels of commodity beans, calculates Eric Cochran, an Iowa State professor of Chemical and Biological Engineering.

“The soy-based polymer improves performance while it also promotes environmental stewardship—not only because it’s biobased, but also because you’re able to reuse more recycled asphalt content when you’re producing

these roads,” says Cochran. “Importantly, it is cost competitive with asphalt paving materials that depend on foreign oil instead of U.S.-grown soybeans.”

Cargill developed Anova, a biobased asphalt rejuvenator that the Missouri Soybean Merchandising Council features in the parking lot of its Center for Soy Innovation.

Minnesota counties found success with a soy-based road product, RePlay by BioSpan, that the Minnesota Soybean Research and Promotion Council introduced to them. Developed with USB support, RePlay is letting Hutchinson, Minnesota postpone road replacements.

“We don’t have the time and resources to put toward street maintenance, so we need streets to last,” says Hutchinson’s public works manager, John Olson, who reports residents like the citrus odor and that RePlay doesn’t harm their plants.

Concrete roads, dams, driveways, parking lots, and more are also opportunities to use a soy-based concrete sealant, PoreShield™, that Purdue University developed with Indiana Soybean

(continued on page 20)

(continued from page 19)

Alliance (ISA) support. A Columbia University study finds the United States produces more than 500 million tons of concrete each year—the equivalent of 2 tons for every man, woman and child.

PoreSheld™ is a biobased alternative to traditional concrete protectors that contain harmful chemicals, such as silicon and petroleum-based fillers. ISA has successfully demonstrated the product with the Indiana Department of Transportation, major universities,

fire stations, individual driveways and 83 Indiana bridge decks scheduled for application this year.

Midwestern and southern roads are also 2020 trial sites for a new dust suppressant that North Dakota State University developed with USB support. The Illinois-based BioBlend company is now perfecting the soy-based dust suppressant that could soon step into a multimillion-gallon market to replace calcium chloride or magnesium chloride.

“We appreciate what the United Soybean Board has done for companies like ours to be able to take these products that take a little extra research, a little bit more product development, and help us get them commercially available,” says BioBlend VP Steve King. “Without USB’s help, it would be very difficult for us because of the time commitment and the development costs.”

Source: United Soybean Board

U.S. Soy Improves Air Quality—One Step at a Time

Recently the American Lung Association reported that 70-90% of consumers’ time is spent indoors. With schools back in session and colder months approaching, the concern for indoor air quality is growing, and soy growers have a solution.

Farmers accustomed to customers’ demand for sustainable products are stepping up—quite literally—to provide biobased solutions to improve indoor quality. One of those solutions is probably right outside your front door: A mat outside the entrance captures dirt, dust, and more before it enters a home or office building, providing an essential step to ensure the air quality and people inside remain healthy.

“As a part of the American Lung Association Health House program, we recommend that mats be used outside the home or office,” says National Senior Director Angela Tin. “And we recommend that mats have little petroleum and be biobased to minimize chemicals.”

One company providing consumers with soy-biobased mats is Signature Flooring. The company has created the Trellis Entryway System, which is touted as “From America’s Farms to Your Floors” and contains EnviroCel High-

Performance Sustainable Backing, produced with renewable biobased material extracted from U.S.-grown soybeans. Trellis entryway mats are customizable with specific colors, branded logos, insets, and motifs and can be sized for any space—from school entryways and hallways to office lobbies and elevators. Signature Flooring works closely with U.S. soybean farmers, the United Soybean Board (USB), and the U.S. Department of Agriculture on the “Farm to Floor” campaign and, as a result, has replaced 90% of the petroleum-based polymers in its products with biobased mats from U.S. soy.

While air quality concerns have intensified, the demand for Signature’s soy-biobased mats goes back to 2010 when a Pentagon pilot program used EnviroCel soy-backed mats for its main entrances. The use of these entry mats later supported the

2015 Presidential Executive Order, Planning for Federal Sustainability in the Next Decade, which accompanies laws that Congress enacted for the federal government to set the pace for the nation by buying biobased products, such as those made with soy. Today, these mats are still being used by the Pentagon, proving that prioritizing sustainability does not affect performance—and can help with air quality, to boot.

Source: United Soybean Board



The American Lung Association Health House program promotes the use of mats outside homes and offices to capture dust and dirt and help keep indoor air quality healthier. Furthermore, the association recommends the mats be biobased, such as soy-biobased, to minimize chemicals.



unitedsoybean.org

MAINTAINING OUR REPUTATION TO DELIVER

Whether shipping by river, road or rail, the soy checkoff is committed to ensuring America's infrastructure is a significant advantage for U.S. 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. 

© 2018 United Soybean Board. Our Soy Checkoff and the Our Soy Checkoff mark are trademarks of United Soybean Board. All other trademarks are property of their respective owners.

How ASA Soy Program Participants are Leveraging Social Media for Soy's Future



Amanda Heilman (right) advocates for agriculture using both social media and her personal blog, offering a glimpse into her life on the farm with husband Wes Miller (left).

Facebook. Instagram. Twitter. Blogs. Websites. YouTube. Farmers have plenty of tools to share their messages with other farmers, legislators and consumers. And for those who have participated in social media training, developing a niche has become easier and more effective.

"I got involved with ASA's Agriculture Communications Team (ACT) in 2017 and found it to be the best media training I ever received," says Amanda Heilman from Rising Sun, Maryland. "It put more tools in my toolkit, and I have had a strong social media presence ever since."

Create an identity

Heilman and her husband, Wes Miller, were also ASA Young Leaders in 2019. Miller is a sixth-generation dairy farmer who produces

soybeans, corn, wheat and hay.

Heilman helps on the farm as she can.

"I am a full-time cheesemaker," says Heilman, the University of Delaware's UDairy Creamery plant operator. "I am a huge foodie. Cooking is my passion."

Heilman, otherwise known as the "Delmarva Crop Queen," got involved with ASA at the urging of Delaware soybean farmers when she was a seed sales rep for DuPont Pioneer. She has also served as a CommonGround volunteer, which put her in communication with consumers. CommonGround is a group of volunteer farmers that have conversations with consumers about the food they grow and how they produce it.

"I was traveling in the Mid-Atlantic for work. People started

referring to me as the Delmarva Crop Queen, so I took advantage of that by posting on Facebook with the nickname," she says.

"I started using Instagram and Twitter to share agronomic alerts and legislative issues."

Heilman spends about an hour a day creating social media posts. She especially enjoys sharing food pictures on Instagram, using relevant hashtags and relating the food back to the farm.

"I am raising awareness about agriculture. I get so many comments from followers who say they are unaware of what happens on the farm. They need to know where their food comes from, especially as consumers are increasingly removed even further from the farm," she says.

Heilman also maintains a website and blog (delmarvacropqueen.com), although she does not see as much traffic with the blog unless it involves recipes. Her area of growth is in live videos.

"Videos are huge. Wes and I did one on the tractor packing corn silage. We called it 'sauerkraut for cows,' and it is insane the number of views we got. We will do more of those," she says.

She also has been posting about their wedding, where they hosted a farm-to-table dinner with everything grown on the farm, including cotton for boutonnieres.

"Consumers like to see how farmers do usual things. They want to see how they might relate to you doing things they do," she says. "My advice is to tell your story. Be transparent."

Amplify your message

Telling their story is exactly what

farmers Angie and June Provost of New Iberia, Louisiana, are doing with social media. The ASA Young Leaders use their training to share a personal story of discrimination while also talking about their passion for agriculture.

"We are on a pathway to rebuild and secure our farm legacy and our future in agriculture," says Angie. "We work to dispel myths about Black farmers and to be included in the conversation. Trade wars, fair pricing and having the right resources to farm are not black or white issues."

Both Angie and June have faced discrimination through the farm loan process and sugar cane production contracts in the past. As they started to speak out and question practices, their farm was vandalized multiple times. Due to the many challenges they faced, June, a fourth-generation farmer, lost the family's 5,000-acre farm in 2015. Angie lost 500 acres in 2017.

"Farming is everything to me. I want to get more Black kids involved in agriculture," says June. "We are proponents of family farms and want to remain part of modern agriculture."

Since participating as Young Leaders, the Provosts have become even more active with social media, primarily using Twitter, Instagram and Facebook (@angela.provost.farm and @juneraisincane) to share their message. They are also considering YouTube.

"Social media for our generation is a tool our ancestors did not have to be open and honest about the situation of Black farmers. It gives us access to a variety of people we might not otherwise reach," says Angie. "In sharing our views, we have found we are not the only Black farmers in this situation, and we have had white farmers reaching out with support. It is extremely important to advocate for the rights of Black farmers because they are the rights of all farmers."

Both June and Angie say the Young Leader program gave them the opportunity to visit other soybean production areas and learn about farming from different points of view.

"Farm groups must be intentional in getting Black farmers involved. Agriculture is too important to our nation to not share how farming and American values relate to all of us," says Angie.

Be personal, add humor

Jordan Scott, Scott Family Farms, Valley Springs, South Dakota, also finds that sharing personal stories rings true with the audiences he reaches through YouTube. And he adds a touch of humor.

"It is good to get your message out to farmers, consumers, legislators and others in a way that connects with people," says Scott, a fifth-generation farmer.

He and wife Samantha farm with Jordan's parents. The 1,300-acre corn and soybean farm, which is near Sioux Falls, has been in the family for more than 100 years.

The couple became Young Leaders in 2016, and Jordan was elected to the state soybean board. He also has participated in Soybean Leadership College, Leadership at its Best and ACT. And like Heilman, Scott found ACT a great resource for delving into social media.

"You have to get out of your comfort zone and see yourself on video. It changes your perspective, and it is good to get



(From left): Angie and June Provost use social media to share their personal obstacles as Black farmers, as well as their passion for agriculture.

tips on how to be effective," he says. "I watched a lot of YouTube videos to get started. It is hard at first and takes time to build a following, but you should just be yourself."

Scott can be found at Scott Family Farms on Facebook and YouTube and SFamilyFarms on Instagram. He spends about 20 hours a week putting together his YouTube videos.

"I follow myself around all day and tell my story. I talk about our equipment, products we use, plant and soil health and other topics," he says "I have a broad scope of farmers nationwide, and my city friends follow me. It's a great way to show the work it takes to be a farmer."



As a way to connect with consumers and legislators, Jordan Scott (left) produces a YouTube channel detailing various aspects of life on the farm as he works alongside wife Samantha (right) and his parents in Valley Springs, South Dakota.

ISSUE update

By Kyle Kunkler, ASA Director of Government Affairs for Biotechnology and Crop Protection

Discord on Dicamba: The Court Ruling that Sparked a Legal, Regulatory and Agronomical Firestorm

It's the call no policy staffer ever wants to receive. But late on the evening of Wednesday, June 3, it came all the same. "That crop protection tool your growers use on over 50 million acres? Vacated! That's right, at the peak of growing season. Oh, and it gets worse. These court decisions always take weeks to implement, right? This one? Immediate." While there was certainly no need to explain the gravity of the situation, at the time I had no idea that call would thrust the American Soybean Association (ASA) into the legal and regulatory equivalent of a Wimbledon court littered with landmines. Rocketing volleys whizzing back and forth—and we cannot miss—and we'd prefer to not get blown up in the process.

Our response had to be immediate and decisive. Before the start of business June 4, ASA was on the phone with Environmental Protection Agency (EPA) staff discussing the dicamba ruling and any recourse that existed for the hundreds of thousands of affected growers. With misinformation swirling, ASA staff sent our membership a status update clarifying the ruling impacts and actions ASA was pursuing. In concert with other affected groups and concerned members of Congress, ASA got to work pressing EPA to allow for the use of existing stocks to responsibly—and legally—wind down use of the products. We needed EPA to

act quickly: With warmer weather and state application deadlines approaching, every day growers went without federal guidance was another day closer to application windows closing.

It was not enough to push EPA, however. We had to think three steps ahead. ASA predicted if EPA offered the existing stocks guidance, the environmental groups that brought the original lawsuit would seek to strike it down. They got a major victory from the Court and did not want to lose that win. ASA began working behind the scenes to coordinate a coalition of grower groups equally disturbed by the Court's willingness to invalidate crop protection registrations overnight. When EPA issued its existing stocks guidance June 8—promptly followed by the anticipated environmental group emergency motion to the U.S. Ninth Circuit Court of Appeals seeking to strike down the guidance—we were ready. ASA led a coalition of six grower groups to submit a brief to the Court explaining the critical and timely need for crop protection tools and why EPA's guidance was justified.

We anticipated we might need to seek relief from the U.S. Supreme Court. Amazingly, that need never came. On June 19, we received a far more welcome call than that June 3 call. Without explanation, the Ninth Circuit

Kyle KUNKLER



Kyle Kunkler, ASA Director of Government Affairs for Biotechnology and Crop Protection

dismissed the environmental group motion and allowed EPA's existing stocks order through July 31. While overwhelmed by the victory, we knew the dispute was far from over. In the days to follow, ASA would again lead growers to support a rehearing of the Court's decision. And, we have advised EPA on its new dicamba registration expected this fall.

The smoke on the tennis court has cleared a little for now, but we'll continue to need skilled footwork ahead to make it to match point on this challenging issue. ASA knows just how vital it is for your operations to have choices in the crop protection tools available to you, and we will continue to advocate strategically and vigorously to defend your access to them.

INDUSTRY

perspective

By Paul Schrimpf

A Roundup of Blossoming Technology

After more than two decades of covering precision and digital technology adoption on the farm, I've come to appreciate the difficult challenge that both farmers and suppliers have endured to get where we are today.

The quantity of great ideas to emerge from individuals and organizations over this time has been staggering. But the ability to scale products and services that create consistent value is a monstrous mountain to climb. It's true for most industries, but agriculture's immense diversity in farming operations—even among farmers in single crop categories like soybeans—creates significant hurdles for established ag giants and venture capital driven entrepreneurs alike.

About five years ago, investment in agriculture from

outside the industry went wild. Over that time, the best ideas triumphed, or were acquired and absorbed. More recently, investment from the outside waned in technology for the traditional commodity crop markets. And in 2020, in addition to dealing with the pandemic, farmers and suppliers have been busy sorting out and digesting all the technologies and systems that emerged in the last half decade.

I've experienced a few of these cycles of relative "quiet," and from my viewpoint they are among the most exciting times in the development of agriculture technology. Given the time and space to sort through the rubble of ideas and products, real breakthroughs emerge. Below are three segments of technology that blossomed this year, and I believe will continue to impact soybean growers in the years ahead.

PaulSCHRIMPF



Paul Schrimpf is Group Editor at Meister Media Worldwide, an agricultural media company based in Willoughby, Ohio. He has managed the company's PrecisionAg brand for more than 20 years.

Electronic business

Everyone to varying degrees shared the disruptive effects of social distancing requirements during the pandemic. At a minimum, farmers were not able to engage with their advisers and suppliers through the critical planting and early scouting months. Suddenly, smart phones, apps and software systems were leaned on heavily to keep lines of communication and access to information open.

With help of research conducted by the PrecisionAg Alliance, an education and advocacy organization supported by ASA, producers and suppliers shared their experiences from this past spring. Overall, two-thirds of surveyed farmers engaged in some measure of e-business, from researching and purchasing products to accessing and managing field data.

(continued on page 26)



Next year should see plenty of enhancements to the digital user experiences tapped into this season during the pandemic.

(continued from page 25)

In general, these experiences were viewed as positive by farmers, and all indications are that use of digital tools for business will continue to increase. Suppliers are recognizing that this is indeed a watershed season for electronic business and will continue to invest and tune offerings to the needs of farmers. Next year should see plenty of enhancements to the digital user experiences tapped into this season.

Imagery

I recently completed some research on imagery for an article, and what impressed me is how it has evolved from stand-alone product to an integrated agronomic tool.

This is especially true for imagery that aids directed scouting for the agronomist. Successful systems are providing clues to variability within the field in season that, often combined with other field data, help the scout to recognize and prioritize field issues to follow up with boots-on-the-ground observation.

Some suppliers are working on algorithms that could further tune imagery to help get more specific about the type and severity of crop pest and fertility problems as well, which could further improve its value. But after so many years of waxing and waning value, the benefits of imagery service are finding a meaningful place in the crop production system.

Getting serious about carbon

The venture-driven tech company Indigo has kept a steady spotlight on the concept of rewarding farmers for engaging in practices that maintain and regenerate soil health. In 2020, we've seen a groundswell of support of these initiatives emerge from agriculture



The race to mainstream soil health protocols has heated up as more tech and ag companies support initiatives rewarding farmers for regenerative practices.

companies, including Bayer, Land O'Lakes, and Corteva, focused on giving farmers a clear path to meeting criteria that would provide a premium.

I've been impressed with how fast this movement is progressing, and the race to mainstream protocols has certainly heated up. Undoubtedly, these systems will require a base level of valid field data for farmers to enroll once they become available. Now might be a good time to engage suppliers and trusted advisers to discuss the possibilities for your operation, and what you can do to prepare.

One final thought—it's been wonderful to witness the sustained attention that the need for rural broadband has been receiving over the past few years. Legislative action that began in 2017 has been kept active by USDA, led by Secretary Sonny Perdue, and also by the FCC's Broadband Deployment Advisory Committee

and legislators at the state and federal level who continue to work on ways to accelerate the process.

The pandemic has shone a bright spotlight on the devastating effects of poor internet access, in particular for schools and healthcare facilities, in addition to farms and agricultural businesses. We need to keep this issue at the forefront with our legislative leaders and be active on local initiatives that will make broadband connectivity a reality.

The planning season ahead is going to be very interesting indeed, from the uncertain political and regulatory climate to international trade and industry consolidation. Emerging technology is only one thing you'll be looking at among so many pressures and forces impacting your farm operation. But I am heartened to see a greater focus on delivering real value and improving collaboration among key suppliers.

WISHH's USB Initiative Speeds Protein Progress in Emerging Markets

A West African feed company owner and his customers liked the U.S. soy the American Soybean Association's (ASA) World Initiative for Soy in Human Health program (WISHH) delivered to him through a U.S. Department of Agriculture (USDA)-funded Quality Samples Program. After participating in WISHH feed extrusion training, the entrepreneur made his own soy-based floating fish feed.

So, what's stopping this 45-employee company from buying U.S. soy for its approximately 10,000 tons of annual production of livestock, poultry and fish feed?

There's no simple one-size-fits-all solution to overcome obstacles to supply chains in developing and emerging markets. Based on 20 years of experience, WISHH designed its USB-funded initiative to take on these challenges in Africa, Asia, and Latin and Central America. The Mobilizing Entrepreneurs to Expand U.S. Soy Utilization in Developing and Emerging Markets initiative works to compress the time for a new U.S. soybean market to go from emerging market entry to basic market ready. The initiative attracts and mentors entrepreneurs who can invest in developing and emerging market soy enterprises, bringing new market sectors into the U.S. soy market pipeline.

USDA provided stage-one funding for WISHH's USB-funded initiative, which included WISHH conducting a series of key market assessments in Africa, Asia, Central America and the Dominican Republic. Highlights of WISHH's USDA-funded market assessments include:

AFRICA

Burkina Faso

- 100% of the companies that participated in the market

assessment have a positive impression of U.S. soy products, but they have limited or no experience using U.S. soy.

- 100% of the feed mill managers said they need imported soybeans to supplement local soybean production.
- Foods derived from biotechnology do not require import approval.

Togo

- Solid potential to serve as a hub for regional U.S. soy efforts in West Africa due to proximity to major markets, supply routes to neighboring landlocked countries, and existing port facilities.
- Reliance on costly prepared animal feed underscores the potential for soymeal.

Kenya

- The U.S. and Kenya in February announced plans to negotiate a Free Trade Agreement (FTA), which would be the U.S.' first FTA with a sub-Saharan African country.
- Lack of easy financing options and affordable commercial credit facility for investors has led to an underdeveloped soybean crushing industry.

ASIA

Cambodia

- Continued foreign investment in animal feed mills demonstrates the livestock sector is poised for growth.
- Feed millers prefer the digestibility and consistent quality of U.S. soybean meal but are price sensitive.

Sri Lanka

- The government wants to increase aquaculture production by strengthening the value-chain links.
- The growing middle class has



(From left): Rady Chea, general manager of the first feed mill in Cambodia to add a manufacturing line for fish feed, discusses soy protein with USB Director and WISHH ex-officio member David Williams of Michigan, ASA Director and WISHH program committee member Morey Hill of Iowa, and WISHH committee member and past Missouri Soybean Merchandising Council Chair David Lueck.

positive views on soy foods—meat analogues and snack foods are two opportunities.

CENTRAL AMERICA AND DOMINICAN REPUBLIC

Food & Beverage Manufacturers

- Soy use is growing in food and beverages—29% of surveyed manufacturers currently produce products using soy.
- 100% of the surveyed manufacturers are willing to work alongside WISHH and its partners on use of U.S. soy protein ingredients.

Retailers

- 59% of distributors and retailers surveyed would consider partnering with a strategic partner to co-invest in marketing and advertising of soy-based products.

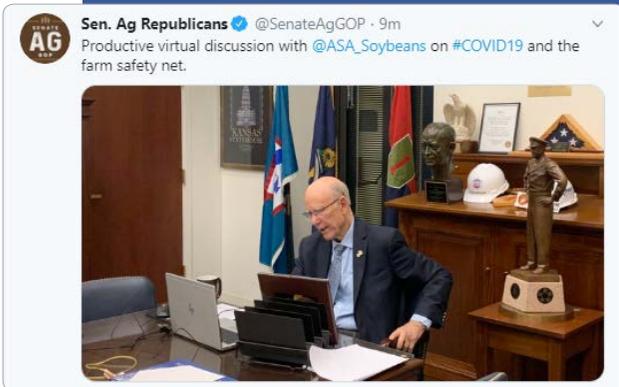
End Consumers

- Central America's middle income households will grow by 30% over the next five years.

#SOY SOCIAL

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

Sen. Pat Roberts (KS) tweets about his talk with soy leaders during ASA's virtual Advocacy Team meetings in July.



ASA Director Kendell Culp (IN) advocates for soy growers in his fields and on social media. Over the summer, Culp posted on Facebook after hosting Sen. Todd Young on his farm in Indiana to discuss policy issues impacting soybean farmers



LaVell Winsor, member of ASA's Agriculture Communications Team (ACT) and a Conservation Champion, shares sustainable practices her family uses on the family farm in Kansas, igniting discussion with other farmers and consumers on social media.



Follow the American Soybean Association on:



@ASA_Soybeans



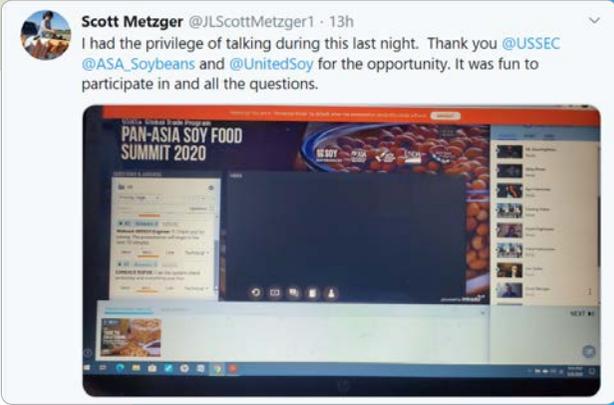
/AmericanSoybeanAssociation



@AmericanSoybeanAssociation



/AmericanSoybeanAssoc



↑
Soy leaders may not be able to meet in person due to the pandemic, but that hasn't stopped them from discussing issues, both domestically and internationally. ASA Director Scott Metzger (OH) tweets about his participation in the U.S. Soybean Export Council's Pan-Asia Soy Food Summit 2020.



↓
Purdue University gives a Facebook shoutout to ASA in a story featuring one of its previous students, who also happens to be the great-great granddaughter of one of the co-founders of ASA.



Great-great-granddaughter of American Soybean Association co-found...
 "I grew up on stories like this, said Crum, whose great-great-grandfather was among the first farmers to grow soybeans in the United States. ...
 ag.purdue.edu



←
Shirley Bloomfield, CEO of NTCA—the Rural Broadband Association, tweets about ASA's Soy Issues Forum, where she provided an update on the vital work and advocacy taking place to ensure rural communities have access to secure, reliable and fast internet.

←
The Minnesota Soybean Growers Association posts a tribute to the late Herb Halvorson, a past ASA director who passed away in May.



Student Innovators Chart a Bright Future for Biodiesel

By Melissa Narins

Next Generation Scientists for Biodiesel (NGSB) are frontrunners in research that can yield new opportunities for soybean farmers and biodiesel producers alike.

Pennycress, a plant in the mustard family, is named and sometimes grown for its round seedpods. Field pennycress is primarily a winter annual weed of winter small grains, which is where its potential connection to soy comes in. Zenith Tandukar's pennycress research at the University of Minnesota offers an opportunity to complement soybean production with an oil-producing cover crop that can also serve as a cash crop.

Meanwhile, at the State University of New York College of Environmental Science and Forestry, Jenny Frank's research quantifies the impacts of investing early in biodiesel and renewable diesel versus waiting five years and investing in an immature battery-electric pathway.

Frank and Tandukar, both Ph.D. students, are two of the four new co-chairs selected to lead the NGSB, a National Biodiesel Board- and United Soybean Board-supported program for college-level science students. NGSB fosters professional relationships between budding and established scientists, shares accurate information, and increases collaboration between academia and the biodiesel industry.

Tandukar's research focuses on domesticating and breeding pennycress into a major oilseed crop—and a potential source of biodiesel and jet fuels.

"Through my research, we will identify ways of increasing oil production by gaining an understanding of the genetic basis

of oil content and seed size in pennycress," he says. "Increasing seed size and oil content can improve seed handling, crushing efficiency, and increase farmer and industry profits in the long term. Clearly, the demand for plant-based biofuels is on the rise, and these demands can be fulfilled with current sources like soybeans and corn as feedstock, but also supplemented by new sources of feedstock like pennycress."

Frank conducts techno-economic analyses for renewable energy pathways, quantifying the technical and financial feasibility of different technologies and feedstocks, including biomass-based diesel (biodiesel and renewable diesel), in class 8 heavy-duty trucks. Her results find that when compared to battery-electric as a pathway to decarbonization, the biomass-based diesel pathway achieves the largest 20-year net present value.

"To reduce the probability of catastrophic climate change, the world economy needs to quickly decarbonize, and biodiesel is a promising piece of the solution," explains Frank.

"I think biodiesel is a particularly interesting fuel system, as it is a mature carbon abatement pathway that yields greenhouse gas emissions reductions as opposed to standard petroleum diesel."

The two other new NGSB co-chairs are:

- **Leo Budy**, an undergraduate chemical engineering student at the University of Kansas, who has been a leader in the KU Biodiesel Initiative, a grassroots, student-run operation that produces biodiesel from used cooking oil generated on campus. In addition, the

ZenithTANDUKAR



Zenith Tandukar, Co-chair of Next Generation Scientists for Biodiesel

JennyFRANK



Jenny Frank, Co-chair of Next Generation Scientists for Biodiesel

University granted Budy an undergraduate research award to explore plant-based adsorbents for the dry washing of biodiesel and biodiesel feedstocks.

- **John Cramsey**, an undergraduate chemical engineering student at Iowa State University who served as president of the BioBus Club, which travels to local dining centers on campus, collects used fryer oil, and converts it into biodiesel using their own reactor. It's then used to help fuel the "CyRide" buses on campus and in the Ames, Iowa, community. Cramsey also secured a summer job with AGP, a biodiesel producer and soybean processor in Iowa.

For more information about the NGSB, visit biodieselsustainability.com.



1920 (L to R) Brothers and pioneer soybean growers Taylor, Finis and Noah Fouts on their Soyland farms in Camden, Ind., on Sept. 3, 1920, at the “First Corn Belt Soybean Field Day” where ASA was founded.

2020 (L to R) John Heisdorffer, immediate past ASA chairman, Bill Gordon, ASA president and Davie Stephens, ASA chairman

FROM SOYLAND TO CAPITOL HILL

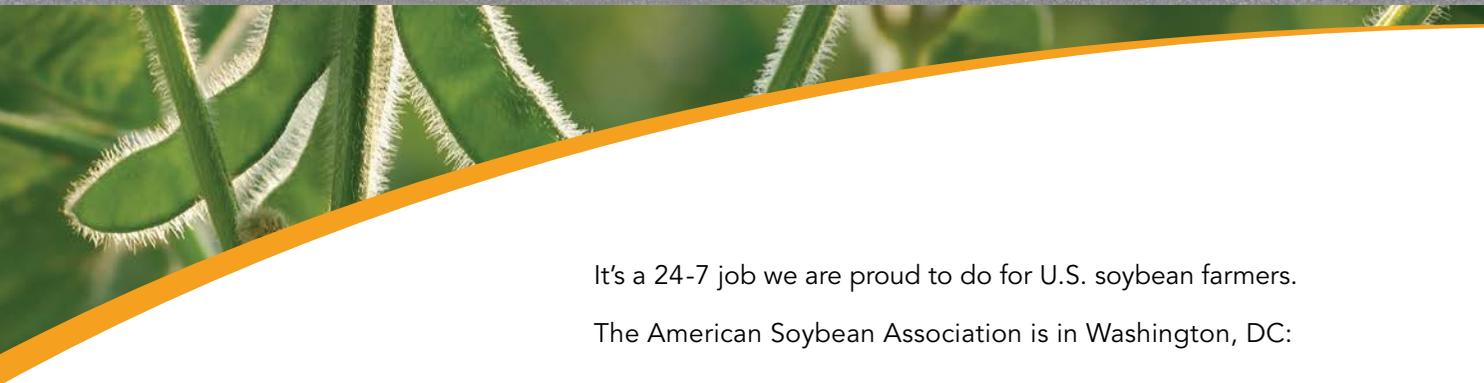
A century of growing the U.S. soybean industry and advocating for soybean farmers

100Years
1920-2020
American Soybean Association®

ASA100Years.com



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.

