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ABOUT THE COVER
Austin Rincker’s (right) employment with Hunter Grain, Inc., in Moweaqua, Ill., transitioned into a long-term partnership. Robert (left) and Alice Ann Hunter’s children had no intentions to return and farm for a living. Photo by Cyndi Cook.

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January 2014
Volume 4 • Number 1
As ISA celebrates 50 years of existence and 100 years of soybean production, Illinois has moved back to the number one slot for state soybean production. In USDA’s December crop production report, the agency estimated Illinois farmers raised 460.6 million bushels of soybeans on 9.4 million acres with an average yield of 49 bushels per acre in 2013. Iowa, in second place, grew 415.4 million bushels on 9.23 million acres with an average yield of 45 bushels per acre. The last time Illinois achieved the top state soybean production spot was in 2003.

While I know Mother Nature has a lot to say about the number of bushels we raise, Illinois soybean farmers also can take some credit for being number one. The investments we make in the soybean checkoff help us to collectively produce a better soybean crop.

ISA’s board of directors is cognizant of the need to find ways to produce more soybeans with less environmental impact while creating new uses that expand our demand base. Officially, ISA’s vision is to enable Illinois soybean producers to be the most knowledgeable and profitable around the world. Our goal is to achieve maximum profitability and global competitive positioning for Illinois producers and utilize 600 million bushels of Illinois soybeans by 2020.

Strong production in 2013 allows us to continue along that path. As we begin a new calendar year, this issue of Illinois Field & Bean focuses on risk management and profitability. Certainly to maintain our ranking as top producer and continue to grow and use our production, we must be prepared to manage risk wisely and keep our books on the positive side of the ledger.

You can read about ways to better manage your production for profits in 2014, as well as read about farmers making plans to farm for the next generation. Increasing yields is just part of the equation. We also must eliminate freedom to operate barriers, such as unnecessary and restrictive regulations, and remain good neighbors to our urban counterparts.

As you look forward to the new year, I challenge you to put the practices in place on your farms to profitably grow Illinois soybean production and stay on top. Additionally, I invite you to become a member of Illinois Soybean Growers, and provide input into those legislative and regulatory issues that will have an impact on your future soybean profitability.

We’re number one. Let’s work together in 2014 to keep that status.

Bill Raben
ISA Chairman
Flourish with Succession Plan

Welcome to the new year. As we turn the calendar, you’re busy reviewing the 2013 crop year and making plans for 2014. We in farming get somewhat of a “break” in the winter – but there are still conferences to attend, crop plans to make and book work to do.

As you plan for your next crop year, have you also been thinking about the long-term future of your farm? I am talking about the future that’s maybe five, 10 or 20 years away – or closer if you want to retire soon.

One of the keys to your farm’s future is identifying the next leader. With the average farmer age now just past 57, this is a critical time for training the next generation of farm leaders.

But first, the next farm leader needs to know his or her role in the succession plan. I have heard stories of farm families where the “kids” were in their 40s and dad was still calling all the shots. The next generation had no idea when they’d take the reins or who would have leadership responsibility for which areas. Lack of planning like this can be devastating on a farm, especially if something tragic were to happen to the current leader.

When you identify the next leader for your farm, you can start creating a more detailed training plan. Some families put these plans in writing – one grain farm set up a 10-year gradual transition of responsibility. Their plan is very intentional and specific about how the transfer will occur, and the family members feel secure in how it will happen.

As you plan for the future leadership of your farm, you may want to enlist the help of a legacy advisor. Since each farm family is unique, a legacy advisor meets with the whole family to talk about their situation, needs and goals. Then the advisor works with the whole family – in connection with your accountant and attorney – to get a full legacy plan in place to transition the farm at the proper time. That includes clear plans for how leadership will transfer.

This winter is an opportunity to start working with a legacy advisor and begin training your future leaders. Have them shadow you as you meet with vendors, suppliers and partners. The key is to show them not only how you make decisions for the farm, but your thought process as you make those decisions. That shows them exactly what you’re taking into consideration.

Give the future leader some areas of responsibility and hold them accountable for their decisions. They can prepare to make the bigger decisions they’ll be faced with in the future as farming continues to experience rapid change.

Soybean farmers of the future need to be armed with the skills to navigate and adapt to the large amount of change they’ll almost certainly see in their careers.

The time to start the plan is now. The future of your operation depends on it.

Darren Frye is president and CEO of Water Street Solutions, based in Peoria, Ill. The company helps Midwest farmers achieve success through financial analysis, legacy planning, insurance and commodity marketing. Visit www.waterstreet.org for more information.
Successful Succession
Begin With The End In Mind

By Joanie Stiers

For successful farm successions, estate planner Curt Ferguson references Stephen Covey’s “Seven Habits of Highly Effective People:” Begin with the end in mind.

“If I drop dead today, how would I want the farm operation to look next month?” asks Ferguson, who owns and operates The Estate Planning Center law firm in Salem, Ill. “Who should be in charge? Who is capable of being in charge?”

Farm families must think about who is capable of leading the farm. They must challenge the decision-making skills of the next generation. And above all, they must be clear. Ferguson says that may mean getting more formal than some families like. He encourages farmers to write the plan down and gradually prepare for transition, which can take years to do effectively.

Ferguson says a successful farm succession process also requires talking with the entire family, especially if assets may be distributed unevenly. “It really bothers me when parents are favoring one son or daughter -- for probably very good reasons -- but they’re chicken to tell the rest of their family about it,” Ferguson says. “If you’re not willing to talk about the plan with your kids, then either the plan is unreasonable or your kids are unreasonable.”

Succession Takes Many Forms

Succession can take many forms, including those that do not include a father-son transition. These soybean farmers share how they are moving forward.

Austin Rincker
Hunter Grain Inc., Moweaqua, Ill.

Farm: Farms with Robert and Alice Ann Hunter, unrelated partners. They grow 2,200 acres of corn and soybeans and own a small herd of Angus cows.

History: Centennial farm founded in 1885.

Transition: Rincker’s employment transitioned into a partnership.

Top tip: Communication is key. Outline everyone’s expectations.

A dream came true when farm employment transitioned to a partnership for Austin Rincker. The young man in his 20s always wanted to farm after growing up on one. But there wasn’t room in his family’s operation.

“This opportunity presented itself, and I couldn’t be happier,” he says.

Robert and Alice Ann Hunter, who farm near Moweaqua, Ill., invited Rincker to work on their farm as an employee. The work started part-time when Rincker was in high school, running the combine and doing some tillage. He continued seasonal work in college. Halfway into his four-year degree in ag economics, the Hunters invited him back full-time with a partnership offer after he graduated from the University of Illinois. None of their three daughters had intentions to farm for a living.

Today, Rincker and the Hunters manage 2,200 acres of corn and soybeans and 22 head of Angus cows. They talked about his transition into the business for a couple years.

“Communication is key,” Rincker says. “Outlining everyone’s expectations on each side is huge.”

The Hunters gradually have given Rincker more respon-
Doug Winter

*Doug Winter Farms, Mill Shoals, Ill.*

**Farm:** Farms with brother. They grow 3,800 acres of corn, soybeans and wheat.

**History:** Four generations; farm founded in 1895.

**Transition:** One brother slowing towards retirement while the other takes on more acreage.

**Top tip:** Communication. It is the key to harmonious transitions.

This winter, farming brothers Doug and Richard Winter will change the acreage balance to meet each other’s needs. While older brother Richard slows down, younger brother Doug ramps up.

Richard will reduce his acreage to 1,000 in the 3,800-acre grain operation. At age 70, it shortens his workload and presents him an acreage he can handle without full-time employees. Meanwhile, Doug willingly takes on more acres, more bills and more machinery needs. He is 12 years younger, and still has eyes on farm expansion.

Keeping the four-generation farm running smoothly requires communication, says Doug. In fact, the farm succession discussions started several years before his brother’s 70th birthday.

Doug worked with landlords to change some share rent arrangements to cash rent, which aids in grain marketing and expense planning. He believes one of his biggest challenges in the transition will be projecting equipment needs for the next few years.

Dean Campbell

*Agri Tech Acres Inc., Coulterville, Ill.*

**Farm:** Farms with Nathan Hasheider, an unrelated partner. They grow 2,000 acres of corn, soybeans and wheat.

**History:** Six generations; farm founded in early 1800s.

**Transition:** Campbell hired Hasheider. Employment transitioned into a partnership.

**Top tip:** Communication. Know the thoughts, concerns and desires of all involved.

“Discuss all your alternatives and be very open,” Doug says. “Don’t be afraid to say what you’re thinking and get all your ideas out on the table.

“That’s why it’s taking so long,” he says. “We’ve bounced different ideas and pros and cons, and it has helped us to come up with a mutually beneficial and advantageous arrangement.”

“After 50 years of progress and direct decision-making, it takes a few years for me and my family to step down to a different pace,” says Richard. “This is especially true when you still have good health, the ability and desire to farm. It also takes time for landlords who have dealt with you for 40 and 50 years to make these changes.”

Doug says that communication also needs to extend to immediate family members, even if they are not directly involved in the operation. Also, keep financing providers, accountants and landlords in the loop is critical. All share a stake or interest in the farm’s future.

Doug Winter plants a field on his Mill Shoals farm, which he operates with his brother Richard.
Dean Campbell thought outside the family tree to keep his long-time family farm moving forward. The plan disrupts the lineage, which is long in the Campbell family, however.

“I needed assistance. When I found someone who was interested and wanted to work into it, I thought, ‘Why not?’” Campbell says. “We can keep the operation going and let someone else continue to be involved in agriculture the way I was able to be involved.”

Word of mouth brought him to Nathan Hasheider, who grew up on a diversified family farming operation about 25 miles away. With lots of cousins in the family, there wasn’t room for him to join his family’s business, and he wanted to work in production agriculture.

Hasheider is in his early 30s and Campbell is in his early 60s. They found a great fit, as Campbell’s grown children have solid off-farm careers.

“I remember my Grandpa telling me, ‘Do whatever you’re happy doing and you’ll be successful,’” Campbell says. “That means a lot about keeping an operation going. Someone has to be happy working as a farmer. There’s no sense pushing something on a sibling or descendant just because it’s history.”

Future plans include for Campbell to fade out of the business and Hasheider to grow. Their decision to establish a corporation will aid this transition as ownership interest is transferred.

“It is equitable to both sides. When we sat down and started thinking about how we were going to do this, it had to be a win-win for both sides,” says Hasheider. “From his perspective, it allows him to move out slowly. And then on my side, I started with no equity and then build it up as I go along.”

“The biggest thing is communication,” says Campbell. “You have to know where the other individuals stand and what their concerns are and what their desires are and work with that.”

### Steps to Start the Process

1. **Identify capable leadership.**
   
   One of the biggest mistakes families make is putting blinders on to the real facts, Ferguson says. If a grown child has troublesome relationships or habits, such as alcoholism, reconsider putting the farm at stake with him or her. Sometimes this requires tough-love decisions, he says. A farm cannot remain viable if leadership is incapable of running it.

2. **Prepare the next generation.**
   
   Get the next generation involved in making decisions, he says. “Let them test their own decision-making ability. Let them have control of how part of the farm is run.” Some people become uncomfortable with this because the younger generation is making decisions with the elder generation’s capital. Make sure the person who makes decisions bears some noticeable consequence of success or failure of those decisions, Ferguson says.

3. **Share skin in the game.**
   
   Have a son or daughter buy their own equipment, or take on a small tract and farm in their own name, he says. Allow them to build their own cash flow and their own credit records. That’s a necessary part for the transition.

4. **Think through land and machinery transfers.**
   
   For tax reasons, it may be better to receive land and machinery as inheritance than as a gift, or buy it in advance while the owner is living, Ferguson says. Inherited land resets its basis, which significantly reduces capital gains tax burdens if an heir sells. Machinery, which is expensed as a tax write-off, essentially zeroes out its basis value, so a sale is taxable income. Hang on to equipment or lease it to the younger generation. Upon death, heirs can depreciate it again on their income taxes. If longer owner life expectancy or shorter life of equipment warrants action now, make sales incrementally.

5. **Consider trusts for land transfers.**
   
   One of the biggest legal mistakes farmers make related to farm succession is transferring land in a successor’s name. Rather, Ferguson encourages a trust. Land transferred to heirs in a trust can protect the land from future estate tax and life issues, such as divorce, lawsuits or creditors.

6. **Be clear with everyone’s intentions.**
   
   “Do things in such a way that is business-like,” he says. “Treat your son -- even though you love him more than your neighbor -- virtually the same as you would your neighbor in terms of documenting your agreement.”

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8—Illinois Field&Bean

January 2014
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ISG Schedules February Policy Session

All Illinois Soybean Growers (ISG) members are invited to attend the ISG policy session, Feb. 12, at the Illinois Soybean Association office located at 1605 Commerce Parkway, Bloomington, from 1-3 p.m. Members also are invited to attend lunch at noon prior to the session.

The purpose of the session is to allow ISG members and the ISG board of directors to review current American Soybean Association (ASA) resolutions for changes and amendments that will be presented during Commodity Classic in San Antonio, Texas, in February. The resolutions are available for viewing at www.ilsoygrowers.com by clicking on “Download the ASA Resolutions” (adopted March 2, 2013) at the top of the page. Please contact Dustin Scott at scottd@ilsoy.org or 888-826-4011 by Feb. 5, if you plan to attend.

Head to San Antonio for Commodity Classic

Registration is open for farmers and families interested in attending Commodity Classic, Feb. 26-Mar. 1, in San Antonio, Texas. Commodity Classic is the annual convention and trade show organized for the nation’s corn, soybean, wheat and sorghum farmers. Visit the website, www.commodityclassic.com, for registration and housing details.

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SOY TALK

Using the Map

For centuries, travelers have used maps to get where they wanted to go. Without one, they might not take the best route, or worse, miss their destination altogether.

Similarly, soybean breeders are using genetic mapping to produce more complete seeds that meet the needs of farmers.

“Through the mapping of the soybean genome, we are learning more about the genetic components of disease characteristics,” says Robert Waller, Dow AgroSciences soybean product development agronomist. “We now have the capacity to look more closely at specific genetic markers associated with important characteristics. This information allows us to identify products earlier on in the breeding process that have a greater chance of having certain disease characteristics. When we know we have the right disease characteristics, we can turn our attention to the agronomic characteristics. This delivers a more complete soybean package to growers.”

The development of new soybeans begins with a minimum of three years of testing at multiple locations. This allows breeders to build a database of characteristics for a specific variety. It’s critical to collect data under different environments to position the soybean on the right acres.

In addition to agronomic attributes, researchers look for disease resistance characteristics and adaptability to environmental factors such as high pH soils and weather-related stress.

“There will always be emerging problems that are limiting factors to yield potential. When we take care of one disease or pest, a new one takes its place. Diseases and pests may prevent a variety from reaching its fullest genetic potential. By mapping out the essential disease and agronomic characteristics, we start to remove the limiting factors of yield potential,” adds Waller.

The soybean checkoff funds basic research that helps the industry develop specific varieties. This research identifies genes that are beneficial to yield and agronomic characteristics. Individual companies can use this research to form the building blocks of new products.

“Soybean genome mapping has provided us with a roadmap. We are now deciding the best roads to take to higher-yielding soybeans.”

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Illinois soybean farmers have identified many reasons to support Illinois livestock expansion: a growing market for Illinois soybeans, more jobs and a bigger tax base. Challenges facing livestock producers who want to expand their facilities are more complex. But Illinois soybean farmers can help neighbors tackle regulatory roadblocks.

The Livestock Management Facilities Act (LMFA) contains aggressive time frames. Warren Goetsch, bureau chief of environmental programs at the Illinois Department of Agriculture, admits the permitting process can be frustrating for livestock producers. Arranging a public information meeting can take three to four months.

“People in the livestock industry have gotten good at seeing challenges at a particular site, and coming up with practices and solutions that address those challenges,” he says. “They don’t propose a facility unless they believe they can meet all the requirements.”

ISA has created a Guide to Beginning a Thriving Livestock Operation that explains how to meet requirements, lists experts to contact, and provides tips for siting a new barn.

Keep Neighbors Informed

Goetsch’s advice to producers is to begin by building good relationships with neighbors, including area farmers and community residents. “Have open, honest discussions up front, well before starting the formal permitting process. Talk about the positive impact on the local economy and the tax base for schools,” he says.

Jake Nims, agricultural engineer and consultant with Frank & West Environmental Engineers, Springfield, Ill., spends 90 percent of his time permitting livestock facilities. In his estimation, most of the opposition comes from non-agricultural neighbors. “There are absentee landowners who worry about the value of their property. They have an incorrect perception that a livestock facility decreases the value of adjacent property,” says Nims. “Grain farmers generally support livestock producers as their biggest customers.”

Don’t Buy the Barn First

Compared to surrounding states, Nims says Illinois regulations are fairly straightforward. Unfortunately, there is misinformation about who needs a permit. “If you’re building any waste-holding structure, you need a permit,” he adds. “And sometimes what people want to build and what they can build varies greatly.”

For example, thresholds for manure storage capacity are required in any new structure. “If producers buy a barn before permitting, they may wind up being forced to add onto the new building to meet manure storage capacity. That will drive costs up, so they should get the permit first,” Nims advises. “Producers have a year to begin construction once granted a permit and then a minimum of two years to finish construction. Don’t wait until the first day of spring or first winter snow to decide you’re doing it this year.”

To help livestock producers address regulatory roadblocks, contact Mark Albertson, ISA strategic market development director, at albertsonm@ilsoy.org or 309-808-3601, or Nic Anderson, ILDG livestock business developer, at ildg@ilfb.org or 217-622-7491. Visit www.ilsoy.org/isa/animal-agriculture/ for more resources and tools.
ISA Takes Initiative on Waterway Repairs

Barges historically are the most economical, environmentally friendly way to move Illinois soybeans, but funding shortfalls and maintenance backlogs pose increasing threats. ISA is exploring a public-private partnership (PPP) with the U.S. Army Corps of Engineers (USACE) to rank and speed fixes that will protect profits for farmers, commodity shippers and transporters.

“ISA is taking information gleaned from checkoff-funded research to move the needle on repairs,” says Paul Rasmussen, soybean farmer from Genoa, Ill., and ISA transportation first vice chair. “Increasing soybean industry profit depends on efficient and reliable locks and dams to bring Illinois soybeans to market.”

ISA researchers in 2012 concluded a PPP would be a feasible development and funding option for addressing repairs for deteriorating locks and dams. ISA approached the Rock Island District USACE seeking a partnership to help the district supplement funding.

“No other organization had approached the Corps to help and proactively work on developing the PPP concept to the degree that ISA did,” says Rick Granados, regional asset manager at USACE’s Mississippi River Valley Division. “The collaboration with ISA to improve waterways through non-traditional funding is a natural fit with an alternative financing concept the Corps is currently considering.”

Pending approval by the federal government, the Water Infrastructure Now Public-Private Partnership Act will allow USACE to join with private entities to fund critical repairs. The pilot program could serve as a case study for other groups to use PPP organizational efforts to fund lock and dam repairs. USACE also is analyzing economic risks to shippers of lock and dam part failures, such as miter gate machinery, valves and electrical equipment.

“Assigning maintenance and repair costs to each piece of the system will help the Corps better prioritize repairs, and will help ISA learn where more funding is best spent to benefit the soybean supply chain,” says Granados.

According to USACE, grain makes up 11 percent of the major commodities transported on the U.S. inland waterway system. Illinois has approximately 1,100 miles of navigable waterways, including 65 grain river terminals, which are used to transport commodities. Numerous other facilities enable movement of goods like petroleum, coal and chemicals.

“Lock and dam repairs will ensure smoother and more cost-effective grain shipping, but other industries also will benefit from ISA’s leadership,” says Paul Rasmussen, soybean farmer from Genoa, Ill., and ISA transportation first vice chair.

ISA Highlights Waterways Need

To read the checkoff-funded “Illinois Lock Maintenance Assessment and Funding Alternatives” study and learn more about possible funding scenarios and outcomes, visit www.ilsoy.org, and click on the transportation section, waterways area.

Checkoff Fact: ISA Highlights Waterways Need

ISA is exploring alternative funding options with the Army Corps of Engineers to speed lock and dam fixes and get Illinois soybeans to market via barge.

To read the checkoff-funded “Illinois Lock Maintenance Assessment and Funding Alternatives” study and learn more about possible funding scenarios and outcomes, visit www.ilsoy.org, and click on the transportation section, waterways area.
Google “100-bushel soybeans” and a few inconsistent results pop up. However, some soybean growers are reaching this milestone more routinely. With variety selection, management and some luck from Mother Nature, more producers could increase yields to 100 bushels per acre.

“Both genetics and management come into play,” says Jonathan Perkins, Southern Illinois Practical Farm Research (PFR) director for Beck’s Hybrids.

Even with this year’s wet spring and dry summer, many Illinois soybean producers say their soybean yields were higher than they thought their yields should have been.

“I think we’re beginning to see what soybean genetics can really do, especially with the little rain we had late this year,” says Doug Winter, a Mill Shoals, Ill., farmer and United Soybean Board (USB) director from Illinois.

Variety selection is a must, says Fred Below, Ph.D., University of Illinois crop sciences professor and author of the soybean checkoff-funded Six Secrets of Soybean Success. “Consider planting fuller season varieties to get the most time for plants to grow,” he says.

On research plots, Below has seen a three-bushel per acre gain without any extra cost. With soybean prices at $13 per bushel, that’s an increase of almost $40 per acre.

“You have to match seed selection to the right soil type and the right fields,” says Jonathan Perkins, Southern Illinois Practical Farm Research director for Beck’s Hybrids.

Once seed variety is selected, management is needed to get the most from genetic potential.

“Farmers largely don’t manage soybeans, but with more attention they can easily get 65-70 bushels per acre,” Below says. “The next 15 to 30 bushels are trickier.”

Remember the Basics

With continuing improvements in genetics, biotechnology and management, producing high-yielding soybeans is more attainable than ever, says Harold Watters, assistant professor for Agricultural & Natural Resources at Ohio State University. His biggest recommendation is to understand the fundamentals before chasing trends in yield-enhancement products or practices.

Marshall, Ill., soybean farmer and ISA Production Committee Chairman Don Guinnip agrees. “Begin with an emphasis on basic production principles. Manage pH, nitrogen, potassium and phosphorus,” he says.

One of the most overlooked factors is fertility, Below says. For example, he believes soybean yields were higher than expected in
2013 because the crop took advantage of unused fertilizer from a 2012 corn crop that was fertilized for high yields but produced drought-induced lower yields. Below's four keys for increased soybean yields include fertility, variety selection, foliar protection and seed protection, especially for earlier planted varieties.

Farmers seeking higher yields need to manage insects, weeds and other yield-robbers. Perkins frequently sees resistant weeds that limit yield potential. He advises rotating herbicide modes of action or switching between Roundup and Liberty systems to help control these weeds.

"We're always trying to produce more, but the genetics are changing and we have all these things that help get us to a new level, if we coordinate things at the right time," says ISA District 9 Director Tim Seifert. The Auburn, Ill., farmer does a lot of on-farm research, including about 35 acres dedicated to small plots and another 200 acres to whole-field plots.

In 2013, Seifert tried three practices that may help increase yields. First, he used soil-applied insecticides and fungicides, which led to a two- to three-bushel per acre increase. Second, he experimented with different applications of insecticides and fungicides, including none, one and both. Third, he applied nitrogen at the R5 growth stage and saw a five-bushel increase.

On Beck's Hybrids PFR sites in Illinois, Indiana and Kentucky, the teams have tried a few approaches that show potential, but are inconsistent, Perkins says. These include using the herbicide Cobra to stress the soybean plants and stack up nodes; mechanical damage such as rolling at various growth stages and post-emergence micronutrients.

Several soybean growers report success with seed treatments such as fungicides, insecticides and biologicals. Fun-
Funded by the Illinois soybean checkoff.

“We’re always trying to produce more, but the genetics are changing and we have all these things that help get us to a new level,” says Tim Seifert, ISA director from Auburn, Ill.

In southern Illinois, higher management leads to higher yields, but not necessarily a higher profit, Perkins says. The key is to find the right combination of genetics and production practices that lead to higher yields and higher profits.

The Illinois soybean checkoff is investing in programs to help soybean farmers reach 100 bushels per acre. For example, ISA created the Soybean College and Soybean Summits to help producers grow more soybeans. Last year ISA added the 100 Bushel Challenge to its annual Yield Challenge.

“By setting a goal and reinforcing production practices, we are encouraging farmers to think about what they can do to get there,” Guinnip says.

Consistently High Yields a Decade Away

While some growers are hitting 100 bushels in parts of their fields now, it may take five to 15 years to consistently hit the mark, Guinnip says.

“I think it’s possible within the next five to 10 years as we see better germplasm and increased management practices behind the soybeans,” says Perkins.

Below is optimistic 100 bushels will be fairly routine in 20 years. But it will take planning, and trial and error. “I’m excited about the opportunities to increase yields with management,” he says.

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Reconsider Corn-Soybean Rotation Benefits

Corn and soybeans have been the bread and butter of Midwestern agriculture since the mid-1900s. And while many farmers consider corn “king” in terms of profits and yields, soybeans in rotation with corn offers economic and agronomic benefits for both crops, says Gary Schnitkey, Ph.D., University of Illinois professor and farm management specialist.

“Farmers who invest more in soybean crop inputs such as fungicide, soil insecticide and fertility are more likely to see higher yields and higher profits,” says Rob Shaffer, soybean farmer from El Paso, Ill., and ISA director.

While corn generally has been considered king in terms of profits and yields, soybeans in rotation with corn offer economic and agronomic benefits for both crops.

“However, intense corn rotations mean fewer total soybean acres, so farmers are missing out on yield benefits typical for corn-after-soybean acres and actually limiting their returns in future years.”

To help put the profit potential of a corn-soybean rotation into perspective, Schnitkey says consider the Illinois average return on continuous corn is $211.50 per acre, while corn after soybeans delivers an additional $62.50. Soybeans following a single year of corn deliver $27.25 more than continuous corn. The estimates are based on the 2014 Illinois Crop Budgets data and assume $4.60 per bushel for corn and $11.00 for soybeans.

Schnitkey adds the last few seasons have challenged assumptions about yield performance of continuous corn. Farmers report yield drops up to 40 bushels compared with corn after soybeans.

Better Management is Key

Rob Shaffer, soybean farmer from El Paso, Ill., and ISA director, believes farmers can see even greater returns from soybeans by investing more in soybean crop management.

“I think most farmers like growing corn and are willing to invest more in managing it,” he says. “When corn prices are higher, farmers will spend $50 to $75 an acre to get another 10 bushels, but they don’t always realize investing more in their soybeans will also bring greater returns.”

He believes increased attention to all aspects of soybean management can help drive better yields. “Farmers who invest more in soybean crop inputs such as seed treatment before planting, fungicide, insecticide and foliar feeding are more likely to see higher yields and higher profits,” he says. “But you won’t see the results if you don’t spend the money on inputs. Rotating corn and soybeans on my farm improves soil health and keeps our land productive for the next generation of farmers.”

For more yield and profit tips, visit www.ilsoy.org/isa/profitability/management-matters/.

The first in a three-part series, this article looks at the advantages of a corn-soybean rotation. Next month, we’ll explore options for double-cropping soybeans with wheat, and in March we’ll provide tips on adding cover crops to your cropping rotations.
The Association of Illinois Soil and Water Conservation Districts (AISWCD) is a grassroots organization that serves Illinois’ 97 Soil and Water Conservation Districts (SWCDs). Illinois Field & Bean spoke with AISWCD Executive Director Rich Nichols about the association to learn more about how the organization can work with Illinois soybean farmers.

“The statewide association provides a voice to support local soil and water conservation goals,” Nichols says. AISWCD works with farmers and federal and state agencies including the Illinois Environmental Protection Agency, Illinois Departments of Agriculture, Natural Resources, Transportation and Economic Opportunity, along with groups such as Pheasants Forever, National Wild Turkey Federation and The Nature Conservancy.

What is one of the biggest soil and water conservation challenges that farmers face?

People down river from farms are increasingly concerned about nutrients getting into municipal water supplies and ecosystems. One of our goals is to help farmers address those concerns, and help keep the EPA from needing to take action.

How do farmers benefit directly from district work?

Local districts can help access state programs that put money in farmers’ pockets. One example is the Conservation Reserve Enhancement Program (CREP) available to riparian landowners in the Illinois and Kaskaskia River basins. CREP puts land in a permanent easement, which pays well and keeps that land in conservation cover forever. District resource conservationists help farmers by assisting with practices required for compliance. CREP is an extension of Conservation Reserve Programs, but CREP addresses high-priority environmental problems.

Are some farmers cautious about seeking SWCD help?

The SWCD system is sometimes mistaken for a regulatory body. Most farmers who work with local staff know they are trusted advisors trying to provide the best assistance possible. They help farmers keep nutrients on their land to boost yields, protect waterways and profitability.

Why are districts needed to support federal NRCS programs?

SWCD can do work that the Natural Resources Conservation Service (NRCS) is not funded to do, such as urban outreach. We work with landowners in urban and urban fringe areas on projects that align with the NRCS mission, but are not within the NRCS toolkit. Project examples include helping landowners install conservation tools, such as rain gardens or bioswales, which remove silt and pollution from runoff water.

How do you get the community involved in addressing conservation issues?

Local districts sponsor events on and off the farm, such as a cover crop tour held last November in Normal, Ill. We reach high school students through sponsorship of the Illinois Envirothon, a program where teams compete at the state level to solve a water quality or soil protection issue.

What is the primary challenge SWCD faces?

The state funds local SWCD efforts, but the statute that created SWCDs did not provide taxing authority. That means districts are the only unit of local government that cannot levy a general operating tax, and must rely on General Assembly funding. The state has cut funding about 70 percent since 2008, so districts are working as efficiently as possible to get the best support they can to farmers with resources they have available.

Visit www.aiswcd.org for a list of programs and local office contacts, or call 217-744-3414.
Attend the 2014 Illinois Soybean Summit.

It is our goal to see the Illinois soybean industry become the marketplace leader by 2020. This is the Decade of the Soybean. However, to achieve the production needed, we all must continue to seek out and apply the best farming practices. Soybeans have tremendous yield potential if fields are managed for high yield, including soil health and fertility. In 2014, two Illinois Soybean Summits are planned! If you want to learn more about how building soil health is key to long term sustainable yield gains, come to Peoria. And if you want to learn more about how to optimize soybean production in conditions prevalent in mid to southern Illinois, come to Effingham. **Make this your year!** Obtain the latest news and trends, get expert advice, and learn about innovative practices to boost your yields and maximize profits in 2014.

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- **March 7, 2014:**
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Scholarship Investment Leads to Promising Weeds Research

Nick Harre was one of the first college students to receive the ISA Crop Sciences Scholarship beginning with the 2010-11 school year. The Southern Illinois University Carbondale (SIUC) student from Nashville, Ill., was entering his junior year to study plant and soil science.

But what Harre did not realize then was the passion he would develop for weed science. He completed his bachelor's degree in plant and soil science with a minor in agribusiness economics in 2012. Now completing his master's degree at SIUC and preparing to work on a Ph.D. at Purdue University, he says the scholarship helped ignite his interest.

“The crop sciences scholarship has done a great deal for me. It allowed me to continue in higher education and make connections within the industry. I have been exposed to a side of agriculture that I had not previously considered or experienced,” he says.

ISA directors are pleased with the scholarship program’s success. Nick Harre is a great example of what the scholarship was designed to do -- educate young people in crop science. “We are happy to support programs like this with soybean checkoff dollars that provide opportunities for future scientists,” says David Droste, soybean farmer from Nashville, Ill., and ISA director.

Harre has been working in the lab of SIUC weed scientist and professor Bryan Young since his undergraduate days. Harre provided hands-on weeds research assistance to Young for two years before entering graduate school. Still working with Young for the last year and a half, Harre has been studying interactions between weeds and soybeans, with some interesting findings.

“I have been looking at the dynamics of nutrient competition, and what happens the longer both broadleaf weeds and grasses compete with soybeans in terms of crop nutrition,” he says. “I also studied how that competition affects grain characteristics, such as protein and oil content.”

Harre followed up that first study with a look at what nutrients are stolen from soybeans by weeds and what nutrients weeds release back to soybeans once they are controlled. He did evaluations on four weed heights, ranging from four to 18 inches.

“My data were more consistent in 2013 since it was a better growing season than 2012,” he says. “I am still analyzing data, but I have initially concluded that competition from weeds up to four inches affects some nutrient acquisition by soybeans, while competition from weeds eight inches or taller is detrimental to accumulation of all nutrients needed by growing soybeans. This also resulted in reduced soybean yields and lower oil content. Bottom line, this confirms what weed scientists already tell farmers -- early-season weed management is critical to protect yields.”

Harre also finds decomposition and release of nutrients back to soybeans from larger weeds is a slower process than from smaller weeds. It turns out delayed weed control is not only harmful when the weeds are growing, but even after they have been controlled.

Harre will continue to work with Bryan Young on his Ph.D. Young left SIUC for Purdue University. Harre’s research will likely study herbicide-resistant weeds.

“I did not know what weed science research would be all about, and didn’t anticipate the career it would provide,” he says. “I would tell other students to not be scared to try something new. The scholarship gave me the opportunity to work in this field and help farmers increase yields.”

Checkoff Fact: ISA Accepting Scholarship Applications

ISA currently is accepting applications for the Crop Sciences Scholarship, available to 2014-15 junior-status students at the University of Illinois, Illinois State University, Western Illinois University and Southern Illinois University Carbondale. Visit www.iaafoundation.org for more information and application details. The scholarship deadline is Feb. 1, 2014.
Register Now

Sign up to attend the 2014 Soybean Summit, and learn how to boost soybean yields. The annual event hosted by ISA will be held in two locations this year: Effingham, Ill., Feb. 6, at the Keller Convention Center, and Peoria, Ill., March 7, at the Peoria Civic Center.

Participants can acquire new skills and knowledge to increase production and profitability of their operations. The Summit will feature speakers from agricultural media, university research programs and professional crop consulting firms. Programs include Markets & Outlook, Sustainable Production and Weather – Consistent Volatility. The agenda also includes breakout sessions about cover crops, fertility programs and soil and root health. A trade show area offers additional tools, technologies and resources.

The 2014 Soybean Summit is free to Illinois farmers, and includes a continental breakfast, lunch and snack breaks with exhibitors. Register online at www.soyyieldchallenge.com/summit.

Illinois Soybean Farmers Join Industry Partner Boards

Illinois soybean and hog farmer John Hagenbuch, Utica, Ill., was elected to the U.S. Meat Export Federation (USMEF) Executive Board.

Ron Moore, soybean farmer from Roseville, Ill., was elected to the ASA Executive Committee as one of four vice presidents.

Mike Cunningham, soybean farmer from Bismarck, Ill., and ISA representative to the American Soybean Association (ASA), was elected treasurer of the National Biodiesel Board (NBB). NBB works to create sustainable biodiesel industry growth through education, communication, governmental affairs, technical and quality assurance programs.

CALENDAR OF EVENTS

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For more information visit www.ilsoy.org

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■ There’s nothing you can do about the weather.

TRUE: While weather still ranks as the top factor in determining yield levels, season-long moisture management and good pest control improve yield performance, even under less-than-ideal conditions. Reduced tillage has well-known benefits in keeping moisture in the root zone and increasing organic matter. Healthy soils and early-season pest protection can help plants develop the strong root systems that will support pod and bean production, especially during drought or heat stress.

■ Yield potential of soybean varieties is determined by maturity rating.

FALSE: Careful variety selection is an easy way to add yield potential from the start. Research by the University of Illinois shows varieties of similar maturity can vary by as much as 20 bushels per acre. Always select varieties suited for your area that will respond to improved management practices.

■ Soybeans don’t need fertilizer.

FALSE: Don’t overlook the importance of soil fertility for soybean production, especially phosphorus (P). Because phosphorus can be immobilized quickly in the soil, there may not be enough available for modern soybean varieties. Research suggests that a high-yield soybean management system (70 to 80 bushels per acre) can remove equal or greater amounts of P from the soil relative to corn. Applying fertilizer containing P, nitrogen, zinc and sulfur immediately prior to planting can add an average 4.3 bushels per acre.

■ Seed treatments usually aren’t worth the money.

FALSE: Protect yield potential by choosing a seed treatment combination that promotes germination, protects seedlings and ensures early plant vigor. Fungicidal, insecticidal and plant growth regulator seed treatments can play a role in delivering higher yields.

■ Narrow rows offer better yields.

TRUE: Narrow rows (less than 20 inches) usually produce higher yields than 30-inch rows. One benefit to planting 20-inch rows for soybeans relates to fertilizer placement in a corn-soybean rotation. For example, 20-inch soybean rows could benefit from the residual fertility from a precision fertilizer placement of P the previous year in a corn-soybean rotation. Narrower rows also benefit from increased light interception, and can yield an average 2.1 bushels per acre more than 30-inch rows. In northern areas of Illinois, the yield benefit can be as high as 6.5 bushels per acre.

Source: “Six Secrets of Soybean Success” by Fred Below, Ph.D., University of Illinois Department of Crop Sciences

Farmers and ag industry leaders gather in Livingston County, Ill., each summer for a look at the conservation practices being used in the Indian Creek watershed. Karen Scanlon, executive director for the Conservation Technology and Information Center (CTIC), says the checkoff-supported program is a grassroots model for the rest of the country.

“The Indian Creek Watershed Project pairs farmers with experts to help apply the latest conservation practices,” Scanlon says. “It’s a case study for groups working together for safe and clean water, and ensuring farmland can feed future generations.” Since 2010, CTIC and partners including ISA have provided funding, expertise and equipment for area farmers to try new techniques such as cover crops, drainage systems and nutrient management. Learn more about the project at www.ctic.org/IndianCreek.

Top: The streams, rivers and lakes of the 82-square mile Indian Creek provide recreation and drinking water for residents of Pontiac and Streator, Ill. Water quality issues concern these farm-centered communities. Right: “Drainage water management systems are like a dimmer switch for drainage,” says Phil Algreen, with Agri Drain Corporation.

Pontiac Flying Service demonstrates cover crop seeding. Livingston County producers use cover crops for erosion control, and improved nutrient cycling, water infiltration and soil microbial balance.

David Droste, soybean farmer from Nashville, Ill., and ISA director, was among more than 270 participants who attended the 2013 tour.
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