



IOWA SOYBEAN ASSOCIATION

■ ANNUAL REPORT 2008 ■

The Iowa Soybean Association assists growers with every aspect of soybean production and marketing, from the quality and volume of the soybean crop they grow, to the markets available for them at harvest, to increasing the price of their product. This publication highlights some of the successes achieved on behalf of Iowa soybean growers in 2009.



Photo courtesy of the United Soybean Board/Soybean Checkoff.



Photo courtesy of Robert C. Venette.



Photo courtesy of Mick Lane.

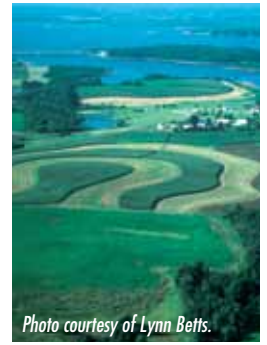


Photo courtesy of Lynn Betts.



Photo courtesy of The Soyfood Industry.

Membership:

ISA gives you the opportunity for your voice to be heard at the state and national levels. Your input helps shape ISA's agenda, and your membership helps fund lobbying and legislative activities that cannot be supported with checkoff dollars. ISA will continue to champion the biodiesel industry as well as promote workable environmental standards and rural economic development. ISA will continue to safeguard the future of agriculture.

Legislative:

ISA's public affairs team conducts policy surveys, organizes grassroots Capitol Hill visits, lobbies policymakers and communicates with members throughout the year to be sure that soybean producers' voices are heard both in the Iowa Statehouse and Washington, D.C.

Producer Services:

ISA's producer services team delivers information and plans learning opportunities for soybean producers in all of Iowa's nine crop districts. To contact your producer services representative, call ISA at 515-251-8640.

Biobased Product Development:

ISA helps to develop and promote new and innovative biobased products. These products add value to Iowa soybeans by ensuring additional use and demand for soybean crops. These products often have the added benefit of being "green."

In addition, ISA is a founding member of the Iowa Biodiesel Board, which promotes biofuels at the state level, and

the Soy Transportation Coalition, which promotes solutions to soybean and soybean product transportation challenges.

International Outreach:

ISA builds markets for soybeans and soybean meal in foreign countries and develops relationships with buyers from around the world.

Strategies target building customer preference, differentiating U.S. soy exports, targeted demand building, and addressing market access and trade policy issues.

ISA works to promote the use of soybean meal as a livestock feed for animals destined for export as meat. The association also works with those raising livestock to make sure they are informed about the benefits of feeding soy.

Grower Advocacy:

In 2004, ISA helped create the Coalition to Support Iowa's Farmers (CSIF).

The coalition stands ready to help Iowa's farm families navigate today's complex agricultural environment.

CSIF has four primary goals: 1) Help families to grow their livestock farms responsibly and successfully; 2) Enhance consumer awareness, understanding and acceptance of progressive livestock farming; 3) Empower livestock farmers to actively and proactively communicate information about their occupation; and 4) Hold opponents of modern livestock farming accountable.

Production Research:

Higher yield means more profit for farmers. That's why ISA invests checkoff dollars in research to limit yield loss from insects and diseases.

Checkoff funds were used to develop soybeans containing oil low in linolenic acid. These "low-lin" soybean varieties are now helping to eliminate the need for hydrogenation, which forms trans fats in foods.

In addition, ISA is a participant in the North Central Soybean Research Program, which funds research that benefits the 12 north central states.

On-Farm Network®:

Through the On-Farm Network®, ISA works with Iowa farmers who use precision ag tools and standardized protocols to evaluate crop production inputs and practices on their own farms in real-world situations.

Growers conduct trials on fungicides and insecticides for soybeans and corn, inoculants for soybeans, nitrogen fertilizer rates, application timing, and form, as well as manure management, tillage, and more. Protocols can be designed for anything growers want to test on their own farms.

For more information, go to www.isafarmnet.com.

Environmental Programs:

In 2008, 257 farmers participated in CEMSA (Certified Environmental Management Systems for Agriculture), which helps farmers examine and track the performance of current practices to evaluate costs and agronomic, economic and environmental benefits and make improvements.

The Watershed Program provided technical assistance and applied environmental research in nine watersheds. ISA staff collects local data and helps apply it to finding voluntary solutions to each watershed's needs.



Soyfoods:

One of the primary goals of growing the soyfoods market is to increase the demand for Iowa soybeans.

Soybean producer investments in soyfoods are proving to be a savvy marketing strategy. Soybeans are produced in abundance and are one of the most versatile components for foods, from simple to sophisticated.

Furthermore, our world is hungry. The Soy for Life Foundation and our involvement in the World Food Prize is a reflection of our belief in the importance of a nutritious and sustainable food supply for all people.

Communications:

ISA's communications team is responsible for publicizing ISA's activities, including documenting how checkoff investments are made and explaining policy issues and legislation.

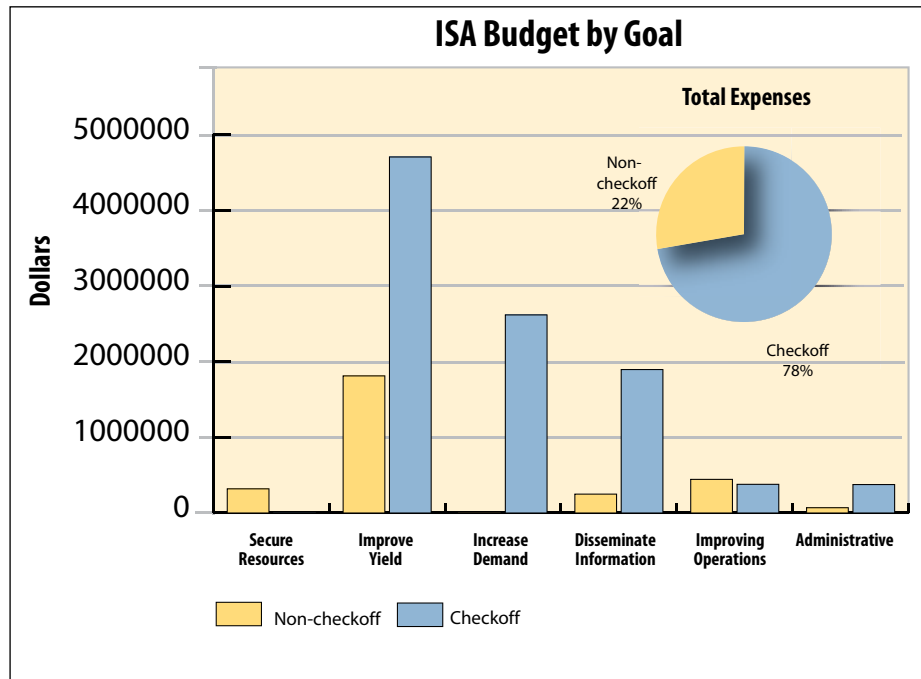
The communications team uses a variety of media to reach farmers, including The Iowa Soybean Review; Field, Farm and Watershed; and the E-Gold Standard. Other media include the Iowa Soybean Radio Network and the ISA Web site.

The communications department also handles media relations, press releases, news events and answering media questions on behalf of the association.

Both programs help farmers improve profitability and environmental stewardship using locally collected data, planning and management tools through locally led, science-based, voluntary initiatives.

IOWA SOYBEAN ASSOCIATION FY2008 EXPENSES

(Reported by Goal for Period Ending September 2008)



BOARD OF DIRECTORS

The Iowa Soybean Association is made up of a board of 21 directors from across the state. Representing nine districts, this farmer-elected board makes decisions to benefit all Iowa soybean farmers. They are mindful of production and market issues affecting soybean farmers when investing checkoff dollars, and they seek projects that will provide a return on farmers' investments.

- Jim Andrew, At Large
- Roy Arends, At Large
- A. J. Blair, District 5
- Delbert Christensen, District 4
- Bob Cole, District 3
- Dean Coleman, District 2
- Wayne Fredericks, District 2
- Ray Gaesser, District 7
- Cindi Grover, District 3
- Sheila Hebenstreit, District 4
- Ron Heck, At Large
- John Heisdorffer, District 9
- Mark Jackson, District 9
- Brian Kemp, District 1
- Cliff Mulder, District 8
- Tom Oswald, At Large
- John Schlorholtz, District 7
- Benjamin Schmidt, District 6
- Curt Sindergard, District 1
- Ed Ulch, District 6
- Randy VanKooten, District 5

ISA GOALS FOR FY2009

- Secure resources and policies that enable Iowa soybean and livestock producers to compete globally.
- Stabilize and increase yield while improving production efficiency and the environment.
- Increase demand for Iowa soybeans by meeting the needs of our customers.
- Disseminate information about the activities and investments of the organization.
- Strengthen the ability of ISA to meet its goals and objectives while improving operations.

A Resilient Production System will Help Growers Cope with Volatility

by Karen Simon

ozone

CO₂

environment

diseases

insects

soil

While the jury may still be out on the climate change debate, there is evidence that you could already be losing 10 percent of your yield each year due to changes in the atmosphere that have already occurred. Looking into the future, soybeans will continue to be developed to maximize yield, but there will be other factors to consider.

A recent study funded by the U.S. Climate Change Science Program looks at the effects of climate change on agriculture, land resources, water resources and biodiversity in the U.S.

In last month's issue of the *Iowa Soybean Review*, we talked about management practices, including conservation practices, that can help soybean growers adapt their management practices to the changing environment. In this issue, we'll address agronomic issues, particularly from the plant composition perspective, that will provide tools for soybean growers in the future.

"While climate change is often discussed in dramatic, negative terms, the upper Midwest should think of this as an opportunity to improve the efficiencies and resilience of the production system in order to cope with the climate extremes we might be subjected to and produce a profitable crop," says Jerry Hatfield, laboratory director of the National Soil Tilth Laboratory and one of the contributing authors of the study.

"When looking at climate variability as it relates to agriculture, we should look at fully understanding the plant, as well as insect and disease populations, asking different questions about our production system. We need to work hand-in-hand with plant breeders and agronomists to build a more resilient production system."

Carbon dioxide (CO₂) and ozone levels, and their affects on the soybean plant, are two areas currently studied.

Randall Nelson, a U.S. Department of Agriculture Agricultural Research Service (USDA-ARS) research geneticist, has studied the impact of increased CO₂ and ozone levels on soybeans since 2002

at the Soybean Free Air Concentrate Enrichment (SoyFACE) facility at the University of Illinois.

Nelson says CO₂ has steadily increased over the past 100 years, and newer soybean varieties tend to respond to increased CO₂ levels better than older varieties.

“In general, soybeans like CO₂,” Nelson says. “All the plants in our studies get bigger and mature later, but not all varieties produce more seeds – in fact some don’t respond at all in terms of seed yield. If plant breeders understood the differences that cause plants to produce higher seed yield when exposed to higher CO₂ levels, they could select for those characteristics to produce higher yielding varieties that take advantage of higher CO₂ levels.”

Ozone is a secondary pollutant resulting from the interaction of nitrogen oxides with sunlight and hydrocarbons. Nitrogen oxides are produced in the high-temperature combustion of any fuel.

Ozone is a challenge to work with because it’s highly variable from day to day and year to year. Also, soybeans don’t like ozone one bit. In fact, soybeans are likely to experience yield loss at ozone levels not considered harmful to humans.

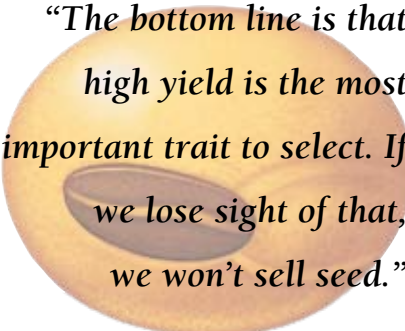
Nelson believes they have found some lines that have minimum yield reductions, 3 to 5 percent, when exposed to higher levels of ozone. However, it is important to point out that it’s pretty clear we’re already losing yield to ozone exposure.

“Looking at our data, it would be reasonable to assume we could be experiencing losses as high as 10 percent just because of ambient ozone,” Nelson says. “No one is aware of this because there isn’t a control – we can’t remove ozone from the air and then measure soybean yield – and losses are highly inconsistent from year to year.”

Based on earlier studies conducted in North Carolina, it is believed ozone levels above 40 parts of ozone per billion parts of air (ppb) decreases yield, and Nelson says the Midwest routinely experiences ozone levels above that.

Nelson’s top priority is finding an indicator that measures ozone tolerance, other than yield, so researchers can begin to screen varieties more efficiently for ozone tolerance.

According to the study funded by the U.S. Climate Change Science Program, “Ozone at the land surface has risen in rural areas of the United States, particularly over the past 50 years, and is forecast to continue increasing in the next 50 years. The Midwest and Eastern U.S. have some of the highest rural ozone levels on the globe ... Only Western Europe and eastern China have similarly



“The bottom line is that high yield is the most important trait to select. If we lose sight of that, we won’t sell seed.”

Brian Diers
Professor of Soybean Breeding
University of Illinois

high levels. Argentina and Brazil, like most areas of the southern hemisphere, have much lower levels of ozone, and are forecast to see little increase over the next 50 years.”

If ozone is predicted to continue to increase and has been shown to decrease soybean yield, increasing ozone tolerance will therefore be important to the competitiveness of U.S. growers.

According to the report, levels of ozone during the day in much of the Midwest now reach an average of 60 ppb, compared to less than 10 ppb 100 years ago.

From the plant breeders’ perspective, Walter Fehr, Charles F. Curtiss Distinguished Professor of Agriculture and Life Sciences at Iowa State University, says taking environmental conditions into account is a way of life for them.

“The goal of the soybean breeder is to develop new varieties that will yield well under a range of environmental

conditions,” he says. “Any new variety that is released has had to perform better than existing varieties during multiple years and locations of testing.

“In the U.S. system, public researchers divide up the responsibility for investigating ways to overcome plant stresses, including those associated with the environment, diseases, insects or soil factors. That strategy makes it possible to use financial resources effectively for investigating production problems that may be a factor in the future,” Fehr says.

Brian Diers, professor of soybean breeding at the University of Illinois, agrees with Fehr.

“It’s hard to breed for future environments,” he says. “We evaluate in the field now and select based on past year’s agronomic performance. Climate change will be gradual, and we will breed new varieties that will be adapted to current environmental conditions.”

Diers adds that it’s increasingly difficult to provide all the traits the customer wants, but he notes that marker assisted selection increases scientists’ ability to combine traits.

“The bottom line is that high yield is the most important trait to select,” Diers says. “If we lose sight of that, we won’t sell seed.”

Soybean growers will need to make sure they are keeping current with the highest yielding soybean varieties, according to David Wright, director of contract research for the Iowa Soybean Association.

“The key to success in the next decade will be choosing seed that is best adapted to the localized environment, including changes in disease and insect pressure,” he says.

“In the past, technology development focused on corn,” Wright continues. “Now we’ll see a decade focused on soybean research. Seed providers have put large amounts of resources into the development of soybean varieties with improved yield stability. Greater yield will come from the selection of high yielding, stress tolerant varieties and better management practices.”



The Outlook for Soybean Production and Profits in 2009

Food vs. Fuel Debate of 2008 Becomes Profitability Concerns for 2009

“The recession has caused the drop in demand of fuel, but the question is how long will that continue.”

Don Hofstrand
Iowa State University
Agricultural Economist



There is no doubt that 2008 will be a year to remember – or perhaps forget. It was a year of high demand for soybeans and high prices as well as soaring fuel and food prices. It was a difficult growing season and concluded with a challenging harvest and a downturn of global economics resulting in a worldwide recession.

As a result of the financial collapse and lower oil and fuel costs, commodity prices have dropped from their highs of last summer. It is believed that fertilizer prices may come down as well. However, farmers have not seen big declines and many have already purchased their inputs for 2009. All of these factors have farmers contemplating their profitability and trying to manage their risk for the year.

A year ago, the biofuels boom had everyone talking and raised the question of whether soybean growers could adequately and simultaneously supply the food, feed and fuel markets. Some consumers argued that farmers were raising their crops for biofuels and creating a supply problem for food products – causing increased prices. However farm groups pointed out that high oil and gas prices were the cause of higher food prices.

Although 2008 was one of the most difficult years on record for growing soybeans, farmers answered the call to produce soybeans to meet the growing demand worldwide. The U.S. Department of Agriculture (USDA) crop production summary for 2008 indicates that soybean production totaled 2.96 billion bushels, up 11 percent from 2007, and that U.S. production is the fourth largest on record. The average yield per acre is estimated at 39.6 bushels, which was 2.1 bushels below last year's yield. However, the harvested area was up 16 percent from 2007 to a record 74.6 million acres.

“Exports are strong with our biggest foreign customer, China, continuing to place large orders,” says John Heisdorffer, soybean grower from Keota, Iowa, and president of the Iowa Soybean Association (ISA). “However, soybean farmers are keenly aware that our largest

customers, the hog and chicken industries, need a dependable supply of reasonably priced soybeans, and the reduction in soybean prices has helped make soybean oil a player again in biodiesel.”

Don Hofstrand, Iowa State University (ISU) agricultural economist, and his colleagues at ISU's Agricultural Marketing Resource Center (AgMRC) are working to understand the future of the biofuels industry.

“We have seen a reduction in soybean and corn prices over the last six months due to the improvement in last summer's growing conditions, the financial downfalls that occurred at the end of 2008 and the drop to the crude oil prices,” Hofstrand says. “Going into 2009, production inputs have not dropped as of yet. Oil prices have fallen and wholesale fertilizer prices have fallen. But the distributors, who often have locked in prices ahead of time, still have not dropped their prices, and those prices will be passed on to farmers. So for 2009, farmers will have substantially higher production costs versus 2008. But if the present scenario continues, we could see a drop in production costs for 2010 if these lower oil and natural prices continue.”

The recession has caused the drop in demand of fuel, but the question is how long will that continue.

“Many analysts believe we will return to higher energy prices, but it might be a while before usage or consumption resumes its upward march,” Hofstrand says. “With low oil prices and the low prices for biodiesel and ethanol, the profitability of those products will be difficult because of the tight margins on raising the crops – soybeans and corn – that are used to make biodiesel and ethanol.”

Soybean Uses - Fuel & Feed

Although 75 percent of soybean oil is used in human foods, soybean oil is still readily available for biodiesel production and other industrial markets. The USDA's Economic Research Service reports soybean oil used for biodiesel generally contributes less than meal to the value of processed soybean products. One bushel of soybeans produces 1.5 gallons of biodiesel and 48 pounds of meal.

About 98 percent of soybean meal used in the U.S. goes into animal feed, which accounts for more than 1 billion bushels of soybeans, or more than one-third of total U.S. production.

Where are We Headed for 2009 and Beyond?

Hofstrand contends that agriculture's profitability will be a challenge for farmers in 2009 because of input costs.

However, many factors create a “wild card” for the renewable fuels industry. If the Obama administration “puts a price on carbon” with cap-and-trade legislation or a carbon tax, he says it will change the economics of the whole energy industry. It should give an immediate boost to renewable alternatives like wind, solar and geothermal. But there is uncertainty about how it would impact biodiesel or ethanol because of the controversy over the greenhouse gas emissions caused by the ethanol industry.

To read more about Hofstrand's profitability analysis or to sign up for the monthly AgMRC Renewable Energy Newsletter, go to http://www.agmrc.org/renewable_energy/.

To visit AgMRC, a virtual value-added agriculture center operated by ISU and partially funded by USDA, go to <http://www.agmrc.org/>.





No More Excuses

The fact is biodiesel produced from America's soybean farmers used less than 12 percent of the nation's soybean harvest in 2007.



by Joe Jobe
CEO
National Biodiesel Board

Your grocery bill should be smaller. The food companies say as much, but somehow the prices on the store shelf don't reflect that.

Here's how Kraft CEO Irene Rosenfeld explained rising food prices to the USA Today recently.

"Our prices will go up and down as the cost of our ingredients goes up and down."

Unfortunately, with the release of recent profit earnings, that statement isn't accurate. Rosenfeld's assertion was an extension of the logic offered by the food

industry more than a year ago, when it cited the high cost of corn, wheat and soybeans as the driving force behind higher food prices. The industry also alleged that biofuels were responsible for a jump in the costs of those grains and, thus, also responsible for higher food prices.

Now, the food industry's explanation for higher food prices has come undone. The prices of corn, wheat and soybeans plummeted by about 50 percent this fall. Commodity price reductions happened while biofuels production remained unchanged.

As for the prices you pay for Kraft products and other foods? They budged by as little as 1 percent. That pales in comparison to the 50 percent drop in grain prices.

Meanwhile, Kraft has recently reported doubling its profits, with \$1.4 billion in earnings in the third quarter of last year. This year, oil companies made more in profits than they – or any other American companies – ever had. But when oil prices dropped, so did the price at the pump. That's the pattern that Rosenfeld voiced, but the food industry has yet to follow through.

At least two issues have been at play with the food industry's advancement of biofuels as the excuse for higher food

prices. First, it seeks to undermine the promise of sustainable biofuels as alternative fuels; and, second, it seeks to draw attention from the huge profits of the food companies. The fact is biodiesel produced from America's soybean farmers used less than 12 percent of the nation's soybean harvest in 2007. And, after extracting the oil from the bean to produce a fuel that addresses a global climate change crisis, 81 percent of each soybean still went into protein markets, producing a positive impact on the net food supply.

Judging by the company's actions, Kraft may be in the business of falsely blaming biofuels for quite some time.

Keith Collins once worked for the U.S. Department of Agriculture (USDA), and he often expressed his opinion of the extremely limited effect of biofuels on food prices – the USDA still supports this position. But Collins later reversed himself and fingered biofuels as the primary cause of rising food prices.

Something important happened just before his change of mind. Kraft put Collins on its payroll.

Someone should explain to Americans why the food industry won't lower its prices, as promised, and stop blaming biofuels. There are no more excuses.





2008 Ag-Urban Leadership Initiative Wrap-Up

The goal of the program is to urge participants to cross interest-group lines and promote dialogue, build alliances, grapple with complex issues ... and work for sustainable solutions that will result in a better quality of life for rural and urban residents.

by LeAnn Strother

Iowa is one of the nation's leading agricultural states and also the home of growing urban areas. Though both sectors are crucial to the economy and culture of our state, there can be a disconnect in communication, and their approaches can be out of sync with one another.

The Ag-Urban Leadership Initiative, developed by the Iowa Soybean Association and other Iowa business leaders, brings together agriculture and urban leaders in a program of learning and collaboration. The goal of the program is to urge participants to cross interest-group lines and promote dialogue, build alliances, grapple with complex issues – particularly those in which they share a common interest but may lack

common understanding – and work for sustainable solutions that will result in a better quality of life for rural and urban residents.

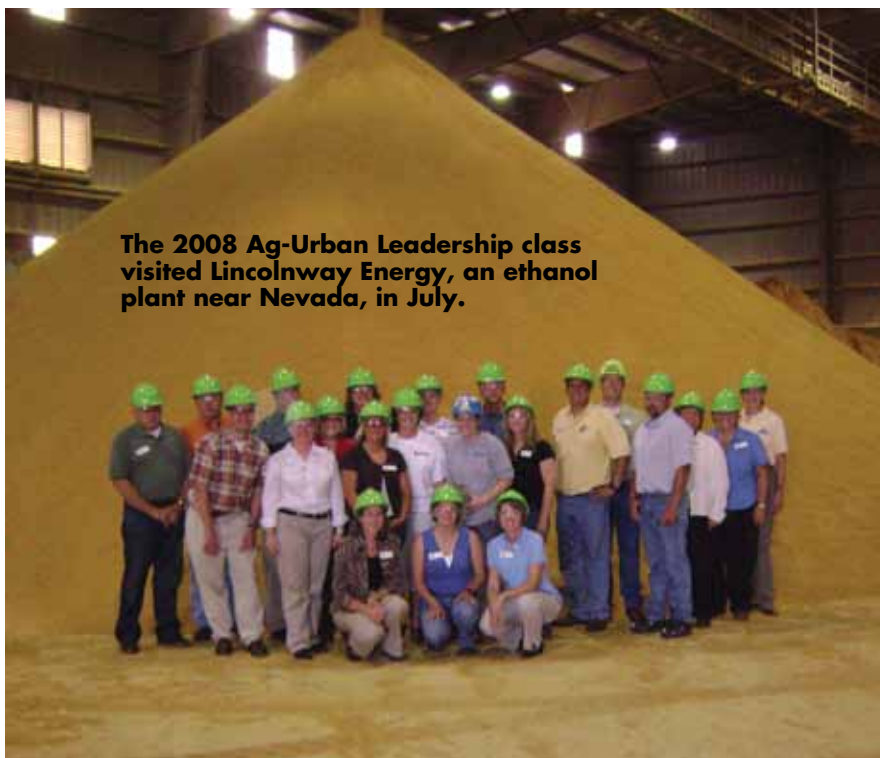
The Ag-Urban Leadership class of 2008 was made up of 23 Iowans from across the state, including farmers and agricultural business people as well as a financial planner, a banker, two legislators, marketing and communications professionals and an educational consultant, to name a few.

During their five meetings, they participated in on-site tours, heard speakers and engaged in discussions on topics that included energy; food, feed and fuel; and the environment, including water, soil and air; and culture. Class members formed groups and worked on challenge projects to make a positive impact on current issues. Their projects included addressing the state's water quality, providing education about biofuels, providing low-interest financing for new entrepreneurial ventures and creating a rural living guide for nontraditional rural residents.

This year's class culminated in December as groups presented their challenge projects at the ISA Policy Conference. Members shared their project objective, the process they followed and how the project might be taken to the next level. They were encouraged afterward by conversations with members of the audience who offered suggestions and help for the projects to be continued.

The first session for the 2009 Ag Urban Leadership class will convene in March. To learn more, check out the Ag Urban Web site at www.ag-urbanleadership.com.

The program is sponsored by the soybean checkoff, along with West Central Co-op, Heartland Co-op and Iowa Farm Bureau Federation.





Boone River Watershed Project Assists with Strip-Till Evaluations

by Mike Tidman



Keith Schwandt compares the size of corn between a 32 percent nitrogen and a manure application. The manured corn is shorter and lighter colored.



Schwandt examines soil structure, evidence of earthworm activity and rooting depth of corn in a strip-till field. He says, "Looking at the dirt is how you learn and figure this stuff out."

Keith Schwandt's neighbors might see some things that seem out of the ordinary – such as a backhoe digging in his cornfield in July or red flashlights dancing among the rows at 3:00 a.m. But these occurrences are just part of Schwandt's quest to better understand his farming operation.

Schwandt farms near Webster City, in the Boone River and South Fork (Iowa River) watersheds, and he participates in the Iowa Soybean Association's Boone River Watershed Project and the CEMSA (Certified Environmental Management Systems for Agriculture) program.

He is working with Gary Hammitt, ISA agricultural environmental specialist, to improve the efficiency and performance of his farm. Hammitt has helped him with troubleshooting in-field concerns, planning and testing to validate his practices.

Schwandt says ISA's assistance in evaluating practices like strip till would help many farmers in his area.

"One of the best things farmers around here could do is accept Gary Hammitt's challenge to go out and do 40 acres of strip till beside their conventional tillage," Schwandt says. "Gary can help them rent a machine or contract the work, so they don't have to invest to run the experiment."

Schwandt says he got interested in strip till as a way to reduce tillage time and cost.

"A few years ago, I told my dad I'm not going to do as much tillage when he's gone – there's got to be a different way to farm," Schwandt says. "But after thinking about that, I thought I should start trying new ideas now, while I've got his 40 years experience standing by me.

"He agreed to it, so we got started with a 12-shank in-line ripper," Schwandt continues. "In the fall, we put the wings up and pulled eight shanks at 18 inches deep to break up hard pan. In spring, we put the wings down and ripped 12 rows with a tank behind the unit, and we applied liquid NPK in the standing rows. Then we came back and planted in that, and it was one of the best crops we ever had. The roots were huge; they went straight down. Everything about it made a lot of sense, so we did that for a couple years. Since then, we've moved to a 24-row unit – we are practicing controlled traffic patterns to reduce compaction so the 24-row unit matches up with our 24-row planter."

Schwandt says putting fertilizer below the corn drives the root deeper and insures that it is available.

"I spend so much money on fertilizer, I want it right under the plant, where the corn plant can find it and use it," Schwandt says.

Schwandt says the changes in management are causing changes in the soil.

"When we moved from full-width tillage to strip till, we also switched from

NH₃ to 32 percent, and there was an explosion of earthworms and night crawlers in the soil," Schwandt says. "I think because we leave last year's row in place, the worms, night crawlers and bacteria are left undisturbed and can graze on the residue. They're kind of like the livestock people don't see.

"One night I couldn't sleep, and it was just about done raining. So I went out to the field, got on my hands and knees with a red light, and I started looking at the dirt and watching the worms. I watched this night crawler stretch out from a hole and pull all kinds of stuff toward him and into the hole. I couldn't believe it. Maybe the neighbors think I'm nuts, but that's how you learn and figure this stuff out."

Schwandt also digs holes in the field in the middle of the growing season to better understand how the soil works.

"I've dug holes so that I can see what's happening under the surface of the soil," Schwandt says. "I've seen parts of tassels, deep worm holes, root structure – all of it is there. When you see it, you begin to better understand it."

Schwandt says ISA's technical assistance has been helpful in measuring the effect of his management on profitability and the environment.

"I don't know exactly how to put a dollar figure on it yet – that's what we're trying to do," Schwandt says. "But I'm looking at my crops and at the results I'm getting, and it seems like a good thing to me."



EARLY PLANTING IS STILL IMPORTANT

Palle Pedersen
Assistant Professor
Soybean Extension Agronomist
Iowa State University
palle@iastate.edu

A few farmers have contacted me this winter and asked how they were able to achieve 50 bushels per acre in their replanted beans last year. The answer is luck and Mother Nature. There are also people who asked me if our recommendations for the soybean planting date should be changed based on the past year, and the answer is “no.”

Early planting is still the cheapest and most efficient way to increase yield. I did more than 50 trials across Iowa from 2003 to 2007 with different varieties, different tillage systems and at more than a dozen different locations. We saw that more than 80 percent of these studies had the highest yield at the early planting compared to mid-May or later. Most importantly, there were only two cases where early planting yielded less than late planting. In 2008 the data was not as clear-cut. It was when we planted in early June or later that we started to see yield tapering off because of the cool and wet conditions. We were very lucky, and it would never happen in an average growing season.

We do not want to see years like 2008 more than once in our lifetime, so with normal growing conditions in 2009, we know we will be back on track with our typical responses to planting date. The optimum time to plant soybeans in Iowa is the last week of April for the southern two-thirds of the state and the first week of May for the northern one-third of Iowa, if soil conditions are suitable. Iowa growers should be done planting soybeans by May 15 to not lose any yield.



PHOTO COURTESY OF PALLE PEDERSEN.

Bean leaf beetles can cause significant defoliation if not managed. The soybean plants on the left were not managed. A fungicide/insecticide seed treatment was used on the plants to the right.

When planting early there are two major things we need to consider. First of all, for farmers in the southern two-thirds of Iowa, we know we need to battle bean leaf beetles. They can cause a tremendous amount of yield loss, so it is very important we take them as seriously as soybean aphids. Many farmers have started to use fungicide or insecticide seed treatments to protect their stand from damping off pathogens and to manage the overwintering generation of bean leaf beetles. My data supports this practice, and I have seen very good responses using these seed treatments, but only at early planting or prior to May 20. If you are not sure you have bean leaf beetles, then daily scouting during the warmest part of the day is needed. If you reach threshold, then they can very easily be managed with a foliar insecticide. Most importantly, you cannot wait to spray the beetles with your first application of

glyphosate. You need immediate action if you reach threshold.

The other factor you need to consider when planting early is sudden death syndrome (SDS). You cannot ignore this disease. Again, this advice is mostly for farmers in the southern two-thirds of Iowa. Sudden death syndrome can very easily be managed with variety selection. You will always have SDS, and you will always have more with early planting. However, that is fine since the yield response from early planting will outweigh any yield impact from SDS. However, if you are planting an intermediate-to-poor rated variety to SDS and are also planting early, then you are probably better off planting in July. Variety selection is even more critical if you are planting no-tillage, since SDS is higher in a no-tilled field than in a tilled field. For more information about soybean management, go to www.soybeanmanagement.info.