KNOWLEDGE SHARING
The Education & Communication Issue: Teaching and telling the story of soybeans’ value on pages 10–21.

8 Soy-based road sealant can pave the way for cost-effective road preservation.

26 The latest update from the USMEF’s president and CEO indicates promising times ahead for meat exports.
FOR BETTER MARGINS

THE LINE FORMS HERE.

Stay out in front with Asgrow® brand soybeans. Featuring 100% exclusive genetics and tailored, integrated solutions to help maximize profitability on every acre. Ask your dealer how much further you can grow when Asgrow leads the way.
Here’s How It’s Been Growing:

4 | EUGENE’S TAKE ON SOYBEANS FOR 2020
Read this year’s outlook from Eugene Goering, the newly appointed NSB chairman.

5 | SOYBEANS IN THE SPOTLIGHT
Association President Robert Johnston pens his final message as he concludes his tenure.

6 | YOUR 2020 BOARD LEADERSHIP
Meet your NSB committees and officers for the year ahead and learn about USB appointments.

8 | ‘KEEPING THE GOOD ROADS GOOD’
Soy-based road sealant can pave the way for cost-effective road preservation.

10-21 | KNOWLEDGE SHARING
Our feature section highlighting how the Nebraska Soybean Board invests checkoff dollars in education and communication projects to enhance soybeans’ value.

11 | WHY WE INVEST IN EDUCATION & COMMUNICATION
Board Member Anne Meis underscores the importance of strategically investing in ways to teach and talk about soybeans to all audiences.

12 | TEACHING OUTSIDE OF THE BOX
Fourth-grade students learn about all the wonderful ways soybeans impact agriculture and their daily lives through two unconventional lessons.

13 | NEVER TOO SOON TO FOCUS ON THE FUTURE OF FARMING
The future of soybean farming is in good hands with Nebraska FFA.

14-15 | SOYBEAN EDUCATION IN ACTION
Teachers are meeting new state standards for science and bringing soybeans into middle school classrooms thanks to the Soybean Science Institute.

16 | ON THE AIR
Partnership produces content, collaboration and communication across seven states.

17 | WHY JUST READ ABOUT CHECKOFF DOLLARS WHEN YOU CAN ‘SEE FOR YOURSELF’?
Join other producers to learn about soybeans on a larger scale through this NSB tour.

18-19 | EFFECTIVE, EFFICIENT, FARMER-DRIVEN
The NSB’s partnership with Nebraska Extension yields a host of helpful educational events and resources free to growers.

20-21 | TELLING THE AG STORY
Add social media to the list of technologies changing agriculture, especially how it’s seen by the outside world.

22 | NSB SHOWS SUPPORT FOR WOMEN IN AG AS GROUPS HOST ANNUAL CONFERENCES
At the Ag-ceptional Women’s Conference in November, NSB celebrated women’s role in agriculture.

23 | BRING YOUR VOICE TO THE TABLE
Join the U.S. Farmers and Ranchers Alliance as they tackle emerging issues.

25 | BIODIESEL DEMAND GROWS IN THE BIG APPLE
New York City’s growing dependence on Bioheat has opened a new market for soybeans.

26 | BIG GROWTH OPPORTUNITIES
The latest update from the USMEF’s president and CEO indicates promising times ahead for meat exports.

27 | 3 NEBRASKANS CHOSEN FOR ASA YOUNG LEADER PROGRAM
Growers from Doniphan and Randolph were selected into this year’s program.

On The Cover
Soybean Science Institute (SSI) participants take an up-close look at soybean aphids. Credit: Thomas Hoxmeier.
Note from the Executive Director

The winter issue of SoybeanNebraska focuses on investments the Nebraska Soybean Board (NSB) makes in education and communication programs. NSB has a strong presence in Nebraska schools, starting with fourth-grade education programs like the Ag Sack Lunch program for students visiting our state capitol. At the junior high level, our Soybean Science Institute gives teachers scientific insights to implement curriculum using soybeans as a teaching tool.

The NSB provides valuable information and research results to farmers and consumers to help share knowledge and best practices in agriculture. Soybean Management Field Days has provided unbiased research for 22 years across the state as well as other timely topics regarding soybean pests, diseases and risk management.

Good education and communication programs are key for soybean farmers and consumers. They continue and create relationships and partnerships dedicated to growing domestic and international soybean demand as well as the acceptance of soybean products. Education and communication are a part of the changing world, and the NSB must (and will) continue to communicate those challenges to move our programs forward.

Have a good winter season.

For more information, go to NebraskaSoybeans.org.

---

EUGENE’S TAKE ON SOYBEANS FOR 2020

Even though change was the theme last year, there are plenty of positives to look forward to as the new year begins.

By Eugene Goering, Columbus, NSB Chairman

This January, we look back on a challenging year of weather, flooding and interruption of foreign markets. Yet, there were still many successes adding even more value to the crop we grow: Meal demand is growing in the state with rapid growth in poultry. We hear reports in growth and diversification of foreign markets in Southeast Asia, Europe and across our northern and southern borders. Plus, the use of soybean oil in biofuels is expanding.

Soybean oil continues to amaze me. It is used in the tires on my wife’s car, fuel in my diesel engines, the foam seats of my son’s car and now in road sealants. Demonstrators in Omaha and Lincoln have shown good results and cost savings for pavement preservation.

In spite of the challenging weather in 2019, many producers had very good yields. And so the work of the checkoff board continues in 2020.

A brief introduction: I’m Eugene Goering, your newly elected Nebraska Soybean Board (NSB) chairman, and I was also recently re-elected to represent District 4. I live in Columbus with my wife Sheila, and we farm in the Platte Center area and near Fairmont with my two sons.

The Board is planning for the year ahead and reviewing the year we just completed. We greeted two new members to the Board—welcome to Clay Govier and Jason Penke. They both participated in their first meeting in November and impressed me with what they can bring and contribute to our checkoff. We also reorganized and filled committees with new officers and members. I’m happy to have Anne Meis as our secretary, Daryl Obermeyer continuing as treasurer and Doug Saathoff as vice chairman alongside me as officers. On the national level, congratulations to Ed Lammers and Ron Pavelka, who were appointed to represent Nebraska on the United Soybean Board.

Two NSB members have completed their terms, so we thank Terry Horky and Tony Johanson for their service. We hired a new staff member last fall, Associate Executive Director Scott Ritzman. November was his first meeting with Board, but he has been working for several months and contributed to many projects already.

In closing I want to thank all the Board members and staff. We work to invest your checkoff dollars in projects designed to grow Nebraska soybean farmers’ opportunities here and around the world.

Happy New Year!
Greetings, Nebraska soybean producers.

As the new year begins, we can reflect back at what a year 2019 has been. We’ll remember it for years to come—soybean production and agriculture as a whole are demanding enough, but when you add politics, weather and, yes, more politics, you have a recipe for a challenging crop year.

Most of us do not need to be reminded, but the season began with historic weather conditions—the spring snow, rain and flooding plus uncertainties about planting intentions. Then there were politics and more politics: Even before planting, we knew the administration was still negotiating a trade deal with China. More news came when the USMCA or NAFTA 2.0 had been agreed upon and the House of Representatives would be voting and confirming the deal.

The Nebraska Soybean Association (NSA) worked on these trade issues throughout the year. We made calls, wrote letters and sent emails to our elected officials in Washington. We were part of a state trade group led by the Nebraska Department of Agriculture and traveled to Washington in June to meet with officials concerning trade and getting the USMCA agreement ratified.

With all of the uncertainty surrounding soybean production, there is a silver lining. As harvest wrapped up, we know some beans are being exported (even to China) and the market adjusted slightly. We understand the first-phase agreement with China is ready to be implemented, and the House of Representatives could possibly vote on the USMCA agreement soon. The announcement of the second payment of the market facilitation program gives us some certainty. Hopefully this encouraging news helps us look forward to this year.

Thank you to all NSA members. Without you we could not continue to accomplish our goals and represent you on important issues for the soybean producer. I encourage you to contact friends and neighbors to become a member and support our policy efforts moving forward in 2020.

At the end of 2019, my term as President came to an end. The past two years have been very enjoyable, and it’s been very rewarding to meet and work with so many great people who care about our industry. I want to thank Lori Luebbe, our Executive Director, and the other NSA directors for your encouragement and help responding to issues affecting the soybean industry. It has been my honor to represent Nebraska soybean producers.

May the coming year bring success to you.
YOUR 2020 BOARD LEADERSHIP

Put faces with the names of the Nebraska Soybean Board’s elected officers and committees.

Pictured left to right: Daryl Obermeyer, Anne Meis, Doug Saathoff and Eugene Goering.

Board Officers

Chairman: Eugene Goering, District Four – Columbus
Vice Chairman: Doug Saathoff, District Seven – Trumbull
Secretary: Anne Meis, District One – Elgin
Treasurer: Daryl Obermeyer, District Five – Brownville

Committees

Research Committee: Richard Bartek, Chairman; Eugene Goering; Clay Govier; Nathan Dorn
International Marketing Committee: Daryl Obermeyer; Anne Meis; Clay Govier; Nathan Dorn, Chairman
Education & Communication Committee: Jason Penke, Chairman; Daryl Obermeyer; Anne Meis; Greg Anderson; Doug Saathoff
Domestic Marketing Committee: Richard Bartek; Eugene Goering; Jason Penke; Greg Anderson, Chairman; Doug Saathoff

For more information about the board and a list of board members, visit nebraskasoybeans.org and unitedsoybean.org.

Appointments to the USB

In November, the U.S. Department of Agriculture (USDA) announced the appointment of 43 directors and five alternates to serve three-year terms on the United Soybean Board (USB).

Nebraska’s newly appointed members are Ron Pavelka (Glenvil) and Ed Lammers (Hartington). They join Tony Johanson (Oakland) and Mike Korth (Randolph) as Nebraska’s four USB representatives.

The board is authorized by the Soybean Promotion, Research and Information Act and composed of 78 farmer-directors representing 29 states, the Eastern Region and the Western Region. Members must be soybean producers nominated by a Qualified State Soybean Board (QSSB).

USB develops budgets and contracts to carry out a coordinated program of promotion, research, consumer information, and industry information. The latest evaluation of the program’s value, calculated since its inception in 1991, estimates a $5.20 return on investment for every program dollar invested. The USDA’s Agricultural Marketing Service (AMS) provides oversight to 21 boards to ensure fiscal accountability and program integrity, and it is paid for by industry assessments.
SOYBEAN FARMERS: YOU ARE THE VOICE OF YOUR DISTRICT.

LET IT BE HEARD DURING THE 2020 BOARD MEMBER ELECTIONS.

The election is conducted by mail-in ballot in July for Districts 5 and 7. Soybean farmers who reside in counties that are up for election in 2020 will receive ballots and candidate information regarding NSB’s election process via direct mail. The At-Large position on the Nebraska Soybean Board is open to all soybean farmers in Nebraska and will be elected by the NSB members at the July board meeting.

Election districts and counties are:

- **District 5:** Counties of Cass, Johnson, Lancaster, Nemaha, Otoe, Pawnee and Richardson
- **District 7:** Counties of Adams, Buffalo, Clay, Franklin, Hall, Kearney, Nuckolls and Webster
- **At-Large:** All counties in Nebraska

To apply for a Candidacy in District 5 and 7 or the At-Large Position you must:

- Obtain a NSB Candidacy Petition by contacting NSB’s executive director at (402) 432-5720
- Complete the petition and collect the signatures of at least 50 soybean farmers in their district
- Return petition to NSB office on or before April 15, 2020

Nebraska Residents Cast the Deciding Vote

Our shared soybean farmer community determines electoral winners. These voters must be:

- Nebraska residents,
- District 5 or 7 residents and a
- Soybean farmer who owns or shares the ownership and risk of loss for such soybeans, by reason of being a partner in a partnership, or is a shareholder in a corporation, or is a member of a limited liability company, during the current or immediately preceding calendar year.

**Election Calendar:**

- **DEC. 1, 2019**
  Candidacy petition period began
- **APRIL 15, 2020**
  Candidacy petitions due to NSB office
- **JULY 2020**
  Ballots mailed to eligible voters
- **JULY 31, 2020**
  Final day to return ballots for consideration
- **OCT. 1, 2020**
  Newly elected board members’ terms begin

Reach out to the NSB team for more information at 402-441-3240.
‘KEEPING THE GOOD ROADS GOOD’

Soybean oil showed its worth as a road sealant in a September demonstration in Lincoln.

By Thomas Hoxmeier, NSB Communications Coordinator

“Right treatment on the right pavement at the right time.”

That popular catchphrase is king in pavement preservation and a major consideration of owners and managers of streets, highways, parking lots and all types of driving surfaces.

Because of traffic, weather and age, road crews are always combating the steady deterioration of roadways—but soybean oil could be a factor in counteracting it.

In September, a cooperative demonstration between the City of Lincoln, University of Nebraska–Lincoln (UNL), Nebraska Soybean Board (NSB), United Soybean Board (USB), Agricultural Utilization Research Institute (AURI) and Bargen Incorporated showed the merits of RePlay, a soybean oil-based road sealant.

The demo took place in Lincoln, and revealed the sealant could stabilize and preserve the asphalt, extending the overall life of the driving surface. Formulated by BioSpan Technologies, RePlay cures to a roadway in 15–30 minutes and, when reapplied every 3–5 years, can save road managers the high cost of repaving.

AURI has been studying the impact of RePlay for several years.

“In the past three years, we have been able to assess eight years of data collected in normal operations to show the impact of this important, soy-based product,” said Dr. Jimmy Gosse, a microbiologist at AURI. “Today, it’s about expanding the sphere of influence as we look to see the data replicated in communities across the Midwest.”

RePlay—an 88% bio-based material—helps restore asphalt, effectively reduces moisture penetration that causes cracking from freeze-thaw cycles in cold temperatures and is environmentally safe to use. RePlay costs $1.50 per square yard, a much more affordable option compared to partial and full road reconstruction, which can be 50–100 times more.

Products like RePlay could be a gamechanger for extending the life of roadways. Public roads, especially the U.S. interstate system, are a huge investment and vital for commerce, moving people and goods like soybeans in an efficient manner.

“With bio-based alternatives that can extend the life of asphalt, (we are) not only reducing the pressures on community budgets but returning dollars into our rural communities by supporting our grower partners,” Dr. Gosse said. “The product is also displacing toxic petroleum alternatives, thus transitioning it into an environmental solution—a solution that is safe when used in communities, helping our urban and rural communities thrive.”

“KEEPING THE GOOD ROADS GOOD”

Soybean oil showed its worth as a road sealant in a September demonstration in Lincoln.

By Thomas Hoxmeier, NSB Communications Coordinator

“Right treatment on the right pavement at the right time.”

That popular catchphrase is king in pavement preservation and a major consideration of owners and managers of streets, highways, parking lots and all types of driving surfaces.

Because of traffic, weather and age, road crews are always combating the steady deterioration of roadways—but soybean oil could be a factor in counteracting it.

In September, a cooperative demonstration between the City of Lincoln, University of Nebraska–Lincoln (UNL), Nebraska Soybean Board (NSB), United Soybean Board (USB), Agricultural Utilization Research Institute (AURI) and Bargen Incorporated showed the merits of RePlay, a soybean oil-based road sealant.

The demo took place in Lincoln, and revealed the sealant could stabilize and preserve the asphalt, extending the overall life of the driving surface. Formulated by BioSpan Technologies, RePlay cures to a roadway in 15–30 minutes and, when reapplied every 3–5 years, can save road managers the high cost of repaving.

AURI has been studying the impact of RePlay for several years.

“In the past three years, we have been able to assess eight years of data collected in normal operations to show the impact of this important, soy-based product,” said Dr. Jimmy Gosse, a microbiologist at AURI. “Today, it’s about expanding the sphere of influence as we look to see the data replicated in communities across the Midwest.”

RePlay—an 88% bio-based material—helps restore asphalt, effectively reduces moisture penetration that causes cracking from freeze-thaw cycles in cold temperatures and is environmentally safe to use. RePlay costs $1.50 per square yard, a much more affordable option compared to partial and full road reconstruction, which can be 50–100 times more.

Products like RePlay could be a gamechanger for extending the life of roadways. Public roads, especially the U.S. interstate system, are a huge investment and vital for commerce, moving people and goods like soybeans in an efficient manner.

“With bio-based alternatives that can extend the life of asphalt, (we are) not only reducing the pressures on community budgets but returning dollars into our rural communities by supporting our grower partners,” Dr. Gosse said. “The product is also displacing toxic petroleum alternatives, thus transitioning it into an environmental solution—a solution that is safe when used in communities, helping our urban and rural communities thrive.”
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
The Nebraska Soybean Board invests checkoff dollars to explain the value of soybeans and keep growers up to date and at their best.

11 | Why We Invest in Education & Communication
   To further our future growers and farming, we put time and effort into teaching.

12 | Teaching Outside of the Box
   Our fourth-grade programming explains soybeans in two unconventional ways.

13 | Never Too Soon to Focus on the Future of Farming
   We back Nebraska FFA’s programs to ensure a bright future for soybeans.

14 | Soybean Education in Action
   Middle school teachers are bringing lessons from the Soybean Science Institute to life.

16 | On the Air Partnership
   Partnership produces content, collaboration and communication.

17 | Why Just Read About Checkoff Dollars When You Can ‘See For Yourself?’
   Take a trip with the Nebraska Soybean Board to see ag on a larger level.

18 | Effective, Efficient, Farmer-Driven
   Checkoff funds create educational resources from Nebraska Extension for you to use.

20 | Telling the Ag Story
   Take it from two experts—social media is perfect for showing off modern-day agriculture.
Anne Meis has been on the Nebraska Soybean Board for four years, and she knows education at all levels to all audiences—students, growers and the world at large—is imperative.

“We know that education is vital to our work with the checkoff,” said Meis, who farms near Elgin. “There are several components to the education communications part of it.”

It’s not just about advertising. It’s about cementing the value of soybeans, teaching the people who grow them and ensuring the public that consumes them understands they’re grown with care.

The Nebraska Soybean Board doesn’t take its responsibility in education and communication lightly.

“We, as an agricultural state here in the Midwest, take time, energy and funds and put them into sharing knowledge to the wider audience in the United States on agriculture’s best practices,” Meis said.

I really think a vital part of our education program is to educate people about what we do in modern agriculture and that farmers are the true stewards of the land, water and resources they’ve been entrusted with.

— ANNE MEIS, NEBRASKA SOYBEAN BOARD MEMBER (DISTRICT 1)
Teaching Outside of the Box

The Nebraska Soybean Board reaches elementary students through two unconventional and interactive lessons for fourth-grade students: the Ag Sack Lunch Program and “Soybeans: A to Z.”

### Ag Sack Lunch Program

**When it Started**
2010–11 school year (10th year)

**How it Was Born**
What started as a seed of an idea during conversations between staff and board members at the Nebraska Soybean Board (NSB) and Nebraska Pork Producers’ Association has sprouted into a popular part of fourth-grade classes’ annual visit to the Nebraska State Capitol. With the help of Brokaw Marketing, the Ag Sack Lunch program reaches thousands of Nebraska fourth-graders across the state each year.

**What Students Learn**
Classes meet on the capitol lawn with one of the program’s ag ambassadors, college students from the University of Nebraska–Lincoln. They discuss everything from the agricultural symbolism of The Sower on top of the capitol down to the ingredients in their lunch. Students connect how each item in their sack lunch was made, including the soybean oil in mayo and the supplemental soybean meal that fed pigs made into ham. The ambassadors share the impact of Nebraska's agricultural industry on the world and its many career opportunities. The students leave with a special deck of playing cards containing different facts about the ag industry.

---

It’s good for students to make the connection between their food and agriculture and that Nebraska farmers and ranchers work day in and day out to provide, not just for themselves, but for the world.

— KAREN BROKAW, BROKAW MARKETING PRESIDENT AND AG SACK LUNCH PROGRAM FACILITATOR

### Soybeans: A to Z

**When it Started**
1993–94 school year (27th year)

**How it Was Born**
Joy Ullstrom earned her teaching stripes as a fifth- and sixth-grade teacher at Holmes Elementary School in Lincoln. So when she was called on to create a soybean-centric lesson plan for her daughter’s Parent Teacher Organization, she reached out to the Nebraska Soybean Board and the rest is history. She created what would become “Soybeans: A to Z,” a special activity about different products made with soybeans taught by Joy and a handful of other soy educators to fourth graders around the eastern half of Nebraska.

**What Students Learn**
As the name suggests, soybeans can be found in products starting with every letter in the alphabet. To engage students, the soy educators use a placemat and vocabulary sheet to map out soy products from A to Z as students take notes. Then the class divides into teams for the “Use Your Beans” game, competing to see which group remembered what they learned. The game is updated every summer to represent the latest statistics and changes in soy-based products.

---

In the state of Nebraska, where agriculture is the No. 1 industry and soybeans are our No. 2 cash crop, students are using products containing soy day in and day out. I think it’s so important to learn about soybeans. There are just so many ways to tie it into their curriculum and make kids aware.

— JOY ULLSTROM, “SOYBEANS: A TO Z” CREATOR AND SOY EDUCATOR

Learn more about these programs at NebraskaSoybeans.org/Education.
Never Too Soon To Focus On

THE FUTURE OF FARMING

The Nebraska Soybean Board is proud to invest in the future of agriculture through support of the Nebraska FFA agricultural education students, FFA members and their advisors. This support is invaluable to the industry and supports the FFA’s vision of growing leaders, building communities and strengthening agriculture.

I am so grateful for the Nebraska Soybean Board’s support of agriculture teachers and students. Many of our teachers have less than five years of experience, so we need to continue to empower them with tools and experiences that will help them be successful and remain in the teaching field. I believe they are the key to supporting our next generation of leaders in the agriculture industry.

— STACEY AGNEW, EXECUTIVE DIRECTOR OF THE NEBRASKA FFA FOUNDATION

Growing Leaders

Support begins at the teacher level with the Curriculum for Agricultural Sciences Education. This 80-hour training in science, technology, engineering and math (STEM) provides teachers with the tools they need to be successful in the classroom. Teachers can then develop and implement a supplemental soybean-based curriculum. So far, with the help of the Nebraska Soybean Board, 105 professional development trainings have been conducted for teachers.

Strengthening Agriculture

As part of the FFA agricultural education model, all agricultural education students must have a supervised agricultural experience. These experiences outside the classroom provide hands-on opportunities for young people to learn about careers in the agriculture industry. The Student Fiber & Oil Crop Production Proficiency Award recognizes students who either own or work for a business that includes best management practices to efficiently produce and market crops for fiber and/or oil.

Building Communities

Leadership development is important for building communities. The Nebraska Soybean Board invests in the Ag Issues Academy to provide FFA members the skills they need to become spokespeople for the agriculture industry and leaders in their communities. The Board also provides the support for Nebraska FFA State Officers to attend the International Leadership Seminar for State Officers. This seminar allows state officers to develop a global perspective and become more culturally aware of diversity in agriculture around the world.
SOYBEAN EDUCATION IN ACTION

Thanks to the Soybean Science Institute, Nebraska middle school instructors can use the miracle crop to teach students about agriculture and science while also meeting state curriculum standards.

Photos courtesy of Katie Hammond, Mickle Middle School

From urban classrooms in Lincoln to schools across the state, the agricultural side of Nebraska sometimes escapes middle school students. Soybean fields surround schools, towns and cities across Nebraska. The state stands as one of the nation’s top producers of the crop. You’re also sure to find any one of the 22,000 soybean farmers in almost any part of the state.

But in Lincoln Public Schools science teachers Bre Hagedorn and Katie Hammond’s experience, students still need the reminder.

“They all know what a soybean is, but they don’t really know how they grow,” said Hammond, an eighth-grade science teacher at Mickle Middle School. “They don’t look at them because we live in Lincoln, so the whole agricultural aspect of it is kind of lost on the kids.”

With the help of the Soybean Science Institute, they have a way to weave it into their classrooms and help their classes make the connection through a teacher program run by the Nebraska Soybean Board and the University of Nebraska–Lincoln. The eight-day institute gives instructors a chance to learn more about soybeans, crop research and how to build agriculture into their curriculum to meet new state standards putting more ownership of learning on the students.

“These new standards are trying to get kids to find information on their own, analyze the information, learn from what they found and then have teachers go back and clarify things,” Hagedorn said. “It’s really student-driven.”
In her seventh- and eighth-grade science classes at Schoo Middle School, she’s morphed what she learned from an entomology lab at the 2018 institute into an interactive, problem-solving lesson involving soybean plants and aphids.

Meanwhile, Hammond developed a genetics lesson after attending the institute in 2017. She uses soybeans to teach the Punnett square, a diagram that helps students predict breeding outcomes, and then had her students plant and track different soybean plants.

“They get into it big time and learn it better, honestly,” Hammond said of the lesson. “They understood the material so much better.”

Hagedorn served as one of the institute leaders last summer and helped other instructors unpack the standards and understand how to implement soybean curriculum into their science classes.

The outcome, Hagedorn said, empowers teachers to paint a clearer picture of science, agriculture and the local world around their students—even if they need a little help to see it.

“I feel like in education, we try to put our kids in the shoes of people in other countries but not always other towns 20 minutes down the road,” she said. “Exposing my Lincoln kids to that rural community, that rural way of life, could interest them in some of the research jobs in science.”

In her seventh- and eighth-grade science classes at Schoo Middle School, she’s morphed what she learned from an entomology lab at the 2018 institute into an interactive, problem-solving lesson involving soybean plants and aphids.

Meanwhile, Hammond developed a genetics lesson after attending the institute in 2017. She uses soybeans to teach the Punnett square, a diagram that helps students predict breeding outcomes, and then had her students plant and track different soybean plants.

“They get into it big time and learn it better, honestly,” Hammond said of the lesson. “They understood the material so much better.”

Hagedorn served as one of the institute leaders last summer and helped other instructors unpack the standards and understand how to implement soybean curriculum into their science classes.

The outcome, Hagedorn said, empowers teachers to paint a clearer picture of science, agriculture and the local world around their students—even if they need a little help to see it.

“I feel like in education, we try to put our kids in the shoes of people in other countries but not always other towns 20 minutes down the road,” she said. “Exposing my Lincoln kids to that rural community, that rural way of life, could interest them in some of the research jobs in science.”

The institute was one of the best things I did to help me learn our new Nebraska state standards. It was so helpful to use the soybean as the launching off point for learning new standards and how to tie agriculture into our curriculum.

— KATIE HAMMOND, MICKLE MIDDLE SCHOOL TEACHER

SSI Impact

› Program began in 2010 with elementary teachers
› Reached 120 teachers from three states (2010-2015)
› Reorganization in 2016 led to focus on middle school teachers.
› Reached 50 teachers from 24 schools in 12 different Nebraska communities (2017-2019)
› 17 middle school and high school soybean lessons aligned with the Nebraska College and Career Ready Standards for Science (NCCRS-S)
› Over 20 presentations from soybean and science experts during eight-day program

Teachers interested in participating in the 2020 Soybean Science Institute can email teri@nebraskasoybeans.org.
One of the most common statistics in the agriculture industry involves the challenge to feed an estimated 10 billion people by 2050. But that challenge extends far beyond merely producing food, feed, fiber and fuel for 10 billion. That challenge includes communicating news, ideas and collaborations to consumers through a trusted, media platform.

That’s where the partnership between the Nebraska Rural Radio Association (NRRA) and the Nebraska Soybean Board becomes critical. The NRRA is proud to work with the Nebraska Soybean Board to share news, information and ideas with producers and consumers across the Midwest on digital platforms.

The Nebraska Soybean Board is the exclusive sponsor of the KRVN/Rural Radio Network Nebraska Innovation Campus studios. This state-of-the-art space allows the NRRA staff to create audio and video stories about news, research and innovations in agriculture. The content created is shared with producers and consumers on the Rural Radio Network and with television partners such as NTV and News Channel Nebraska—reaching individuals and entities in seven midwestern states.

The NRRA, with the help of the Nebraska Soybean Board, is also investing in the next generation of agricultural communicators through internships that allow agriculture communications, journalism and graphic design students to gain valuable experiences with hands-on content creation and multi-platform distribution.

“During my internship with KRVN and the Rural Radio Network, I learned how to communicate agriculture news to producers that affect their bottom dollar,” said Alex Voichoskie, a 2018 farm broadcasting intern. “I also created digital content targeted to young producers and consumers. It’s really rewarding to think that my broadcasts and videos help producers and consumers make important decisions every day.”

The partnership between the NRRA and the Nebraska Soybean Board allows the agriculture industry that feeds the world to communicate with those who need to be fed. It educates consumers about innovations in agriculture and creates platforms where news, research and collaboration can be shared.
Why Just Read About Checkoff Dollars

WHEN YOU CAN ‘SEE FOR YOURSELF?’

By Cale Buhr, NSB Market Development Coordinator

Have you ever wondered how soybean checkoff dollars get put to use? Now is your chance. Each year, the Nebraska Soybean Board (NSB) gives Nebraska soybean growers the opportunity to experience soybean checkoff dollars at work through the See for Yourself program.

“The See for Yourself program gives the producer an opportunity to see and experience the larger scheme of agriculture,” said Sandy Newton of Concord. “It is important to see the diverse uses for soybeans and all of the different transport methods used to get the product to the customer.”

In order to carry out market expansion projects like See for Yourself, the NSB works with several contractors including the National Biodiesel Board (NBB), U.S.A. Poultry and Egg Export Council (USAPEEC), U.S. Meat Export Federation (USMEF) and the U.S. Soybean Export Council (USSEC).

All Nebraska soybean farmers are welcome to participate in an industry meeting or tour throughout the year. Participants are encouraged to share the information from their experience with other producers and colleagues in the industry. These tours strengthen farmer input and outreach, critical elements to building the continued success of the program and increasing awareness and understanding of the soybean checkoff.

“I learned about some of the projects that the Nebraska soybean checkoff are helping fund to create markets for soybeans. I also feel that I am more informed on what my checkoff dollars are used for and can pass this information on to other soybean growers,” said Daren Englund of Holdrege.

As an elevator manager who works with producers, I field questions about the checkoff at times. Now I feel that I have a better story to tell on these discussions and how the checkoff is returning value to the producer who is paying it.

— JOEL ENDORF, RANDOLPH

Call the NSB at (402) 441-3240 to learn about the next See for Yourself tour and other upcoming events.
EFFECTIVE, EFFICIENT, FARMER-DRIVEN

Great partnerships don’t just happen overnight.

Keith Glewen, an extension educator with the University of Nebraska, knows it takes shared vision and effort to deliver something of value.

“Relationships build partnerships. A good working relationship represents trust, communication, knowing the expectations of both parties and delivering a quality product,” Glewen said. “I think the Nebraska Soybean Board (NSB) and Nebraska Extension have provided the Nebraska soybean grower with unbiased, research-based information which has been documented to have a significant impact on soybean enterprises across the state.”

That impact, backed by checkoff funds and delivered by the NSB and Nebraska Extension, takes shape in a full suite of learning opportunities for growers. The wide array of events and reports sheds light on topics such as cover crops, soil health, pests, weed science, productivity, profitability and technology.

The ultimate goal is making sure Nebraska’s growers stay ahead of the curve.

“It is imperative growers remain current with research and technological advances to stay competitive with growers in other regions of the nation and world,” Glewen said. “Growers need a reliable source of production and risk management information so they can grow soybeans in a sustainable manner.”

Learn about the different educational opportunities and resources available to you through NSB and Nebraska Extension.

In today’s world of soybean production and agriculture in general, the decision-making process can have significant short- and long-term implications. Knowledge is an important component in the decision-making process.

— KEITH GLEWEN, NEBRASKA EXTENSION EDUCATOR

Find more information about this year’s events and grower resources at extension.unl.edu.
RESOURCES

Nebraska Crop Management Conference
Jan. 22–23, 2020
Younes Conference Center in Kearney
Learn about the holistic approach of your farming operation at this immersive two-day conference. Pick up best practices for your cropping system. Certified Crop Advisor (CCA) credits and pesticide recertification will also be offered.
Agronomy.UNL.edu/NCMC

Nebraska Extension Weed School
Jan. 29, 2020
Eastern Nebraska Research & Extension Center near Mead
This one-day seminar brings in academic and industry experts to talk about herbicide-resistant weeds and strategies for soybean growers. CCA credits and pesticide recertification will also be offered.
Agronomy.UNL.edu/WeedScienceSchool

Soybean Management Field Days
Aug. 11–14, 2020
Locations TBA
Get an up-close-and-personal look at research findings on farms around the state at this 22nd-annual event. Spend a day at any of the four locations this summer picking up tips to boost the agronomics and pest management of your own operation.

Nebraska Cover Crop & Soil Health Conference
Date TBD
Eastern Nebraska Research & Extension Center near Mead
Discover how cover crops can improve the vitality of your farmland beneath the surface. Insights about cover crops’ soil health and erosion-reduction benefits come from professors, farming specialists and growers like you.

Nebraska Soybean Day & Machinery Expo
Date TBD
Saunders County Fairgrounds in Wahoo
Talk with the businesses supporting the soybean industry, from machinery and tech reps to seed, herbicide and fertilizer companies. NSB and Nebraska Extension will also be in attendance.

A Comprehensive Plan for Soybean Cyst Nematode Education in Nebraska
CropWatch
Determine your next steps for dealing with the aggressive parasite. Compiled on CropWatch (from the University of Nebraska–Lincoln’s Institute of Agriculture and Natural Resources), you can find loads of research articles and tips to beat the pest.
Search Soybean Cyst Nematode at CropWatch.UNL.edu

INVESTING CHECKOFF DOLLARS
Technology is rapidly changing farming, from autonomous tractors to data collection. But there’s another technology changing the way we see agriculture: social media. It has altered the way we digest news, and storytellers and farmers alike are using it to shed light on modern-day agriculture.

Social Media for Farmers: Part ‘Coffee Shop,’ Part Support Group, Part Inside Look

Doug Saathoff is an active Nebraska Soybean Board (NSB) member on social media. He uses Facebook, Twitter and Instagram to talk about the daily life of a farmer—but also to talk shop with peers.

“Social media, to me, is the new coffee shop,” said Saathoff, who farms in Adams County. “It is still important to interact face to face with others, but here, you can interact with farmers from different areas of the country. I like to grab a cup of coffee in the morning, sit down and see what is happening around the country.”

Engaging with other farmers is one of the best parts of the experience. Even though the going has been rough in agriculture (especially in 2019), Saathoff finds comfort in a supportive online farming community.

“It has been a tough few years in agriculture no matter where you are from,” he said. “Finding others with the same problem can be helpful. We can all be encouraging to others and help lift each other up.”

For a wider audience interested in modern-day agriculture, social media is a great place to get straight to the source. Following farmers, Saathoff said, gives those outside the industry an unfiltered, unbiased view of the realities of farming today.

“A lot of misinformation out there about agriculture is supplied by those who have never set foot on a farm or ranch,” Saathoff said. “Snap some pictures of your daily routine—it’s a good way to show the consumer how farmers do take good care of the land, animals and all of our valuable natural resources.”

Follow Saathoff on @WestForkFarm.

Follow soybeans’ story with the Nebraska Soybean Board. Facebook Nebraska Soybean Board @NESoybeanBoard @nebraskasoybeans NESoybeanBoard

Marji Guyler-Alaniz, FarmHer President and Founder

INVESTING CHECKOFF DOLLARS
6 Questions with FarmHer’s Marji Guyler-Alaniz

In the spring of 2013, Marji Guyler-Alaniz took an idea and brought it to life: telling the untold stories of women in agriculture. She left her job, picked up her camera and started shooting.

Seven years later, her business project—FarmHer—has grown from an idea into a social media-powered storytelling machine. Aside from its 78,000 followers across Facebook, Instagram and Twitter, FarmHer also has a regular TV show, merchandise shop and the Shining Bright podcast.

In a recent Q&A, she shared the importance of social media and storytelling to agriculture’s future.

**NEBRASKA SOYBEAN BOARD (NSB):** What about the agriculture industry inspired you to start FarmHer?

**MARJI GUYLER-ALANIZ (MGA):** I was fresh off a career in corporate ag and looking for my next thing. I wanted to do something more creative that put more good into the world. I saw a truck commercial during the Super Bowl in 2013, and then read an article about it shortly after, pointing out the lack of visibility for women in the ag industry.

That sparked my idea for FarmHer—to use my photography skills to show people the real, everyday role women play in ag.

**NSB:** Why are storytelling and social media such important parts of agriculture?

**MGA:** I think stories are the best way to connect with others when we aren’t able to be together in person. It’s the best way to see and understand other parts of our world and to have empathy and understanding for others.

Starting FarmHer as a way to tell stories through photographs and written words on social media was the perfect fit—it was free and readily available for me to put it out in the world. Without social media, there would likely be no FarmHer. As a way for any person to tell any story at any time, it is just perfect.

As it specifically relates to ag—which lends itself to rural areas where we all can’t be connected—it is a great tool to share stories and connect with others in a more meaningful way over topics of interest. Without those of us engaged in the industry telling the stories that we do beyond the borders of ag, it is a culture that could be lost to the rest of the world. With less than 1% of our society now engaged in farming, it matters to keep telling those stories and make sure they are visible to the rest of the 99% who rely on this industry for food, fuel and fiber.

**NSB:** How have you been able to create content that resonates with farmers and non-farmers?

**MGA:** I am genuinely interested in learning about these women, and each and every time, I am amazed by them. They really are the culture of our rural communities. They are the fabric, and it is an honor to tell that story—a story that I fully believe in telling.

With that belief comes authenticity. I think that connection I have allows me to tell a very authentic story about each woman. Of course, moving photographs, well-written stories and beautiful videography from the team I have around me with RFD-TV is also important. Telling the stories of real, everyday women in a beautiful and easy-to-connect-with way has been the key! I also am always cognizant of telling stories so it’s easy to understand from a non-ag perspective. I myself am not a farmer, so I try to think about how I would want to hear the stories.

**NSB:** Why would you encourage farmers and their families to share their stories on social media?

**MGA:** It takes all of us putting ourselves out there, over and over, to keep this industry visible. We need to be relevant and relatable. Your story matters to the overall footprint of agriculture.

**NSB:** How would you encourage farmers to keep telling those stories?

**MGA:** It’s been a ride! What started as a photography project quickly turned into a business at first consisting of merchandise, public speaking and then events. At this point, headed into our seventh year, we are focusing less on the events and more on the spread of our media. We have some pretty great stories—yes, I’m biased—about really, really amazing women, and I want to focus my efforts to make sure more and more people are exposed to them!

**Follow FarmHer**

---

WINTER 2020 / NEBRASKASOYBEANS.ORG 21
Women are a critical part of farm and ranch operations across the country—and around the globe. They contribute to the change we see in the agriculture industry and the challenge of meeting the world’s growing food, fuel and fiber needs. Here in Nebraska, women in agriculture are also an integral part of the success of our neighborhoods, communities and industries. The Nebraska Soybean Board (NSB) continues to support organizations that support women in agriculture.

In November, more than 400 women in agriculture came together at the 11th-annual AG-ceptional Women’s Conference in Norfolk. The conference, supported by NSB, showcased the theme “STRONG” and featured inspiring and dynamic keynote presentations and workshops, along with opportunities for networking, professional development and personal growth. The conference sells out each year.

Supporting Women Through CommonGround Nebraska

In addition to the AG-ceptional Women’s Conference, the NSB also supports CommonGround Nebraska, a movement of farm women who want to share agriculture’s story and information about the food. The group recently wrapped up their annual state conference in Lincoln. The theme was “Tackling Tough Issues,” with topics like gene editing, plant-based meats and how farmers continue to instill trust in the consumer.

Attendees also emphasized their commitment to finding ways to connect with others through shared values that create opportunities for conversation, including:

- We care about helping others.
- We want to feed ourselves and our families the very best.

By finding “common ground,” farm women build relationships that allow them to dispel misconceptions about how farmers grow food. CommonGround Nebraska is excited to take on the new year of opportunities.

Lisa Lunz Named 2019 AG-ceptional Woman of the Year

Lisa Lunz of Wakefield was named the 2019 AG-ceptional Woman of the Year in recognition of her contributions to agriculture. Lunz was the first female to chair the Nebraska Soybean Board and has also held other leadership positions during her 12-year tenure. In 2018, she was named Soy Promoter of the Year by the Nebraska Soybean Association and received the Public Service to Agriculture Award from the Nebraska Agribusiness Club.

For years, Lunz has demonstrated her commitment to creating connections to agriculture through her involvement with soybean education programs, the Ag Sack Lunch program, CommonGround, Ag Pen Pals and soybean trade teams. She continues to be a great advocate for agriculture across the state and beyond.
Extreme weather events. Shrinking farmland. A global population expected to hit nearly 10 billion in 2050. Tough economic times. At the center of it all are farmers and ranchers who are not only responsible for being leaders in food production to feed a growing population, but are also tasked with doing so in a sustainable way.

Fortunately, the U.S. Farmers and Ranchers Alliance (USFRA) never shies away from challenges.

As a farmer- and rancher-led organization, USFRA is committed to encouraging stakeholder dialogue about how food is grown and raised. This includes farmers and ranchers, as well as many different food and agricultural organizations. Together, these organizations create a single source for definitive insights, connections and collaboration opportunities with U.S. food and agriculture. This focus generates proactive collaboration between the best minds in food, agriculture, science and technology to co-create solutions that will result in environmental, social and economic sustainability.

Through its activities and initiatives, USFRA puts farmers and ranchers front and center as the agents for change. This was never more evident this past year than at the Honor the Harvest Forum, when nearly 100 top leaders across agriculture, technology, NGOs, finance and investment, and food companies gathered at a 1400-acre farm an hour outside Washington, D.C. to create a strategic roadmap to meet the challenges of the next decade.

In addition, USFRA produced a docudrama, “30 Harvests,” to amplify the farmer and rancher voice and capture the passion and hope that agriculture has in providing a dependable source of healthy food while addressing economic and environmental concerns for current and future generations.

Looking ahead to 2020, USFRA will launch what promises to be one of the biggest years in agriculture with a decade of ag vision and commitment for 2030. One can be certain the voices of farmers and ranchers will be heard loud and clear.

We need more companies, more organizations and more farmers and ranchers to get involved.

To learn more about USFRA or how you can get involved, visit usfarmersandranchers.org.
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%

PROMOTION

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

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
New York City has big plans for biodiesel in the future. The city is home to the country’s largest home-heating oil market and the largest municipal fleet in the United States. As New York City increases its reliance on Bioheat, a blend of biodiesel and ultra-low sulfur heating oil, it has become one of the most critical markets for biodiesel and its main feedstock—soybean oil.

The city has fully implemented its B5 (5% biodiesel, 95% ultra-low sulfur heating oil) mandate and will use over 40 million gallons of B100 (100% biodiesel) this year. The mandate is scheduled to increase the use of biodiesel in 2034 with a move to B20 (20% biodiesel, 80% ultra-low sulfur heating oil) with projected use growing to 160 million gallons of B100. In addition, the New York City fleet will use three million gallons of B100 in 2019 and is likely to consume up to 13 million gallons in 2020.

It’s a success story for the Nebraska Soybean Board (NSB), one of the first soybean checkoff programs to fund research and development of the Bioheat industry in an effort to grow the market for biodiesel and the consumption of excess domestic soybean oil. As a result, New York City is not only supporting the NSB’s success—clean-burning Bioheat is also helping the city reach its sustainability goals.

Each year, the NSB sends a delegation to New York City with the National Biodiesel Board (NBB) to meet with key industry stakeholders to discuss the next steps in expanding the use of Bioheat and biodiesel in the city.

To learn more about how Bioheat has become one of the fastest-growing renewable fuel sources, visit mybioheat.com.
WITH NEW TRADE AGREEMENTS, HALSTROM SEES BIG GROWTH OPPORTUNITIES

Addressing U.S. Meat Export Federation members at the Strategic Planning Conference in Tucson, Arizona, Dan Halstrom, USMEF president and CEO, said improving market access and strong global protein demand present a positive outlook for U.S. red meat exports in coming months.

USMEF projects U.S. beef exports to finish the year slightly higher in volume at 1.36 million metric tons (mt), with a 2% increase in value to $8.51 billion. 2020 exports are projected to climb another 4% in volume to 1.42 million mt, with value up 6% to just over $9 billion. The forecast for pork export growth includes double-digit increases this year and next, exceeding 3 million mt in 2020 valued at $8.34 billion.

Halstrom’s optimism is bolstered by the U.S.-Japan trade agreement, which will bring tariff rates for U.S. beef and pork in line with those imposed on competitors’ products.

“We’re going to be talking a lot about China at this conference,” he said, “but in my mind there’s nothing bigger than this agreement with Japan. Getting our products on a level playing field is essential, and the best news I’ve seen in several years.”

Market access may also improve with China as U.S. and Chinese negotiators work to reduce barriers for U.S. agricultural exports, while helping China to offset the effects of African swine fever on its domestic pork production.

“China’s pork deficit is so large that the world not only can’t supply enough pork to make up the pork deficit, it cannot supply enough protein,” Halstrom said. “Right now, our pork and beef exports to China are growing despite very high retaliatory duties, but imagine what they could be if duties were on par with our competitors. It would be phenomenal.”

In addition, the U.S. and European Union have agreed to increase U.S. share of the EU duty-free high-quality beef quota, allowing the U.S. to supply European customers all 12 weeks of each quarter, instead of the current 4-5 weeks. While it awaits EU Parliament approval, the agreement appears to be moving forward with an implementation goal of January 1, 2020.

Closer to home, Halstrom stressed the need to ratify the U.S.-Mexico-Canada Agreement, which is especially valuable to the U.S. red meat industry because the product mix exported to these markets differs significantly from Asian markets.
Nebraska soybean producers Josh England (Doniphan) and Lucas and Becky Miller (Randolph) have been selected to participate in the 2020 American Soybean Association Young Leader Program. Sponsored by Corteva Agriscience, the program trains leaders passionate about the possibilities of the future of agriculture and the soybean industry.

England and the Millers represented Nebraska during the first phase of the leadership training program at a December event for Corteva Agriscience in Indianapolis, Indiana, and will participate in the second phase Feb. 25–29 in San Antonio, Texas.

Josh England
Doniphan

Josh farms with his father and uncle raising irrigated corn and soybeans. He is a graduate of Central Community College’s Hastings campus and a member of the Hall County Farm Bureau board, participating in its Young Farmers and Ranchers organization. He also participates with the local TeamMates Mentoring Program and serves on the Doniphan Fire Department.

Lucas and Becky Miller
Randolph

The Millers have a diversified farming operation that includes cow-calf pairs, a contract hog nursery and a corn and soybean crop rotation with Miller Family farms.

Lucas holds a degree in irrigation technology and is a member of the local county Farm Bureau, Nebraska Soybean Association, Nebraska Corn Growers Association and the Nebraska Educational Technology Association. Becky Miller has a degree in education and taught special education technology for several years, but she’s taken time away to help on the farm and spend more time with their four children. The Millers are also avid volunteers with their local church and school activities.
WHERE DNA MEETS ROI.

Backed by superior agronomics and a wide range of herbicide-tolerant traits, our soybeans are equipped with the strongest DNA in Pioneer history. Ask your local Pioneer sales representative how to maximize returns with our unrivaled soybean lineup.

Pioneer.com/soybeans