2021 ANNUAL REPORT
OF THE NORTH CAROLINA SOYBEAN PRODUCERS ASSOCIATION
Whether it’s done with intent or is more attributable to the muscle memory of farmers accustomed to balancing their own farm budgets, the break-even price for the state’s soybean farmers and the North Carolina Soybean Producers Association has historically been closely aligned. With the trade war and COVID receding into the distance, 2021 brought a much-anticipated return to profitability for the state’s growers and a return to black for the NCSPA.

A number of factors suggest that the run of strong commodity price is not over yet. For one, fundamentals are good – soybean stocks, for example, are at record lows - while commodity prices are also being buoyed by the double-edged sword of inflation.

To help protect grower margins going into 2022, the NCSPA, along with partners in Washington and Raleigh, have been vigilant in separating legitimate inflationary pressures on inputs from instances where inflation or supply-chain disruptions have been used as an easy excuse for rent seeking behavior by ag-input suppliers. As you read this, the inputs that come to mind are undoubtedly nitrogen, which has tripled in price, and phosphorous, which has doubled in price, over the course of the year. While it has been frustrating to watch CEOs of leading fertilizer companies tout strong earnings while at the same time restricting competition by lobbying for import duties, rest assured that the NCSPA and our partners in Washington are doing everything we can to promote an open and competitive marketplace for these and other critical inputs.

While safeguarding grower profitability has been a central tenet of our advocacy efforts it permeates other aspects of the Association’s business as well. On the Market Development front, courting a high-speed container loading facility to the state has been a top priority for the Association over the past few years. Association officers and staff toured Scoular’s Richmond facility in early 2019, held a board tour at the Port of Wilmington this past July and are now pleased to announce that Scoular’s new high-speed container loading facility in Wilmington will begin buying beans in January 2022. And, rumor has it, that the new Midwest Grains facility in Dillon, SC is not far behind.

Meanwhile, operating in the background is the NCSPA’s stellar research program, which has pivoted in recent years to emphasizing the role of soybeans as an engine of profitability on the farm rather than its more traditional association as a rotational crop. Evaluating agronomic practices remains the backbone of our research efforts but the NCSPA research program has also branched out, looking into how production practices influence quality characteristics like oil and protein content, and, more recently, exploring how data and technology can be used most effectively on the farm.

Without the license to operate, these investments in advocacy, market development and research would all be for naught. To help protect our freedom to farm, the NCSPA invests in numerous educational and outreach initiatives and it’s been a true delight to get back out into the community after nearly two years of COVID-related disruptions.

In ag we have a lot to be thankful for. Prices are up, growing conditions this year have been generally good and we get to wake up every day and do what we love. It’s in that spirit and in this season of gratitude, that I’d like to acknowledge the NCSPA staff who do a phenomenal job delivering a return on your check-off investment – punching above their weight and running a state soybean board as good as any in the country.

Thanks for all you do as farmers and for taking a few minutes to catch up on activities of the North Carolina Soybean Producers Association in this year’s annual report.

Wishing you a safe and prosperous year ahead.

David Heath
President, NCSPA
EXPLORING BIG DATA AND TECHNOLOGY TO IMPROVE SOYBEAN PRODUCTION

Over time, the agriculture industry has seen many revolutions. From the domestication of plants 10,000 years ago, to the adoption of genetic engineering a few decades ago, farmers have continued to innovate and embrace change to be more efficient and more effective. Today, we find ourselves in the middle of a new revolution which involves technology and information.

Recent advances in precision agriculture, GPS, and data analytics have paved the way for the next important step forward: incorporating big data on the farm. New technology means growers have access to vast amounts of crop and management information, but what do you do with that data and how do you use it to make decisions?

At the North Carolina Soybean Producers Association one of our goals is to help growers understand emerging technologies and data. There are many questions in this space and we can’t begin to answer them all, but we are beginning to fund and support projects to address the questions you have. Some of those projects are highlighted below.

EVALUATING UAV (DRONE) USE FOR WITHIN SEASON MANAGEMENT DECISIONS IN NORTH CAROLINA SOYBEANS

Unmanned Aircraft (drones) are marketed in the agricultural sector as a ‘revolutionary’ technology. Although the technology and corresponding data are impressive, the application of data outputs for agricultural management decisions (e.g., re-plant, pest management) remain unclear. This interdisciplinary project is investigating the use of drones in five key production areas 1) re-plant decisions, 2) incidence of fungal disease, 3) severity of insect-related defoliation, 4) weed identification and management, and 5) nutrient deficiencies. In addition, imagery from satellites is being used as a complementary data source to extend the evaluation to farm-scale recommendations. We are hopeful that the information generated by this project can provide farmers across North Carolina with more information on how to use these technologies to enhance profitability.

DEVELOPING A PILOT DATA SCIENCE EXTENSION PROGRAM TO ADVANCE DATA-DRIVEN SOYBEAN PRODUCTION

An unprecedented amount of data are being collected on soybean fields thanks to advances in sensing technologies and cost-efficient computing, yet, these data are rarely used to their full potential. The limited use of data in agricultural sectors is unsurprising given that many producers in the US are not digital natives and data science knowledge transfer from research to the field is increasingly carried out through private companies. This national project (funded by the United Soybean Board) is being carried out by NCSU researchers and includes interviewing soybean growers across the US to identify the most pressing needs and interests in data services and training, and then using that information to develop a series of Data Science Extension projects including tutorials, workshops, and fact sheets.

KEY MANAGEMENT STRATEGIES TO INCREASE NORTH CAROLINA SOYBEAN YIELD: WHAT WE HAVE LEARNED FROM 877 SOYBEAN YIELD CONTEST ENTRIES

The North Carolina Soybean Yield Contest has been conducted for decades to recognize growers who are achieving high yield and to identify the management practices associated with these yields. But not much has been gleaned from that trove of information because of the size of the dataset and the ability to analyze it in a meaningful way. Thanks to increased computing power and more robust statistical procedures, the NCSPA and NCSU Soybean Extension were able to analyze this dataset to get more insight into the most important factors that contribute to high yield in the state. The top three included maturity group, the use of a foliar fungicide, and planting date.

While we know technology will play a role for every farmer moving forward, we also know one technology solution is not right for every farm. Our goal is to continue to explore how to help you understand emerging technologies and data, while recognizing everyone is at a different spot on the “ag tech spectrum”. Technologies which promise the greatest return for one operation may be nothing more than an unwanted hurdle for the next. As we continue to move into the next “ag revolution” together, we want to hear from you so we can meet your needs.
MARKET DEVELOPMENT

2021 – A FLASH IN THE PAN OR THE START OF THE NEXT COMMODITY SUPERCYCLE?

Agricultural commodity prices have covered a lot of ground in the past year. When last year’s annual report was published, CBOT prices for soybeans were at $13, rising to $16 in May before coming back to $13 at the time this report was drafted in December. While an increasing basis has provided additional support for North Carolina cash prices over the course of the year, falling prices in Chicago beg the question: Was 2021 a flash in the pan or the start of something bigger?

Those working in agriculture understand well the cyclical nature of commodities, seeing periods of over-investment and expansion followed by low prices, disinvestment, lower supply and ultimately higher prices causing the cycle to repeat itself. Typically, we think of these cycles playing out over an easily observable time frame – 2 to 3 years – but, taking a step back, one observes larger patterns, dubbed commodity supercycles, that may play out over the course of an entire career.

Historically, commodity supercycles were tied to periods of sustained growth in demand for raw materials, often coinciding with wars, and ultimately bookended by an economic depression or recession. The diagram below illustrates how this played out for World Wars I and II but going back further we would see similar patterns emerge during the Napoleonic Wars of the early 19th century as well as during the US Civil War.

Beginning in the 1970s a new type of commodity supercycle emerged, this time rooted in monetary policy when the US suspended dollar convertibility to gold. Rapid inflation ensued and, aggravated by the Arab Oil Embargo, commodities began a long period of high prices, staying well above trend until the late 1980s.

The commodity price cycle freshest in the collective consciousness is the one attributed to the “Rise of China”. Due to a number of factors, China emerged from the Asian financial crisis of the late 1990s on firmer footing than many neighboring countries and for the next 15 years averaged annual GDP growth of more than 10%, the highest, by far, of all the world’s major economies. For the purposes of agricultural commodities, this GDP growth translated into a westernization of the Chinese diet, leading to an unprecedented growth in demand for fats and proteins from the world’s most populous country.

It would appear that the trade war and COVID brought this most recent commodity cycle to a close but a key question confronting agricultural stakeholders today is whether the high prices enjoyed in 2021 are simply an aberration or the start of a new upward trajectory and a new cycle. Just as previous supercycles have been assigned a root cause, observers who contend we are in the midst of a new cycle are attributing it to the global push towards decarbonization. Decarbonization has the potential to lift agricultural commodity prices in many ways. Commitments against deforestation and environmentally minded biofuel mandates, for example, serve to limit supply and increase demand, thereby lifting prices. Decarbonization will also affect agriculture indirectly, first by increasing the cost of fossil fuels and, by extension, inputs like fertilizer, having the potential to crimp output and lift prices even further. Other factors, like a devalued dollar, could also lend support to a new commodity supercycle although prospects for even worse inflation in Brazil, muddy this aspect considerably.

While macroeconomic issues like commodity supercycles may seem abstract, and are well beyond anything that can be controlled on the farm, they do provide a valuable framework through which stakeholders in the agricultural value chain – growers included – can make investment decisions. The trick with any cycle, whether it’s 3 years or 30, is to be on the right side of it.
GROWING OUR OUTREACH EFFORTS

As our state continues to grow and we see an influx of newcomers to urban corridors, the need for consumer outreach and education becomes even more important. The NCSPA is committed to helping foster a stronger understanding of agriculture among these urban dwellers, thereby allowing farmers the social license to continue to operate and prosper.

To help fulfill this mission, the NCSPA is pleased to announce the addition of Faith Case to the soybean team. Faith will serve as the outreach coordinator and carry out the important task of sharing the message of the family farmer with the consumer audience. Faith grew up in Rock Hill, South Carolina, and took a liking to agriculture in an environmental science club, where she spent many hours working in the greenhouse and garden beds. Faith attended Clemson University (no hard feelings, Wolfpack fans) and received a Bachelor of Science degree in Agronomy. Faith worked at several farms during her time at Clemson to gain valuable hands-on experience in the field and got a glimpse into the life of a farmer. It was through these experiences that her passion for agriculture flourished and led her to the NCSPA, where she serves as an advocate for the most important industry and the hardest-working group of people.

Faith aspires to educate consumers, improving their understanding of the unique struggles farmers currently face while recognizing the progressive innovations employed by farmers to ensure food security. She has implemented a strong social media strategy that highlights soy as an important, everyday product, as one approach to achieving this goal.

With a renewed focus on outreach, the NCSPA is working on increasing in-house virtual content. One of the projects being tackled by Faith is an aquaculture video that will highlight soy as an important fish feed that is unknowingly invaluable to many cultures globally. Although we are constantly thinking about new ways to reach the consumer and COVID has challenged us to develop virtual materials, we were also excited to ramp back up in person events in 2021 like the NC State Fair, farmers markets, collegiate partnerships, school visits and local festivities.

Faith is excited to work with NC soybean farmers and implement your creative outreach visions. If you have ideas for events or topics for Faith to tackle, don’t hesitate to reach out to her at fhcase@ncsoy.org

ADVOCATING IN THE CLASSROOM

As we continue to open up, 2021 has been filled with “Welcome Backs”. With school doors opening to visitors, the NCSPA has been actively approaching educators for opportunities to teach students about soybeans and agriculture. Some schools, however, are still not allowing visitors, so we met this challenge with the solution of being guest speakers via Zoom – a new but effective way of engaging with students across North Carolina.

“The main hope of a nation lies in a proper education of the youth.”

-ERASMUS, DUTCH PHILOSOPHER

On November 10, 2021 we had our first in-school visit of the year when NCSPA’s intern, Lisandra Mejia (a NCSU Ag Education student), traveled to Carrington Middle School in Durham. Students were presented with information about the journey of a soybean from the field to the processing facilities all the way through to the soy products in their everyday lives. Whether through school visits or other programs, the NCSPA is committed to continuing its longstanding legacy of ensuring that the next generation of consumers are educated about the importance of agriculture and soybean production to the state of North Carolina.
ELECTION OFF-YEAR OPENS OPPORTUNITIES FOR GRASS-ROOTS ADVOCACY

With the 2020 elections fresh in everyone’s minds and chatter actively percolating over the upcoming mid-terms, it is easy to forget that 2021 was actually an off-year in the country’s election cycle. While in-person visits to DC have traditionally been a key element of NCSPA’s advocacy efforts, a “slow year” in DC (made slower by lingering COVID-related restrictions) allowed for the NCSPA Board and staff to focus more of its 2021 advocacy efforts at the grass roots level.

One of those efforts was support for the USDA Nitrogen Fixation Unit (NFU) in Raleigh. Not subjected to the 5-6 year commercial cycles that can, at times, confine private industry, the NFU has a long track record of developing soybean genetics that are resilient to a changing climate and pest and disease pressures. A testament to that success is that the NFU receives more soybean checkoff funding than any other USDA soybean research facility across the US.

While checkoff funding helps the NFU deliver impactful research, it cannot be used to cover the costs of researchers and unfortunately, reflective of the experience of ARS as a whole, USDA funding for the unit has remained flat over the past decade and has actually declined once adjusted for inflation. With pinched funding, the NFU has lost research capacity through attrition, shrinking from seven research scientists throughout the 1990s to just four today.

In 2021 the NCSPA organized a field day at USDA research sites for staffers representing Congressman Price, Congressman Rouzer and Senator Tillis. At the event, NCSPA staff stressed the critical importance of having a strong soybean presence in the Southeast while USDA researchers expanded on themes with bi-partisan appeal, namely food security and climate resiliency. As successful as the day was, initiatives like this are never resolved in the course of one visit. In the year ahead, the NCSPA will be meeting with key USDA administrators and continue to meet with lawmakers until funding for USDA’s local research presence is put on a more sustainable trajectory.

Other key advocacy efforts over the past year included a letter-writing campaign in support of the 24c registration process to extend the deadline for dicamba use in soybeans and vocal opposition to tariffs on phosphorus and nitrogen imports. While these efforts did not deliver the initial outcome we hoped for, 2021 did deliver some impressive policy “wins” for ag – most notably the Bipartisan Infrastructure Package which promises long overdue investment to the nation’s roads, rail, waterways and broadband as well as special concession to North Carolina – namely the grandfathering of in-state weight limits on several key NC roads in the event they are ever designated to the interstate system.

The NCSPA’s Corporate Partners are another great advocate of the NC soybean farmer that deserve recognition. We would like to thank our 2021 Corporate Partners and all that they do to help us continue to serve the soybean industry every day!
THE NUTS AND BOLTS OF OPERATING AN AGRICULTURAL TRADE ASSOCIATION

In the Association’s most recent five-year strategic plan, the Board identified five key focus areas where the NCSPA would direct its efforts. Four of these, specifically Research, Market Development, Outreach and Advocacy are “customer facing”, and as such would be readily familiar to even casual observers of the Association’s activities. As important as these efforts are, however, they all rely on the Association’s 5th priority, namely “Ensuring a High Performing Organization”.

A high performing organization rests on a number of central tenets but chief among them are efficient, transparent and compliant office procedures. Working in conjunction with the CEO, the NCSPA Office Manager is fundamentally responsible for the efficiency and efficacy of the day-to-day “business” of the Association. However, the Office Manager role is vast, and responsibilities vary with an all-encompassing goal to identify opportunities for improvement through the implementation of best practices, utilization of digital tools, and workflow development and prioritization.

In July, the Association welcomed Vicky Clark, who brings 23 years of experience to the NCSPA Office Manager position.

As those in the agricultural community have had to acknowledge and adapt to change so has the NCSPA. The Association recently made a significant transformation by migrating from a primarily paper-based record keeping system to one that makes fuller use of existing software and modern accounting procedures. By streamlining processes such as these and reducing redundancies, the Office Manager can provide first class administrative support to Association staff, increase transparency and accessibility for Association members and by extension, support the programs that matter most to you!
To assist us in maintaining an accurate address file and reduce postage costs, please notify the N.C. Soybean Producers Association (919-839-5700) of any address changes or corrections. Comments and suggestions are also welcome.

HAVE A STUDENT AT N.C. STATE WHO PLANS TO WORK IN THE SOYBEAN INDUSTRY?

The NCSPA is seeking applicants for the NC Soybean Research Scholarship, awarded annually to rising sophomores, juniors, and seniors at NC State. The one-time scholarships range from $2,500 to $5,000.

Applications will be accepted at ncsu.academicworks.com/opportunities (search soybean) through Feb. 15, 2022.

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