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First Illinois Soybean Grower to Break 100 bu/A (2014)

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IT’S MAKING ME MONEY. PRETTY SIMPLE MATH. I USE STOLLER BECAUSE First Illinois Soybean Grower to Break 100 bu/A (2014) DAN ARKELS PERU, ILLINOIS Learn how Dan uses Stoller solutions to Farm Different™ at the kind of results you can only get with solutions from StollerUSA. Always read and follow label instructions.

ABOUT THE COVER Jacob Wade checks the GPS sensor on his combine while harvesting soybeans near Holder, Ill., in October 2015. Working with Central Illinois Ag, Wade embraces technology, which allows him to make side-by-side comparisons of different practices on his acres.

DID YOU KNOW? Illinois farmers were elected to key national leadership positions in late 2015. Ron Moore from Roseville, Ill., was elected American Soybean Association vice president. Mike Cunningham, Bismarck, Ill., was elected National Biodiesel Foundation (NBF) president and Jeff Lynn, Oakland, Ill., was selected as NBF secretary/treasurer.

COVER STORY When Every Bushel Matters, Technology Nets Returns Even when commodity prices are down, farmers still invest in technology because it pays for itself. Read about farmers taking advantage of the benefits precision agriculture provides.

No, It’s Not Soybean Science Fiction The state's plant scientists are boldly going where no scientists have gone before to increase soybean yields. Find out what the SoyFACE project is learning about soybean response to the atmospheric conditions of the future.

Good Barns Mean Good Business Using computer-controlled systems to optimize health and comfort, 21st century animal agriculture is fine-tuned to benefit farmers, animals and communities. Learn how livestock barn technology also provides results for Illinois soybean farmers.

Lower Prices Trigger 2014 Farm Bill Payments The 2014 farm bill was written when commodity prices were high and direct and countercyclical payments to farmers were ending. For many Illinois farmers, the new safety net program provisions have kicked in, and payments are being allocated. Read how farmers are affected.

Container-on-Barge is Good Alternate Route to Reach International Customers Last year saw major shipping delays for soybeans leaving the West Coast. To meet international customer needs, the industry is developing an alternative distribution system to move soybeans down the Mississippi River. Illinois soybean farmers are taking the lead on this new approach.

PROFITABILITY MATTERS Maximize Crop Insurance Opportunities for Profitable 2016 Crop insurance provides an important risk management tool, especially for those farmers facing continued tight margins. See what one economic advisor has to recommend for Illinois soybean farmers for the coming growing season, and its relationship to conservation practices.

Check out the four-page special section about the upcoming Soybean Summit.
PERSPECTIVE

Step into the Future

Sometimes it is hard for me to believe we are more than 15 years past the turn of the century. I remember Y2K, and the concern it created for computer-related data in what many feared would be a collapse of telecommunications and other technology systems. It certainly underscored the greater reliance the world was beginning to have on life linked to computers.

During the same time, agriculture began to take the precision agriculture tools developed during the 1990s — including yield monitors and Global Positioning Satellite technology — and expand into such areas and products as grid sampling, data collection and input software programs, guidance systems, variable rate applications, sensor webs and unmanned aerial vehicles (drones).

Technologies such as these and technologies we haven’t even dreamed of yet will continue to drive the productivity and profitability of Illinois soybean farmers. Understanding and use of that technology fits well with the Illinois Soybean Association’s checkoff-funded goal to achieve maximum profitability and global competitive positioning for Illinois soybean producers.

Our targeted result is to produce and use 600 million bushels of Illinois soybeans by 2020. Already, soybean output in Illinois has risen the last three years, and we have been the top soybean production state in the nation for the last three years. In 2015, we produced a preliminary record-setting 551 million bushels, up from 547 million bushels and the top soybean production state in the nation for the last three years. In 2015, we produced a preliminary record-setting 551 million bushels, up from 547 million bushels in 2014 and 462 million bushels in 2013. Clearly, we are well on our way to 600 million bushels. But how do we meet that goal?

We have several projects underway funded by the Illinois soybean checkoff that will help us. Some of the associated work is highlighted in this issue of Illinois Field & Bean:

- Get an update on the technology capabilities “above the bean,” and what drones can bring to the table for farmers looking to diagnose problems and manage solutions.
- International market development takes a coordinated effort. Illinois soybean checkoff dollars help support activities worldwide with such organizations as the U.S. Soybean Export Council (USSEC), United Soybean Board (USB) and World Initiative for Soy in Human Health (WISHH).
- Connect the technologies that make up the precision agriculture tool kit.
- Find out what university research is doing to adapt soybeans for the future.
- Read about livestock production technology and how that affects the farmers who grow the soybeans that go into feed rations.

You also can learn what legislative issues Illinois Soybean Growers is watching in 2016.

It’s time to step into the future. With a new calendar year, let’s revisit soybean production and profitability strategies and find ways to maximize opportunities in 2016 and beyond.

DARYL CATES
ISA Chairman
As I write this article, I am thinking about the multitude of agriculture’s priorities still unresolved and in dire need of attention for the year ahead. For better or worse, the dominating feature in politics in 2016 will be the presidential race. During this election year, Congress will have a long list of priorities and a fraction of the normal time to address them. In fact, in 2016 the House only will be in session 111 days, which is the fewest number of work days since 2006.

Beyond just the annual budget and funding battles for the federal government, what priorities in agriculture will be fighting for attention between news clips of Donald Trump and Hillary Clinton? Here’s a preview of what could be on the table:

Waters of the U.S. (WOTUS) — A broad coalition of agricultural interests is fighting the implementation of the WOTUS rule. Any reprieve will be short-term and agriculture will have to continue the battle this year. Lawsuits currently are preventing implementation of the rule on the countryside, but the status of those lawsuits could change at any moment.

GMO Labeling — The House passed a bill in 2015 that will preempt any state laws for mandatory GMO labeling of food products. However, the Senate has yet to act on similar legislation. Vermont is the first state to have passed a mandatory labeling law, and that law goes into effect in July. If Congress cannot complete a bill to prevent a patchwork of state GMO labeling laws before the end of the year, the pressure will remain to complete a bill before July.

Country of Origin Labeling (COOL) — Canada and Mexico have won a World Trade Organization (WTO) case against the U.S. for its mandatory COOL law. Both are poised to retaliate as soon as the WTO approves an amount, which could be upwards of $3 billion in retaliatory tariffs, including potential tariffs on soy products. If Congress does not pass a full repeal of COOL this year, retaliation will begin and pressure to find a solution will build.

Trading with Cuba — With the 2015 White House announcement that the U.S. would normalize diplomatic relations with Cuba, the Illinois Cuba Working Group and U.S. Agriculture Coalition for Cuba fully mobilized to support legislation to end the trade embargo. Under current law, ag products legally can be traded with Cuba. But because of a litany of other laws regarding credit, shipping terms and travel, the U.S. is at a severe disadvantage when selling products to Cuba. The trade embargo will remain a legislative priority for many in Congress.

Farm Bill — The current farm bill was passed in 2014 and will remain in effect until 2018. However, as we saw during the budget debate in November 2015, the farm bill can come under attack at any time. The budget bill included a provision to strip $3 billion from the federal crop insurance program and was a devastating blow to private sector crop insurance delivery. The fact that such a devastating provision could be written into legislation so quickly is a reminder that agriculture must remain vigilant in protecting the farm bill in 2016 and beyond.

With so many moving parts as we kick off 2016, it can be difficult to predict what agricultural priorities will be this year. What is clear is that there is a lot of work to be done, with very few Congressional days to do it, and with members constantly looking toward Nov. 8 elections.

Tara Smith grew up on an Illinois corn and soybean farm, but she has spent the last 12 years working in government affairs positions in Washington, D.C. She currently is vice president at Michael Torrey Associates, a political consulting firm specializing in food and agriculture. Smith also is the Illinois Soybean Growers federal contract lobbyist.
WHEN EVERY BUSHEL MATTERS, TECHNOLOGY NETS RETURNS

> BY AMY ROADY

It’s the end of the growing season, and Jacob Wade is harvesting soybeans outside of tiny Holder, Ill. The combines are rolling. The grain truck is parked along the field’s edge. The grain elevators to the west and to the south are busy unloading semis, taking in the 2015 crop.

This is what Wade’s been waiting for — to see if his decisions will pay off or not. And this is where technology helps him answer that question. And it comes on an iPad.

“I get excited because I have a passion,” says Wade, who raises corn and soybeans with his dad, Brad. “When I’m in the combine watching the yield monitor, that’s when we find out if the work is either going to pay off or if it’s not paying off. It’s in real time.”

BETTER BUSHEL MANAGEMENT

Data collection can help farmers manage down to the bushel and improve their whole farm profitability, says Ken Dalenberg who farms near Mansfield, Ill.

Even when commodity prices are down, farmers are still investing in technology, because it pays for itself, says Rush Olson, Precision Planting specialist at Central Illinois Ag in Atlanta, Ill.

“It used to be that farmers just planted and that was it,” says Olson. “Now we have management zones and all types of information and maps to layer on top of each other to manage fields.”

One example is weather. “Before, grandpa used the rain gauge. Now we have weather stations set up across different areas I farm. I get real-time data about the actual environments in my fields,” says Jason Watson, who farms in Champaign County while also working with Stoller USA and DuPont Pioneer.

REAL-TIME DECISIONS

Technology allows farmers to make more real-time management decisions that can improve their crop and boost profitability.

“As markets get tighter, it’s all the more reason for precision agriculture. We directly need to be involved in the crops to protect those bushels,” Watson says. “We don’t have the room for errors that we once had. Quicker decisions keep up productivity.”

Another example of real-time data is 360 Yield Center’s 360 SOILSCAN, which is a portable soil testing system that measures nitrates and pH levels, using an iPad operating system.

“Instead of having farmers do soil samples and waiting two weeks for results, agronomists can tell farmers much quicker how much nitrogen to put on,” says Olson. “As seen this spring, a lot can happen in two weeks with weather.”

Once farmers have data, the key is to act on it. Otherwise it is irrelevant, says Ron Lloyd, agronomy and field research lead for 360 Yield Center, an Illinois-based company. “Farmers have to understand the data and how to take action on it,” he says.

DATA IN, RESULTS OUT

When making agronomic decisions, farmers have to have good data going in, stresses Dalenberg. Precision ag is about placement and timing.

“As we think about our crops’ limiting factors, including diseases, insects and nutrition, we have to make sure we have the nutrients when and where the plant needs them so that the plant can take advantage,” says Lloyd.

To get the most out of technology, Watson encourages growers to work with a team of specialists who understand the technology and the data before making management decisions.

For soybeans, late season management is important, Lloyd says. This emphasizes the need for technology to go in and precisely place what the plant needs.

One of those technologies is 360 Yield Center’s 360 UNDERCOVER, which has multidirectional spray nozzles that glide under the crop canopy to help farmers protect crops from late-season disease and insect infestations. Lloyd says this allows products, such as fungicides and insecticides, to be placed where and when they are needed.

POST-HARVEST EVALUATION

Technology can pay big dividends, especially when growers are evaluating feedback from the growing season during harvest. This is when farmers, including Wade, can use various maps to see how
different applications, seeding rates and other management decisions impacted yields.

Farmers may find out that a seeding rate of 100,000 is just as effective as 120,000, says Wade. “All this technology is helping me grow the most efficient, best crops for the least amount of money,” he says.

“There is so much potential for soybeans but we have to make it easy, make it practical and make it pay to make it worth the farmers’ dollars and time,” adds Lloyd.

For Wade, having the data that he needs when he needs it allows him to make better decisions. Like the farmers who Watson has helped, Wade is using this information to push for 100-bushel soybeans, especially after seeing a lot of 80- and 90-bushel beans this year.

To help farmers benchmark yields in individual fields, FarmLink launched in December a new product called Discovery.

“This allows farmers to validate their decisions and compare to what their field actually yielded,” says Bob McClure, chief data scientist at FarmLink. “Now they can tell exactly what that field should have done.”

**TECHNOLOGY DRAWBACKS**

While precision technology is exciting to those like Wade who embrace it, there are drawbacks.

“The hardest part is that every piece of technology is good at doing something, but it’s hard to combine the information,” Watson says. “Also, not all the systems talk to each other. This is where a team of specialists can help to bring it all together. It can take pretty good computing skills to make the information work from sprayers, planters and combines.”

As with all technology, precision agriculture is constantly advancing and is outdated quickly.

“Technology changes every day,” adds Olson. “It’s just like buying a cell phone or laptop. Some of it sticks around longer than others. There always will be add-ons and better stuff coming.”

Despite the challenges, the information can help a farming operation, including working with farm managers and landowners. Wade says he can use data and yield maps to show landowners what needs to be fixed to raise better beans.

“Farmers need to embrace technology. It’s the way of the future,” sums up Dalenberg.

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**“Farmers have to understand the data and how to take action on it.”**

**RON LLOYD**

agronomy & field research lead for 360 Yield Center

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**ABOVE THE BEANS**

Another tool in, or maybe above, the farmer’s tool box is drones. If a farmer doesn’t have one yet, many say they are thinking about getting one. And the possibilities are endless, says Olson.

“Of the most practical uses for drones is crop scouting, but you still have to ground truth, says Dalenberg. Watson observes the unmanned aerial vehicles (UAVs) can be used to help farmers stay on top of environmental stress, and control weeds, diseases and pests.

“The quicker we can identify and address problems versus waiting to see visual effects, the better job we do approaching productivity,” Watson says.
What makes Priaxor fungicide such an effective tool for soybean growers? It’s powered by Xemium fungicide, which distributes its unique chemistry throughout the plant leaves over time for longer-lasting disease protection. And this kind of consistent performance can help deliver higher-quality crops and higher-potential yields. Grow Smart with BASF and Priaxor fungicide today.

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WHAT IS PRECISION AGRICULTURE?

**ABOVE THE FIELD**
- Drones
- Yield monitors
- Tablets in combines
- Aerial application
- Satellite technology

**FIELD LEVEL**
- Weather sensors
- Y-drop chemical applications
- Pest control
- GPS guidance
- Spray droplets

**BELOW THE FIELD**
- Soil sampling
- Tillage
- Nutrient monitoring
- Water movement
- Seed selection and planting rate
- Satellite technology

**OUT OF THE FIELD**
- Yield maps
- Planting decisions
- Marketing
- Data management
- Farm consultants

Photos by Abby Coers, Barb Baylor Anderson, ISA, Katie Knapp
University of Illinois plant scientists are boldly going where no scientists have gone before to find ways to increase soybean yields for the future.

Through SoyFACE, the ongoing Soybean Free Air Concentration Enrichment project at the Urbana-Champaign campus, soybeans are grown in an atmosphere that mimics expected 2050 conditions. Researchers increase carbon dioxide (CO2) and ozone levels, elevate temperatures and alter soil water availability to see how soybeans respond and how they ultimately yield.

SoyFACE was developed 12 years ago to begin to explore the effects future atmospheric change might have on soybeans and other crops, says Don Ort, USDA-ARS plant biology and crop sciences specialist. Researchers grow soybeans under actual field conditions and then alter atmospheric conditions using various technologies within a ring in the field. They evaluate such things as yield and quality changes that occur with rising CO2, temperature, drought stress and ozone. They also look for genotypes and genes that may be exploited to increase soybean yield and still maintain quality under changed atmospheric conditions.

RESEARCHERS MANIPULATE CONDITIONS

"Soybean yields during the 12 years of our tests have increased an average of 17 percent across all cultivars, but we see variability across growing seasons that range from zero to 35 percent depending on variation in weather and other growing factors," he says. "We have learned that among the things that interact with carbon dioxide to alter its effect on soybean yield are water availability, seasonal average and maximum temperatures and ozone concentration."

With literally the flick of a switch, SoyFACE researchers can assess absolute changes in yield, water and nutrient use, as well as in cultivars and fertilizer trials. A large range of integrated studies on the same plants can be conducted to provide the most complete understanding of atmospheric change. Several seed companies are paying close attention to the work underway.

"Currently we are looking at the combined effect of elevated CO2 and temperature to discover how they will interact during the coming decades," he says. "Results will allow us to look at ways to adapt soybean plants to deal with changes and protect yield."

For example, Ort says some cultivars benefit more than others as CO2 concentration goes up. The plan is to exploit the germplasm that has increased yields under such conditions.

"Whether they know it or not, Illinois soybean farmers are suffering yield loss right now because of ozone pollution," he says. "We can monetize these losses so farmers are able to understand the impact in real dollars at the farm gate."

Ort cites one recent study completed at the University of Illinois where researchers showed ozone emissions have reduced soybean yields by five percent during the last 30 years.

"We suspected that surface ozone pollution, which can be surprisingly high in rural areas, was affecting crop yields. But until now, there had not been a means to quantify this from actual yield data," says Stephen Long, University of Illinois plant biology and crop sciences professor. "The higher the concentration of ground-level ozone, the greater the likelihood of yield damage."

"Laboratory studies had suggested that soybeans were vulnerable to ozone," adds USDA-ARS scientist Elizabeth Ainsworth, who also contributed to the work. "Even when water was not readily available during a period of drought, ozone damage was still extensive."

Ainsworth says the annual loss nationwide for corn and soybeans combined due to ozone damage is more than $9 billion. She is working to identify genes in both crops that will decrease vulnerability to ozone and provide a way to reduce economic losses. For more information about SoyFACE and related research, visit http://www.igb.illinois.edu/soyface/.
YOUR MISSION: YIELD

2016 ILLINOIS SOYBEAN SUMMIT

FRIDAY, JANUARY 29
KELLER CONVENTION CENTER, EFFINGHAM

THURSDAY, FEBRUARY 25
PEORIA CIVIC CENTER, PEORIA

FRIDAY, MARCH 11
GIOVANNI'S CONVENTION CENTER, ROCKFORD

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Soybean Summit Expanded to 3 Locations

EFFINGHAM
FRIDAY, JANUARY 29, 2016
GENERAL SESSION 1:
“Positioning for Success in the Economic Reset”
Presented by David Kohl, Virginia Tech
GENERAL SESSION 2:
“Crop Returns and Risk Management with Lower Prices”
Presented by Nick Paulsen, University of Illinois
FARMER ROUNDTABLE WITH AUDIENCE Q&A PARTICIPATION:
“Producing High-Yield Soybeans – Grower Successes”
Moderated by Daniel Davidson, Illinois Soybean Association
BREAKOUT SESSIONS:
The following sessions will be presented simultaneously during each breakout session time slot.
“Strategies to Manage Double-Crop Challenges”
Presented by John Pike, University of Illinois
“What On-Farm Research Has Taught Us About Producing High-Yield Soybeans”
Presented by Jason Webster, Beck’s Hybrids
“Making phosphorus Management Work for You”
“Become a Master Soybean Producer: Developing the Habits of a High-Yield Soybean Grower”
Presented by Glenn Longabaugh, Winfield

PEORIA
THURSDAY, FEBRUARY 25, 2016
GENERAL SESSION 1:
“2016, Time to Take a Close Look at Practical Application of Unmanned Aerial Systems”
Presented by Chad Colby, Colby Ag Tech
GENERAL SESSION 2:
“Soybean Outlook: Conflicting Signals”
Presented by Darin Newsom, DTN
GENERAL SESSION 3:
“New Technology Options to Improve Yield and Profitability in 2016”
Presented by Kip Pendleton, The Pendleton Group
BREAKOUT SESSIONS:
The following sessions will be presented simultaneously during each breakout session time slot.
“SDS: The Challenges and Solutions”
Presented by Angie Peltier, University of Illinois
“Besides Good Weather, What Does It Take to Maximize Soybean Yields?”
Presented by Emerson Nafziger, University of Illinois
“Soybean Weed Management for 2016”
Presented by Mark Bernards, Western Illinois University
Presented by Lance Tarochione, Monsanto

ROCKFORD
FRIDAY, MARCH 11, 2016
GENERAL SESSION 1:
“2016 Crop Weather Outlook”
Presented by Bryce Anderson, DTN
GENERAL SESSION 2:
“The Search for Profits in 2016”
Presented by Bryce Knorr, Penton/Farm Progress
FARMER ROUNDTABLE WITH AUDIENCE Q&A PARTICIPATION:
“Breaking the 100-Bushel Yield Barrier in Soybeans”
Panel: Jason Lakey, Kris Ehler and Jason Watson
Moderated by Daniel Davidson, Illinois Soybean Association
BREAKOUT SESSIONS:
The following sessions will be presented simultaneously during each breakout session time slot.
“Managing Tough Cornstalk Residue for Increased Soybean Yields”
Presented by Marion Calmer, Calmer Corn Heads, Inc.
“Optimizing Soybean Yield and Minimizing Herbicide Resistance Starts with Advanced Weed Control Systems”
Presented by Vince Davis, BASF
“Effects of Soil Quality & Fertility on Soybean Yield”
Presented by Andrew Hoiberg, Calcium Products
“Applying High-Yield Research and Management in a Low-Margin Year”
Presented by Shawn Conley, University of Wisconsin

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- The future of phosphorus management
- Drones in agriculture
- Technology to improve profitability
- Practical farm research on growing high-yield soybeans
- Managing soybeans in an era of high residue

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“I plan to evaluate the ROI of my inputs to get more out of my investment.”

“Great program!”

“Good tips on high soybean yields.”

“Good program, my first one, glad I attended.”

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Today's high-performance, user-friendly livestock barns feature up-to-date innovations driven by the latest science. Using computer-controlled systems to optimize health and comfort, 21st century animal agriculture is fine-tuned to benefit farmers, animals and communities.

Proper site selection includes access to feed sources and transportation, as well as minimizing impact on the surroundings.

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Water quality, both input and output, is critical: That means a clean source for healthy animals and no uncontrolled discharge to the watershed.

Trees and bushes provide a natural particulate filter for a cleaner atmosphere, while creating a green fence for visual appeal.

Automated feeding systems engineered to fit the facility provide healthy, balanced animal nutrition, including Illinois soybeans and corn. Pigs eat 85 percent of the soybean meal fed in Illinois.

Building design completely eliminates runoff, capturing valuable nutrients that can be reused to produce the next crop.

A new barn means new opportunities

Today’s new barn designs mean more for everyone:

- More revenue for Illinois soybean growers, since livestock farmers are our top customers.
- More home-grown products for America’s food security.
- More jobs for Illinois residents.
- More tax revenues to maintain communities’ schools, services and infrastructure.
Lower Prices Trigger 2014 Farm Bill Payments

While it may be too early to determine the full impact the 2014 Farm Bill ultimately may have on farm businesses, new provisions kicked in last year as commodity prices declined. Also known as the Agricultural Act of 2014, the farm bill was written when commodity prices were high and ended direct and countercyclical payments to farmers. In place of those payments, farmers were given the choice between two safety net programs for the 2014 through 2018 seasons. The Agricultural Risk Coverage (ARC) programs – either ARC-County or ARC-Individual – and the Price Loss Coverage (PLC) program provide assistance only during market downturns, such as that seen in 2014 and 2015, or when adverse weather decreases revenue.

ARC-COUNTY MOST POPULAR OPTION

Early data from USDA’s Farm Service Agency (FSA) show the vast majority of farmers nationwide and in Illinois elected to participate in one of the programs. Most chose the ARC-County program, where nationwide 96 percent of soybean farms, 91 percent of corn farms and 66 percent of wheat farms are participating. That represents three-quarters of total U.S. base acreage enrolled. One percent is enrolled in ARC-Individual and 23 percent is covered under PLC, including primarily long-grain and medium-grain rice and peanut farms.

FARMERS REALLOCATE BASE ACREAGE

The 2014 Farm Bill gave farmers a one-time chance to reallocate, but not increase, their base acres. PLC and ARC payments are based on commodity base acres rather than planted acres. FSA information suggests reallocation decisions were made based on whether farmers expect payments for one crop to be higher than another from 2014-2018.

According to USDA’s Economic Research Service, the U.S. corn base rose 12.8 million acres and the soybean base expanded 4.7 million acres, which were the largest increases relative to enrolled base in 2013. Wheat base declined nearly 9.9 million acres. In Illinois, there are now 13.2 million corn base acres enrolled and 7.1 million soybean base acres enrolled.

USDA BEGINS 2014 PAYMENTS

USDA announced late last year that half of the 1.76 million farms that signed up for either the ARC or PLC programs would receive payments for the 2014 crop year. Those payments began in November 2015. However, because of the Budget Control Act of 2011, payments are sequestered at the rate of 6.8 percent, which means a decrease in farmer payment rates.

To date, both programs have paid a total $4.5 billion -- $3.9 billion via ARC-County and $593 million via PLC. Of the $4.5 billion paid, crop allocations are:

- Corn $3.2 billion
- Soybeans $282 million
- Wheat $307 million
- Sorghum $31 million
- Barley $6 million

Illinois ARC-County payment data show that enrolled farms in only seven of 102 Illinois counties – Carroll, Cass, Cook, Douglas, Henderson, Knox and McDonough – have received payments for soybeans ranging from $2.86 to $52.46 per acre. In contrast, 38 counties with enrolled farms received payments for corn, ranging from $0.21 to $98.82.

USDA ALLOWS ARC-COUNTY CHANGES

ARC-County payments were supposed to be based on the administrative county of the farm. That means farmers with acreage in different counties would receive payments based only on the administrative county. Since this created problems for farmers whose administrative county received lower payments than other counties being farmed, FSA is giving farmers an opportunity to change their administrative county for the 2014 and 2015 crop years. While the decision on 2014 crops can be based on actual ARC-County payments, 2015 ARC-County payments will not be finalized until October 2016.

Source: USDA Farm Service Agency

### ILLINOIS FARM PROGRAM STATISTICS

As of Nov. 3, 2015, Illinois had:

- 53,611 farms paid more than $202 million under the ARC-County program
- 7 farms paid $81,820 under the PLC program
- Total ARC/PLC payments of approximately $202.4 million

### Top 10 States As of November 3, 2015

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<thead>
<tr>
<th>State</th>
<th>ARC/PLC Payments</th>
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<tbody>
<tr>
<td>Arkansas</td>
<td>$160.4 million</td>
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<tr>
<td>Texas</td>
<td>$171.4 million</td>
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<tr>
<td>Wisconsin</td>
<td>$179.4 million</td>
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<tr>
<td>Illinois</td>
<td>$202.4 million</td>
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<tr>
<td>Ohio</td>
<td>$206.3 million</td>
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<td>South Dakota</td>
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<td>Kansas</td>
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<td>$602 million</td>
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<tr>
<td>Iowa</td>
<td>$865.2 million</td>
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</tbody>
</table>

Source: USDA Farm Service Agency
Building foreign markets is essential to growing demand for Illinois soybeans and, ultimately, increasing farmer profitability. To meet international customers’ need for efficient and economical soybean transportation, the industry is developing an alternative distribution system to move soybeans down the Mississippi River System.

Last year saw major shipping delays for soybeans and other goods leaving the West Coast. Labor disputes between shippers and workers were to blame.

And since a large portion of goods coming into and leaving the U.S. passes through California and the Pacific Northwest, such delays spelled trouble across the soybean supply chain. Shippers want alternative routes, and containerized soybean shipments are gaining significant interest.

**COB FILLS GAP IN SHIPPING**

Such containerized shipping is known as Container-on-Barge (COB). It has been the basis for Illinois soybean checkoff-funded transportation research since late during the last decade. And now COB has reached a point where continued efforts, more market information and partnerships could allow COB to serve as an export pathway for Illinois soybeans. In so doing, COB could create new market opportunities and potentially more direct financial benefit to Illinois farmers.

According to Ken Eriksen, senior vice president of transportation with Informa Economics and ISA consultant, COB could solve two key problems in soybean transport — inefficient shipments of empty containers and limited port options for shippers.

“Currently, many containers of consumer goods arrive in the U.S. from Southeast Asia, and sometimes these containers are returned empty,” he explains. “Rather than shipping empty containers back across the Pacific Ocean, there is an opportunity to fill them with American products — namely commodities such as soybeans — and return them overseas.”

Interest in COB first gained momentum in the mid-2000s with surplus containers in Illinois, high ocean freight rates, rapidly growing overseas markets and ISA’s industry partnerships, Eriksen adds. “These factors made international shippers see COB as a viable option. With recent concerns about bottlenecks on the West Coast, there is even more opportunity for COB,” he says.

**SOYBEAN TRANSIT FACES CHANGE**

Four to seven percent of U.S. soybeans exported in the last five years have moved via container along a simple path, Eriksen says. Soybeans typically move from farm to local elevator to terminal elevator where they are loaded into containers. Container loads are sent by truck to a railroad container yard, where they are loaded onto railcars bound for the West Coast.

A couple of factors have prevented soybeans from being moved by containerized barge shipments. “It is a longer route, but there is a silver lining for COB to take off in the Mississippi River System,” says Eriksen. “Shippers are speaking out about their need for options. ISA can continue to work to foster container-on-barge to meet that demand.”

New Orleans already boasts the cranes, terminals, experienced labor and shipping processes needed to receive barges and containers, Eriksen contends. There also is ample equipment, numerous barges and towboats available along the Mississippi River, as well as barge operators interested in COB. The next step, according to ISA consultant Chuck Dillerud, is to provide them with the procedures necessary to handle containers. Dillerud’s experience in the inland waterway industry has helped identify hubs and defined equipment specifications.

**COB OFFERS OTHER BENEFITS**

Other factors still need to fall into place before COB becomes a reality. ISA, with funding from the soybean checkoff, has been leading industry efforts to accomplish these goals.

“The driving factor in our work on COB is to make soybean transportation more efficient and flexible,” says Paul Rasmussen, soybean farmer from Genoa, Ill., and ISA director. “Any time we

“If soybeans are loaded into containers and shipped by barge, it means farmers have a low-cost, competitive transportation option that offers some basis preservation.”

KEN ERIKSEN
senior vice president of transportation with Informa Economics and ISA consultant
increase efficiency, we increase farmer profitability and Illinois soybean competitiveness.”

Eriksen agrees that COB could offer direct benefits to Illinois farmers and to the U.S. transportation system. “If soybeans are loaded into containers and shipped by barge, it means farmers have a low-cost, competitive transportation option that offers some basis preservation,” he says.

COB offers long-term benefits as well. “By moving containers on barges, we could move trucks off the road and lower emissions overall,” Rasmussen says. “In fact, according to the Soy Transportation Coalition, the fuel efficiency of moving one ton of freight with one gallon of fuel is 616 miles by barge, compared to 150 miles by truck. This would reduce the wear and tear on American highways, many of which are already in need of repair.”

COB also can also reach international markets looking for smaller shipment quantities or for identity-preserved soybeans. “We’ve already seen developed markets such as Taiwan move from 100 percent bulk shipments to 50 percent bulk and 50 percent containerized,” says Eriksen. “If the trend continues, containerized shipments moved by barge will be a necessity.”

ISA is Key COB Player

ISA has been a key player in developing COB transportation for soybeans from its beginnings in the mid-2000s. Chuck Dillerud, a consultant supporting the ISA-led initiative, explains:

What’s been done so far …

1. Through an in-depth analysis, ISA addressed how COB could best work for Illinois farmers with existing equipment and operations. This included modeling transportation solutions and developing business plans for COB movement from central Illinois River ports to both the Chicago-area rail ramps and to multiple Gulf Coast ocean ports.
2. ISA visited multiple Illinois River ports and Gulf Coast ocean ports to fine-tune COB operating strategies and requirements for infrastructure and equipment to find the most cost-effective solutions for Illinois soybean shippers.
3. To build support, ISA introduced the COB concept to major barge carriers, explained the process envisioned, and attracted their interest in pursuing COB transportation. The process was evaluated and validated through extensive meetings and site visits with successful European inland waterway COB operators.
4. ISA organized stakeholders and secured tentative commitments from several parties to ship up to 8,000 containers each annually.
5. ISA helped the City of Beardstown prepare a USDOT TIGER grant application to partially fund equipment needed to start a COB circuit between Joliet, Ill., and Beardstown, Ill. This location could serve as the departure point for future COB service to ocean ports on the Gulf Coast.

Next steps in 2016 …

1. Use biodiesel to power towboats, which is seldom used on American waterways.
2. Work with all members of the supply chain to understand the specific steps, parties and processes involved in COB.
3. Pursue investments and begin business operations for container loading facilities across the state, including such points as Beardstown, Ill., Joliet, Ill., and Granite City, Ill.
Crop insurance provides an important risk management tool, especially for those farmers facing continued tight margins. Agricultural Economics Professor Keith Coble, Ph.D., with Mississippi State University, served as a key economic advisor during the 2013-2014 farm bill debate. He shares his knowledge to help Illinois soybean farmers rise above economic challenges.

How did the 2014 Farm Bill affect crop insurance?
The 2014 Farm Bill emphasized crop insurance as a farm safety net. It tied crop insurance to conservation practices in a way that hadn’t been done previously. Crop insurance had been tied to Title I, including loan programs and financial commodity programs. Now, it also is tied to Title II, which includes conservation programs. That means farmers now need to be in compliance with federal soil conservation guidelines to be eligible to buy federal crop insurance.

What is the relationship between conservation practices and crop insurance?
Farmers should know rate adjustments are available for some practices. If you look at good conservation practices — improved soil health, for example, or minimum tillage — they typically have positive long-term outcomes. A key trend is that producers who implement good conservation practices, in many instances, are going to be rewarded by the system because their average yield is higher, their risk is lower, and therefore their rates are lower.

How else does crop insurance impact farmer financial decisions?
Farmers need to think about the interaction between crop insurance and forward pricing strategies. The crop insurance they purchase affects how aggressive they can be in terms of forward pricing. I am not encouraging speculation. Rather, as you are more certain of the crop yield as the season progresses, you can forward price more of the crop.

Do you think farmers will make major changes to 2016 coverage?
Farmers might have more protection than they need. Many farmers are in the ARC program, have crop insurance and forward price. They should stop and consider whether they are double- or triple-covered against certain risks. Another change they may have missed in 2015 is implementing separate coverage levels. Previously, coverage had to be the same across all acres of a crop. Farmers now have the opportunity to choose different coverage levels for irrigated or dryland production; say 80 percent coverage on irrigated land and 70 percent on dryland.

What are your top recommendations for crop insurance in 2016?
There are more crop insurance options now. Farmers need to talk to a crop insurance agent as they crunch numbers for the 2016 season. If they haven’t looked at enterprise units, they should. If they haven’t looked at trend-adjusted yields, they should. Additionally, farmers ought to ask for quotes for different coverage levels, typically one-up and one-down from where they’re at today. Most Illinois farmers are in the ARC program, so they won’t need to look at the SCO program. This is a year farmers might want to tweak their coverage level and consider all their options, and work closely with crop insurance agents on those decisions.

For more tips and news about farm profitability, tune in to RFD Radio and your local farm radio this winter for Profitability Matters. This checkoff-funded radio series provides insight on how Illinois soybean growers can manage their farming operation and improve on-farm profitability. Learn and read more from expert interviews at ilsoy.org/profitability.

“Many farmers are in the ARC program, have crop insurance and forward price. They should stop and consider whether they are double- or triple-covered against certain risks.”

KEITH COBLE
Giles Distinguished Professor of Agricultural Economics, Mississippi State University

PHOTO SUBMITTED BY KEITH COBLE
IAA Foundation Offers Dwain Ford Memorial Soybean Scholarship

The IAA Foundation is offering the first Dwain Ford Memorial Soybean Scholarship for the 2016-17 school year. Established by colleagues, friends and family to honor the memory of the long-time leader of the soybean industry, the scholarship is a $1,000 award that will be made to a student studying an agriculture-related field who is or was active in 4-H and FFA. In addition to general eligibility criteria, applicants will address the essay question, "How are soybeans grown in Illinois having a global impact?" Students can apply online at www.iaafoundation.org by Feb. 1, 2016. For more information about the scholarship or to support education through donations, call IAA Foundation Director Susan Moore at 309-557-2230.

In addition, ISA encourages college students who will be juniors in the fall of 2016 to apply for one of up to five crop sciences scholarships. Scholarships are worth $4,000 each for the 2016-17 school year, and will be awarded to students majoring in crop sciences at Illinois State University, Southern Illinois University Carbondale, University of Illinois at Urbana-Champaign or Western Illinois University. The same deadlines and website information apply.

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Attention Illinois Soybean Growers (ISG) Members

ISG Policy Session

All ISG members are invited to attend the ISG Policy Session Friday, Feb. 5, 2016, at the ISA office located at 1605 Commerce Parkway, Bloomington, IL 61704, from 8 a.m.–11 a.m.

The purpose of this session is to allow ISG members and the ISG Board of Directors to review the current American Soybean Association (ASA) Resolutions for changes and amendments that will be presented at Commodity Classic in New Orleans, La., in March 2016.

The resolutions are available for viewing at www.ilsoygrowers.com by clicking on “Download 2015 ASA Resolutions” at the top of the home page. You may also contact Judy Smith at smithj@ilsoy.org or at 309-808-3612 and she will email you the file.

ISG Annual Meeting of Members

Pursuant to Article III, Section 3, of the Bylaws of Illinois Soybean Growers, notice is hereby given that the annual meeting of the members of the Illinois Soybean Growers will be held Friday, Feb. 5, 2016, from 11 a.m. – 12 p.m. at the Illinois Soybean Association office located at 1605 Commerce Parkway, Bloomington, IL 61704. All ISG members are invited.

The purpose of the annual meeting is to provide reports on association activities, approve the acts and deeds of the directors and staff, and to transact such other business as may properly come before the meeting.

ISG members are invited to attend lunch from 12 p.m. – 1 p.m. Contact Dustin Scott at scottd@ilsoy.org, 888-826-4011 or 309-808-3603 by Tuesday, Feb. 2, 2016, if you plan to attend.

DATED THIS 11TH DAY OF DECEMBER 2015

Sincerely,

[Signature]

Illinois Soybean Growers Secretary

Register in 3 easy steps:

1. Visit VoiceforSoy.org
2. Click “Join Us”
3. Complete the registration form

Nancy Kavazanjian was born and raised on Long Island, New York, but she was interested in farming from an early age. She attended Colorado State University to pursue an animal science degree and instead graduated with a degree in ag journalism. She met her husband and fourth-generation farmer, Charles Hammer, there. Kavazanjian pursued her profession at the Chicago Board of Trade as a wire service reporter and then worked for a Wisconsin public relations agency. Today, she farms full-time with her family, growing corn, soybeans and winter wheat. She also serves on the United Soybean Board (USB) executive committee as sustainability target area coordinator and is chairwoman of the U.S. Farmers & Ranchers Alliance (USFRA).

WHY DID YOU CHOOSE TO GET INVOLVED WITH SOYBEAN LEADERSHIP?

I am a firm believer in giving back to your industry. I decided to run for one term on the Wisconsin Soybean Association board in the late 1980s. My husband was on the state corn board at the time, so I wanted to do something different. On many occasions, I was the only woman in the room, but today serve with many great women leaders.

About five and a half years ago, I was asked to submit my name to be a Wisconsin representative for USB. Much to my surprise, I was appointed to the position. I wasn’t sure I wanted to do it, but now I can say it has been the best experience of my life. I have participated in a number of leadership programs that have helped me be a better soybean farmer, spouse and parent, and I no longer am the only woman in the room promoting agriculture.

WHAT BENEFITS DOES LEADERSHIP OFFER YOUR FARMING OPERATION AND AGRICULTURE?

Learning to be a good and organized leader is a benefit, whether you are leading people through an association, on your farm or in your family. The skills I have learned are very transferrable from one situation to another. I am able to step back and look at our farm from a strategic perspective and see where we might add value to our operation. That is the personal payoff.

Leadership gives you the opportunity to look at agriculture from a more global perspective, too. For example, we have been growing specialty soybeans for 20 years. I had the chance to travel overseas on a USB mission where I met the tofu processors in Japan that purchase our soybeans. I also hope to take USFRA’s lesson plans to Long Island to talk to students about agriculture.

WHAT TIPS DO YOU HAVE TO ENCOURAGE OTHER FARMERS TO GET INVOLVED IN LEADERSHIP?

We are all busy people with businesses to run. Big and small farmers, young and old, male and female — diversity is crucial for getting the right balance to make decisions for our industry. Remember your family and farm come first. When you volunteer, you become a better person from what you experience, learn and share. When I was on Long Island, I never dreamed I would get to represent U.S. agriculture, but it is time well spent and an honor to be involved.

Several Illinois districts will have openings this year for soybean farmers interested in serving on the ISA board of directors. Farmers are invited to attend upcoming meetings and learn more about the board, including Feb. 4-5 and June 23-24 meetings in Bloomington, Ill. For more information, contact Angel Terrell at terrella@ilsoy.org or 309-663-7692.

NANCY KAVAZANJIAN
Farmer from Beaver Dam, Wis.
In 2013 and 2014 research trials, Pioneer® brand soybeans treated with the Pioneer Premium Seed Treatment program had a positive yield advantage over untreated Pioneer brand soybeans 59% of the time. The positive yield advantage across these locations was an average of 4.5 bushels/acre. Product performance is variable and subject to any number of environmental, disease and pest pressures. Individual results may vary.

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