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MICHIGAN SOYBEAN NEWS®

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**SOYBEAN
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DEATH
SYNDROME?**

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Michigan Soybean Association's Mission Statement

To improve and advocate for the Michigan soybean industry.

From the MSA Secretary...



Dan Keenan

As I write this article, wheat harvest is in full throttle. And, by the time you read this, hopefully those of you that grow wheat had a safe and successful harvest.

Recently, we have also just witnessed the passage by the House of Representatives of the Safe and Accurate Food Labeling Act (H.R. 1599). This was good to see as it has been a top priority for the American Soybean Association (ASA) and Michigan Soybean Association (MSA). Our focus now shifts to the Senate and the companion bill that awaits markup in the Ag Committee. The passage of this bill

was a top priority Matt Stutzman and I spoke to our Michigan delegation about while in Washington, D.C., in mid-July. I'll leave the summary of the Hill Visits to Matt's column later in this issue on page 24.

We recently had a visitor on our farm who works for a chemical company that was doing a plot in one of our sugar beet fields. She works in Texas, but after meeting and talking with her we noticed she wasn't operating with a Texas accent. Come to find out, she was born and raised in Tehran, Iran. After walking a field, we went to lunch at our local watering hole. We spent lunch asking questions about her home and learned quite a bit. Out of the gate, she made the comment that the landscape from the airport in Lansing to our farm in central Michigan reminded her of back home in Iran. Say what? Could you elaborate a bit on that?

Well, as it turns out my perception of Iran's landscape and agricultural capabilities were a little off. I learned Iran is one of the top producers of cherries, watermelons, cucumbers and walnuts in the world. And here I was picturing sand, sand, sand, and a few camels walking around some oil wells, surrounded by sand.

Now I'm telling this story for a reason. Along with talking about the landscape and agriculture of her homeland, we also talked about the oppressive totalitarian government. Now with the 4th of July just a short time ago and the D.C. Hill visits still fresh in my mind, our discussion put some things about our country and government in perspective.

The woman we met with had two names on her business card. The first was difficult to pronounce and one you would expect from a country in that region, followed by "Ayleen" which was a little more familiar. When we asked her about it, Ayleen said the first name was the one that the government gave her, and Ayleen was what her parents wanted to name her. Can you imagine not being able to name your own child? She also told us that her and her siblings were raised to tell the truth, unless they were asked certain questions from government officials. Questions like "Do your parents pray five times a day?" in which they were supposed to lie and say yes for fear of persecution. It's comments such as this from people that actually experience these situations that make you appreciate the U.S.

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SUDDEN DEATH SYNDROME

By: Dr. Martin Chilvers, MSU Assistant Professor in the Plant, Soil and Microbial Sciences Department

In some fields across the state, soybean growers may have noticed symptoms of soybean sudden death syndrome (SDS), particularly during the month of August.

The Problem

Soybean SDS is caused by the soilborne fungus *Fusarium virguliforme*. Foliar symptoms of the disease initiate as yellow spots which progress to general yellowing and death of leaf material between the veins. Typically, the disease shows up during late soybean reproductive stages, but can be seen earlier.

Leaves of infected plants can prematurely drop and pods can be aborted. However, the hidden side of this disease is below ground. The SDS fungus infects soybean roots after seed germination and can cause root rot. The fungus never moves above the soil line, but produces a toxin that the plant takes up into the foliage causing leaf symptoms.



History of SDS

SDS was first discovered in Arkansas in the 1970s and appears to have spread from there to most soybean producing states. We mapped the distribution of the disease in Michigan and have found SDS in most counties. Although the disease has been more of an issue for soybean producers in southern Michigan, the disease has been confirmed as far north as Huron County. This disease is likely to become an issue for more farmers, as the amount of disease inoculum may build in soil over time.

Identifying SDS

Although the SDS fungus can survive in the soil where it infects the soybean root system, it is typically not recognized as a problem until foliar disease symptoms develop sometime in August. The latent nature of the disease makes it difficult to study and diagnose. That's why we have been developing tools for rapid identification and diagnosis. Graduate students



Premature defoliation typical of SDS diseased plants, leaflets drop but petioles remain attached to the stem.



Jie Wang and Mitch Roth have been developing DNA-based diagnostic assays that can accurately detect and quantify the SDS fungus in soybean roots and soil samples. We have been using these assays to quantify the amount of SDS fungus in the soybean roots, to provide a better picture of how the fungus invades and colonizes the plant through the season. In studies to date, we have not seen any differences in the amount of SDS fungus that accumulates in root systems of susceptible and partially resistant soybean cultivars. This suggests that planting a partially resistant variety may mask disease symptoms and protect yield, but will not reduce the amount of SDS inoculum present in the soil.

Solutions for SDS

SDS is a difficult disease to manage and management options are relatively limited. If you suspect that you have SDS, it should be confirmed by submitting a plant sample, including roots, to MSU Diagnostic Services (www.pestid.msu.edu).

If SDS is a problem in your field, utilize partially resistant varieties. Although no variety is completely resistant, there are many commercially available lines with very good levels of partial resistance. We are also working with the MSU soybean breeder and private companies to identify new sources of resistance for improved plant protection.

Foliar fungicides are not effective against SDS, as the fungus remains in the root system. Most fungicide seed treatments are not effective against

SDS. However, Bayer CropScience recently registered the seed treatment ILeVO™, which we have studied extensively. In our trials, ILeVO reduced the severity of SDS and improved yield compared to a base seed treatment for most varieties. It was also found to reduce soybean cyst nematode (SCN) reproduction. Although SDS can occur without SCN, heavy SCN pressure seems to exacerbate SDS. And, regardless of the interaction, it is always important to stay on top of SCN to minimize losses.

Studies have demonstrated that rotating to corn does not significantly reduce the amount of SDS fungus in the soil. However, a study conducted at Iowa State University has shown that a more diverse rotation can potentially reduce the disease. The researchers found that incorporating a third year into the rotation with either alfalfa or alfalfa and red clover significantly reduced the amount of SDS that developed in the subsequent soybean crop. More research is needed to understand the effect of crop rotation on SDS.

Improving drainage, soil structure, and reducing compaction can also help to alleviate SDS severity. Movement of soil should also be minimized. Not only does movement of soil run the risk of introducing SDS to new fields, but also many other fungal and nematode problems. Early planted soybeans tend to develop more SDS. Although growers should not delay planting, infested fields should, if possible, be planted last in the planting sequence.



Interveinal chlorosis and necrosis

GREG WAGNER - A SOYBEAN YIELD CONTEST CONSISTENT WINNER

By: Ned Birkey, Spartan Ag

Greg Wagner of Reese has won the Group 1 maturity class of the Michigan Soybean Yield Contest for five of the past six years over the nine years of this unique contest in Michigan. He has grown Group 1 soybeans that have produced winning yields ranging from over 65 to almost 74 bushels per acre. In 2014, for example, he entered a 1.6 maturity soybean that yielded 67.99 bushels per acre!

Greg's winning yields include:

2009	66.3 bushels per acre
2010	65.5 bushels per acre
2012	73.9 bushels per acre
2013	71.9 bushels per acre
2014	67.99 bushels per acre

I asked Greg if he is willing to give me some secrets to his success in growing soybean yields that farmers who grow Group 2 or even Group 3 soybeans would love to have. Thanks to Greg for providing some information of what he does on his farm that might help other Michigan soybean farmers get higher yields.

First of all he grows Group 1 soybeans because his crop rotation includes winter wheat. Therefore he wants to grow soybeans that mature early enough to get the wheat planted on time. He wants to plant soybeans as early as possible, past practice has been to plant in mid-April, following corn planting. In the future he would love to try to plant soybeans ahead of corn to see if that helps yields.

He has planted mid Group 2 soybeans, but for whatever reasons, those varieties just have not done as well as the Group 1 soybeans. In 2014 he planted a Stine 1.6 maturity soybean, which is the earliest maturity he has tried. For 2015 he has some 1.4 maturity soybeans in the ground and all of his soybeans are in the 1.4 to 1.9 maturity range. And he planted the 1.4 soybeans first.

His planting is done in a combination of fall and spring tillage using a John Deere 1770 planter. Soils are consistent and tend to be heavy, clay soils. His planter population has been around 150,000 seeds

per acre. After planting, Greg rolls the fields before the soybeans emerge to push stones down and smash corn stalk stubble. This allows for easier combining of the pods that grow closer to the ground.

Graph-Ex® for Soybeans planter box seed treatment/inoculant/lubricant is used, partly because Greg just started growing soybeans in the early 2000s. Greg also uses a foliar fertilizer combination of Easy Man Manganese from Star of the West and ENC® Nutrient Concentrate. He uses one quart per acre of each product at flowering (R1 growth stage). The ENC includes N-P-K of an 11-8-5 analysis, plus a micronutrient micropak that includes boron, iron, manganese, copper, zinc, cobalt and molybdenum.

Greg also believes that weed control must be done early, when weeds are one to two inches tall so they don't compete against the crop for nutrients, water and sunlight. Interestingly, his early soybeans did not have any *Sclerotinia* white mold in them, while his later maturity soybeans did.

For an article about what each of the farmers who won the 2014 contest did for their specific category, please go back and read an article in the Spring 2015 *Michigan Soybean News* which is available at <https://emshosting.blob.core.windows.net/media/MichiganSoybean/Downloads/MSA/MSN%20Spring%202015.pdf>.



Weed control must be done early, when weeds are one to two inches tall so they don't compete against the crop for nutrients, water and sunlight.

—Greg Wagner



Dennis (Greg's dad) and Greg Wagner standing in a soybean field in Reese.



Greg's yield contest trophies and little helpers: Roman Wagner (son - 5), Christopher Walker (nephew - 14) and Brennen Wagner (son - 8)

I WILL
SCOUT MY FIELDS.

- I will walk my rows, and I will stand my ground.
- I will take action against herbicide-resistant weeds.
- I will scout my fields and field borders, ditches and waterways. I will scout them early and often.
- I'll be here when weeds emerge. And I'll be back after I spray.
- I will track down escapees and late emergers.
- I will take action before weeds take over.

Now is the time to take action against herbicide-resistant weeds. Visit www.TakeActionOnWeeds.com to learn how you can prevent herbicide-resistant weeds from spreading.

A photograph of a man wearing a dark polo shirt and a cap, looking down at a soybean plant in a field. The background shows a vast field of soybeans under a clear sky.

Michigan Soybean Promotion Committee
www.michigansoybean.org

Take ACTION
HERBICIDE-RESISTANCE MANAGEMENT

Brought to you by the soy checkoff.

UNDERSTANDING SOYBEAN

Every elevator that receives soybeans has a discount schedule. Discount schedules are important because they communicate how and when various shrink factors and discounts are applied at delivery. Discount schedules vary from elevator to elevator and they can be somewhat



confusing. This article lists and explains the major shrink and discount factors pertaining to soybeans and provides examples of shrink and discount calculations.

Test Weight: Test weight is a measure of density (mass/volume) and is measured in pounds per bushel. The standard test weight of 60 pounds per bushel is always used to convert the scale weight of soybean loads to the number of bushels contained in the load. This is true even if the actual test weight of the load is lower than 60 pounds per bushel. Therefore, test weight does not impact the number of saleable bushels harvested from a defined area (acre or field). However, most grain buyers will begin discounting soybean loads when the test weight falls below 54 pounds per bushel. Discounts are applied to the gross weight of the load before shrink factors are applied. The only advantage of having test weights higher than 54 pounds per bushel is that the beans will take up less volume in storage and during transportation.

Moisture: Grain moisture is an important factor when selling soybeans. Soybean farmers are paid based on the gross weight of the load they deliver minus the moisture shrink when grain moisture levels exceed 13%. Most grain buyers use a moisture shrink factor of 0.7 or 0.8% for each ½% of moisture above 13% to convert gross weight to dry weight. They will also assess a drying charge on loads having grain moisture levels above 13%. A common drying charge is \$0.025 per bushel for each ½% point of moisture above 13%.

Foreign Material: The weight of soybean loads is also reduced to account for foreign material (FM) in the soybeans. Just as with moisture shrink, grain buyers shrink or reduce the gross weight of the load based on the actual FM found in the sample. Although U.S. number 1 yellow soybeans allow for 1% FM and U.S. number 2 yellow soybeans allow for 2% FM, there

are many companies that will allow only ½% and some will shrink for any FM above 0%. Some elevators also assess an FM discount in addition to the FM weight deduction or shrink. The FM discounts range from \$0.01 to \$0.05 for each 1% of FM found in the sample above 1%. The discount typically increases as the amount of FM

in the sample increases.

Damaged (total): Damaged seed includes heat damage, frost damage, immature seed, mold damage, insect damage and sprout damage. Farmers are allowed up to 2% damaged beans before damage discounts apply. Damage discounts range from \$0.02 to \$0.05 for each 1% above 2%. The discount typically increases as the amount of damage in the sample increases.

Heat Damaged: Heat damage (black or dark brown soybeans) can occur when wet soybeans are dried at too high of a drying temperature (>130° F). However, most heat damage occurs when soybeans are placed into storage at moisture levels that are too high for safe storage and hot pockets develop in the grain mass. Heat damage is included in the Damaged (total) category and producers are not charged twice for this type of damage.

Splits: Beans are counted as splits whenever one-quarter of the seed is missing. Producers are generally allowed up to 20% splits at delivery without being discounted. However, some grain buyers begin discounting when split beans exceed 10%. The discount for splits ranges from \$0.01 to \$0.05 for each 5% increase in split beans and increases as the percentage of splits in the sample increases.

Shrink and Discount Calculation Example: This example demonstrates how the shrink, discounts and net payment or settlement are calculated for a load of soybeans weighing 55,000 pounds having the following grain quality factors and a market price of \$9.25 per bushel:

- 14.5% moisture
- 4% FM
- 55 pounds per bushel test weight
- 3% damaged beans
- 10% splits

DISCOUNT SCHEDULES

By: Mike Staton, MSU Extension Soybean Educator

Table 1. Example Soybean Discount Schedule

Grain Quality Factor	Shrink and Discounts
Moisture	0.7% shrink for each ½% plus \$0.025 drying charge for each ½% moisture above 13% per wet bushel
Foreign Material	FM>1% deducted from gross weight
Test Weight	No discount for soybeans above 54 pounds per bushel
Damage	\$0.03 per bushel for each 1% above 2% damage
Splits	\$0.01 per bushel for each 5% splits above 20%

Moisture Shrink:

14.5% - 13% = 1.5% moisture above 13%
 1.5% ÷ 0.5% = 3
 3 x 0.7% = 2.1% moisture shrink
 55,000 x 0.021 = 1,155 lbs. of moisture shrink

Foreign Material Shrink:

4% FM in the load - 1% FM allowed = 3% FM shrink on the load
 55,000 x 0.03 = 1,650 lbs. of FM shrink on the load

Saleable or Marketable Bushels:

[gross weight - (moisture + FM shrink)] ÷ 60
 55,000 lbs. - (1,155 lbs. + 1,650 lbs.) = 52,195 lbs.
 52,195 ÷ 60 = 870 dry marketable bushels

Gross Payment (without applicable discounts and drying charges):

870 bushels x \$9.25 per bushel = \$8,047.50

Drying Charge:

14.5% - 13% = 1.5% moisture above 13%
 1.5% ÷ 0.5% = 3
 3 x \$0.025 per each 0.5% per bushel = \$0.075 per gross or wet bushel
 55,000 ÷ 60 = 917 gross or wet bushels
 917 gross bushels x \$0.075 per bushel drying charge = \$69.00

Test Weight Discount:

No test weight discount applied to the load

Damage Discount:

3% damage in the load - 2% allowed damage = 1% of the gross
 1% damage over allowed x \$0.03 per bushel for each 1% damage = \$0.03 per bushel
 917 gross bushels x \$0.03 per bushel = \$27.51

Discount for Splits:

No discount for split beans applied to the load

Net Payment/Settlement on the Load:

Gross payment - (drying charges + discounts)
 \$8,047.50 - (\$69.00 + \$27.51) = \$7,950.99 net payment before checkoff deduction



Photos provided by
Zeeland Farm Services.

MICHIGAN SOYBEAN FARMERS REPRESENT THE CHANGING FACE OF AGRICULTURE

Greater Diversity is Encouraged

By: Anita C. Stuever, Communication Contractor

They're a generation apart, but Laurie Isley and Sarah Peterson have a lot in common. Isley was part of a tiny minority of women teaching agriculture and advising an FFA chapter when she began her career in 1979. Peterson is a "dirty, in-the-cab, under-the-machine-when-it's-broken-down type of woman" farmer.

Both grew up on farms and married farmers they met in college, becoming third-generation farmers themselves. Isley and Peterson earned agriculture degrees from Michigan State University. Both have a deeply seated passion for agriculture, and both are rookie board members of the Michigan Soybean Promotion Committee (MSPC).

Both Isley and Peterson have been involved with other farm organizations and the many volunteer opportunities in which farmers are quick to share their skills. Isley has written children's ag literacy teaching materials for Michigan Farm Bureau. In 2012, Peterson spent a year as Monsanto's Northeast Farm Mom of the Year.

They employ conservation practices as stewards of the land. They've seen tremendous increases in farm productivity, thanks to modern technology – including biotechnology and precision agriculture made possible by the Global Positioning System (GPS) and geographic information systems (GIS). They use autosteering, lightbar guidance and yield monitors to take advantage of the latest technology.

"Our technology is providing answers," says Peterson. "Technology helps us measure what we manage. It makes our farm more efficient."

"I see it as a positive change," says Isley, but she also sees a dramatic change in the public's view of agriculture. "The increasing distrust of agriculture and misinformation about agriculture, coupled with a lack of agricultural literacy in the general public, is very frightening," she says.

Besides increased technology and productivity, another change is the number of farmers from various backgrounds who are now the main decision makers on their operations.



I think sometimes women have a slightly different perspective, whether it's because of their role on the farm or the fact that sometimes we relate more closely with the consumer. I think there are a lot of women and minorities who have a lot to offer the program. We need to look beyond the guys we see at the elevator.

—Laurie Isley
Shown at her home in Palmyra with one of her three dogs.

Changing Face of Ag

Women farmers are one of the most rapidly growing segments of the nation's changing agricultural landscape. According to the U.S. Department of Agriculture's Economic Research Service, the number of woman-operated farms more than doubled between 1982 and 2012. Add primary and secondary operators, and nearly 1 million women are farming, accounting for 30 percent of U.S. farmers. Furthermore, 14 percent of the nation's 2.1 million farms and 22 percent of its 369,332 oilseed farms had a woman principal operator in 2012. In Michigan, 7,409 women were principal operators in 2012.

Across all demographics, 22 percent of operators are new and beginning farmers, according to the most recent ag census. That means one of every five farmers is a new voice to be heard – a new source of ideas.

According to the U.S. Department of Agriculture's National Agricultural Statistics Service, the number of minority and young farmers is also increasing, with black or African American and Hispanic farmers increasing by 12 and 21 percent, respectively, from 2007 to 2012. In the same timeframe, the number of American Indian farmers increased by 5 percent.

In Michigan, the 2012 U.S. Census of Agriculture shows 989 Spanish, Hispanic or Latino principal operators. American Indians were principal operators on 616 farms. Asian Americans were principal operators of 123 farms. Black or African American people were principal operators of 356 farms at the time of the 2012 census.

Alabama farmer Angela Dee, one of only four women serving on the 70-director United Soybean Board, says, "when you look at who runs our checkoff programs, you won't see a representative number of the 288,264 female principle operators counted in the most recent U.S. Census of Agriculture."

I might put a different spin on it, but I think that's what makes the board strong. We look at the same problem from a lot of angles to come up with what's best for everybody. Involvement on the board broadens your horizons in exciting ways. You can feel like you've made a large difference.

—Sarah Peterson
Shown on her farm in Niles during the 2014 soybean harvest.

✓ Investing Your Soybean Checkoff

The United Soybean Board has highly qualified board members who are diverse in terms of geography, age, size of operation and experience. At the same time, according to the U.S. Department of Agriculture, the board composition is lacking in terms of directors' ethnicity and gender.

U.S. Secretary of Agriculture Tom Vilsack and Deputy Secretary Krysta Harden have communicated the need for state soybean boards to reflect industry diversity by reaching out to women and minorities and encouraging them to apply for open board positions.

Harden says it's critical that board members reflect the diversity of our industry. "By growing a new and diverse set of leaders in agriculture," she says, "we will strengthen our industry and shape the future of American agriculture."

The soybean industry competes in a marketplace that is, itself, growing more diverse. "The ability to draw from a wide range of viewpoints, backgrounds, skills and experiences is important to continued success of the soybean checkoff," says Gail Frahm, executive director of the Michigan Soybean Promotion Committee.

Isley, of Lenawee County, came to the board fresh from retiring after 32 years of teaching agriculture in Blissfield, where her husband Jim grew up and the family farms today. Their son Jacob helps operate the couple's Sunrise Farms, growing soybeans and corn in southeastern Michigan.

Isley's role in the farm is not unlike the role of many traditional farm women: bookwork, running for parts, driving tractor when needed and helping make farm decisions.

Peterson farms near Niles in Cass County, southwestern Michigan. She and her husband Alan farm with his parents and his brother Jeffrey, raising soybeans and corn, plus beef cattle on pasture.



Through the Farm Woman of the Year program, Peterson had opportunities to do public speaking and talking one-on-one at trade shows. "It was a good group to get involved in," she says, "because it's pretty rare to meet women who are not just farm moms," but hands-on farmers. "I love doing it, and it really fits me, but it's a rarity in our culture to find women like that."

Michigan has been a leader in women's participation on soybean checkoff boards. Frahm says that Lois Mason of Blissfield and Mary Lou Smith of Petersburg, for example, were longtime board members between the late 1990s and early 2010s. Both served at the state and national levels. Mason and Smith told Isley what they had learned from their participation, how interesting it was to see the results of what they were producing, where it goes, soybean research and the impact of seeing the entire process. "I became very interested," Isley says, "and I could see some other areas where I could make an impact."

Both Isley and Peterson are quick to acknowledge what they've gained through participation in the board of directors. Isley gained an increased understanding of soybean production as an industry. She says she is reassured by the number of farmer-leaders, researchers and staff who are well educated, determined and work tirelessly to promote the production and use of soybeans. They're doing high-quality work to make soybeans more profitable, she says.

Peterson says she has gained a far better understanding of how Michigan soybean growers

can help feed the world, as well as the numerous opportunities available in the global marketplace. "I have so many opportunities I never had before, and it's only going to make me a stronger leader in agriculture because it's going to broaden my knowledge," she says. "It's going to make me look at the problems we have on the farm in a completely different light. Not only will it help my industry, it will help my operation."

"When I come home from meetings I can't wait to tell Jim what I've learned," Isley says.

Their male counterparts seem to value the board's diversity. "I have not felt at any point that we were being undervalued because we are women," Isley says.

Peterson agrees. The most surprising aspect of the MSPC board, "by far," she says, "is the openness of the gentlemen involved." Recounting other farm group experiences, she says "the group is not always a warm one. Often it starts off feeling cold until you have a chance to share your farming knowledge and experiences and gain the group's respect." After her first MSPC meeting, the first thing she told her husband was: "They're awesome guys; they talk with you like you're just another person in ag. That was very, very encouraging to me," she remembers.

"I think diversity does matter," Isley says. "I think sometimes women have a slightly different perspective, whether it's because of their role on the farm or the fact that sometimes we relate more closely with the consumer." Often, she says, "I think men may be slightly more focused on production and a little less on promotion and marketing."

"I might put a different spin on it, but I think that's what makes the board strong," Peterson says. "We look at the same problem from a lot of angles to come up with what's best for everybody." The camaraderie on the soybean board is important to her.

"I think there are a lot of women and minorities who have a lot to offer the program," Isley says. "We need to look beyond the guys we see at the elevator. That's their frame of reference. We can invite others."

Peterson says that while serving on another board, she often saw people come and go as terms ran out. That gave her the chance to see how diversity changes organizations. "The more diverse the group," she says, "the stronger we were." She saw differences infuse groups with energy. New members bring an influx of new ideas, she says. "They think differently, and maybe challenge some things a little," she adds. "We

The MSPC board of directors:

Back row: Tom Hess, Vassar; Dennis Gardner, Crosswell; Andy Welden, Jonesville; Steve Koeman, Hamilton. Front row: Laurie Isley, Palmyra; George Zmitko, Owosso; Sarah Peterson, Niles.



Changing Face of Ag

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get the best results in the limited time we have as producers coming together.”

“I will definitely encourage others to get on the board,” Peterson says. “Involvement on the board broadens your horizons in exciting ways,” she adds. “You can feel like you’ve made a large difference – not only for Michigan producers, but also for people in foreign countries who are learning to farm fish so they can feed their families and their country. Our time spent at the board table makes projects like that possible. We can drive the research that helps our industry.”

Joining the board is “an opportunity you won’t regret,” says Isley. “You’re going to be valued for the unique perspective you share. You’ll get some unique opportunities to see and do things you wouldn’t otherwise get to see or do. You’ll feel like an active participant in the commodity you’re producing.”

What makes a good board member? Passion, open-mindedness, and commitment to show up and be prepared, the women say, so you can help guide the conversation in a constructive way.

“The way I like to interact,” Isley says, is to ask questions. “I like discussion; I like to talk about things. I really like to find common ground, take diverse opinions and find solutions that meet the needs of all parties.”

“Laurie comes to us with sharp skills in a business meeting,” Peterson says. “I tend to hold back a little and analyze things in my head and might be a bit slower to make motions. Laurie is a sharp tack in that department, and she has a deep love for agriculture.”

Peterson says she tends to be an extremely analytical person. “I’m going to be a devil’s advocate. I want to watch the line items and make sure the benefit is coming back to the producer. I’m going to speak my mind. I’ll talk to the other guys, then sit back and listen to what they say.”

Women and minorities are not expected to be a homogenous group. “When we were asked to choose a program area specialty,” Peterson says, “I chose production and Laurie chose outreach. It’s very useful to have somebody on the board who is really interested in making sure we put our best foot forward and present us in a way that will advance Michigan soybeans and make a positive future for all of us.”

Isley concludes, “I want to participate fully, take advantage of opportunities as they come along and share that with other people. I hope I can be a valuable asset to the board.”

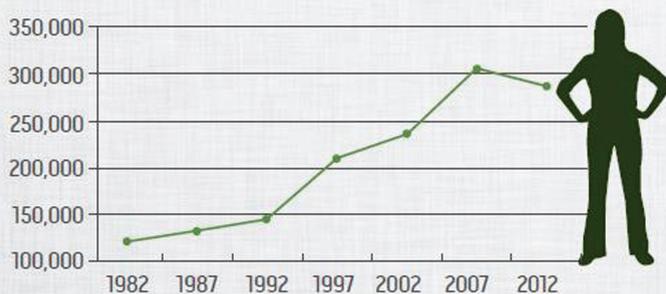
Serving on a soybean checkoff board:

- Enables you to influence how your checkoff assessments are invested.
- Places you in a position to influence the direction of the soybean industry.
- Enables you to greatly expand your network of farmers, leaders and influencers on a state or national level.
- Increases your knowledge of the soybean industry.

Alabama’s Dee says, “U.S. agriculture needs all the passionate, smart farmers it can get, and women make up a big share of that group.”

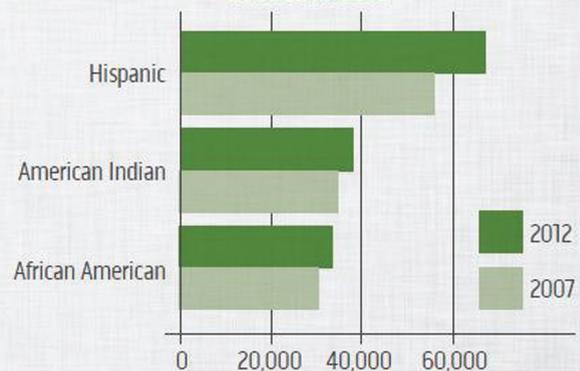
Serving on the Michigan Soybean Promotion Committee provides a steppingstone for leadership opportunities in the industry on a state and national level. Every year the board has terms that expire, so seeking interested farmers is an ongoing task. Any Michigan soybean farmers who are interested in getting involved in the soybean checkoff should call Gail Frahm at 989.652.3294, or email gfracm@michigansoybean.org. Further information is available by visiting www.michigansoybean.org and searching “MSPC Board Positions.”

NUMBER OF FEMALE PRINCIPAL FARM OPERATORS, 1982 THROUGH 2012
NUMBER OF FARMS (ROUNDED TO NEAREST THOUSAND)



Source: USDA Economic Research Service

NUMBER OF MINORITY PRINCIPAL FARM OPERATORS, 2007 AND 2012



Source: USDA NASS, 2012 Census of Agriculture

IMPROVE YIELDS AND INCOME BY REDUCING SOYBEAN HARVEST LOSSES

By: Mike Staton, MSU Extension Soybean Educator

Reducing harvest losses is a simple and effective way to increase soybean yield and profitability. Harvest losses at or below 3% (1.5 bushels per acre) can be achieved with careful equipment maintenance and operation. Surveys conducted in Ohio and Arkansas found that actual harvest losses averaged around 1.5 bushels per acre. However, other surveys found that harvest losses of 6% (3 bushels per acre) were common. Reducing harvest losses by just one bushel per acre will produce more than \$9.00 per acre of additional income in 2015.

Harvest Timing: Properly timing your harvest operations is critical to reducing harvest losses. Harvest operations can begin any time after the beans have initially dried to 14 to 15% moisture. Under good drying conditions, this will occur five to ten days after 95% of the pods have reached their mature color. Try to harvest as much of your crop as possible before the moisture level falls below 11% to reduce shatter losses, split seed and cracked seed coats. Shatter losses also increase significantly when mature beans undergo multiple wetting and drying cycles.

Equipment Maintenance: Before harvest operations begin, inspect and repair the cutting parts on the head. Make sure all knife sections are sharp and tight and that all guards are aligned and tight. Check the hold-down clips to ensure they hold the knife within 1/32 of an inch (thickness of a business

card) of the guards. Adjust the wear plates to the point that they lightly touch the back of the knife.

Equipment Adjustment: Information from the University of Arkansas shows that a skilled combine operator can reduce harvest losses significantly compared to an inexperienced operator or one that is trying to hurry or cut corners. Combine operators should understand how losses happen and how to reduce them.

Nearly 80% of harvest losses occur while cutting and gathering the plants into the combine. Most of these result from shattered pods dropping beans on the ground. The following recommendations will reduce gathering losses:

- Operate the combine at a slight angle (about 20 degrees) to the rows. This is especially beneficial in wide rows or when the stems are tough.
- Maintain ground speed at 3 mph or less. Higher speeds are reported to be possible with draper headers, when an air system is added to the head, when using 1-1/2 inch knife sections or when the field was rolled. Pods stripped from the stalks and uneven stubble are signs that the travel speed was too fast. At the 2013 soybean harvest equipment field day, we measured actual gathering losses occurring at 3 mph and 5 mph by counting beans on the ground. We found that increasing the



ground speed to 5 mph increased gathering losses by two bushels per acre. This was true even though the combine was equipped with a draper header and 1-1/2 knife sections and the beans had dried down to 13% moisture for the first time. We also checked for ground speed effects on harvest losses at the 2014 soybean harvest equipment field day and found no difference between 3 mph and 5 mph.

- Set the speed of the reel to run 10 to 25% faster than the ground speed. If the beans are lodged, gradually increase the reel speed to a maximum of 50% faster than the ground speed.
- Position the reel axle 6 to 12 inches ahead of the cutter bar. In most conditions, the reel should be positioned as close to the auger as possible to promote even feeding. If the beans are lodged, move the reel forward to pick up the plants. Ideally, the reel should leave the beans just as they are being cut.

- Set the height of the reel just low enough to control the beans (generally the top 1/3 of the plants). In lodged conditions, operate the reel as low as necessary to pick up the plants. Raise the reel if cut plants ride over the reel.
- Measure gathering losses after each adjustment to determine your progress. Information on measuring soybean harvest losses is available from Michigan State University Extension at: http://msue.anr.msu.edu/news/measuring_soybean_harvest_losses and from the Michigan Soybean Promotion Committee at: <http://www.michigansoybean.org/smart-fact-sheets>.

SMaRT Harvest Factsheets: The following factsheets are available at <http://www.michigansoybean.org/smart-fact-sheets>:

- *Reducing Soybean Harvest Losses*
- *Harvesting Lodged Soybeans*
- *Harvesting and Handling Frost-Damaged Soybeans*

SEPTEMBER 18TH FIELD DAY

By: Mike Staton, MSU Extension Soybean Educator

On average, harvest losses reduce marketable soybean yields by one to two bushels per acre. Given the projected soybean prices, this could cost soybean producers \$9.25 to \$18.50 per acre in 2015. Harvest losses can increase significantly if the crop is lodged, very short or harvest operations become delayed.

Because of this, Michigan State University Extension is cooperating with Chad and Mindy Goetz Farms, Fred Ott, Inc., Archbold Equipment Inc., Burnips Equipment Company, Crary Industries Inc., the Michigan Soybean Promotion Committee and the Ohio Soybean Council to conduct a Soybean Harvest Equipment Field Day on **Friday, September 18**. The field day will be held on this date if conditions are conducive to harvest. The program will begin with an update from Michigan Farm Bureau on farm truck safety and regulations at 10:45 a.m. and run until 3:00 p.m. The field day site is located south of Blissfield at 9245 Thompson Highway



about a quarter of a mile south of Fike Road.

Participants will learn new information about farm truck regulations and safety in addition to reducing soybean harvest losses. This is also an excellent opportunity to see the latest harvest equipment demonstrated in the field. Equipment company representatives

will be on-hand to discuss specific recommendations for fine-tuning their combines. The following soybean harvest topics and equipment will be demonstrated: draper headers, air-assisted reels, measuring soybean harvest losses and ground speed effects on harvest losses.

There is no charge for the field day. However, **pre-registration** is requested by calling 269.673.0370 ext. 2562 before noon on Friday, September 11 as a complimentary steak lunch and educational materials will be provided. Please call this same number for cancellation and rescheduling updates.

FEMALE FARMER STEPS UP IN MICHIGAN AG

By: Maria Brown, Freelance Writer

It's early on a Saturday morning in May when most teenagers might still be in bed with the covers over their head but, instead, Michigan native Jessie Walton is behind the wheel of a tractor, preparing ground for planting. This has been Jessie's full-time job since graduating from Imlay City High School in 2014, joining her dad, Lynn, in the family's farm operation.

"I've had a lot of tractor time this spring," Jessie said with a tired grin. Before planting season began, there was tiling to do and Jessie operated the stringing equipment. When it came time to put seed in the ground in late April, she and her boyfriend, Nathan McNary, alternated between driving the rock picker and tillage equipment through the fields while Lynn followed in the planter. The Walton's planted 2,400 acres of soybeans in 2015, all in Lapeer County and they managed to do it within one week's time.

Her career as a full-time farmer is, for the most part, what she expected. "Working with family, I feel

comfortable and familiar with what I'm doing," she says.

Operating equipment certainly isn't new to Jessie. Having grown up on the farm and, literally, in the tractor, has given her the confidence to take tractors and combines through the field with ease. She learned how to drive by watching her dad from the tractor's instructional seat and, since the age of 10, has operated the machinery on her own. Often on weekends in the fall, she would follow her dad through the fields during harvest with the grain cart. Last year, during her first full-time harvest, she served as the farm's main combine operator.

Jessie admits that most people are surprised to learn what she does for a living. Gender roles on the farm have evolved and, for the most part, the teen said friends and acquaintances are impressed she can do what she does considering her age, not just because she's a girl.



Jessie Walton became a confident equipment operator by tagging along with her dad, Lynn, in the tractor from a young age.



Jessie, behind the wheel of the combine, unloads beans into a grain cart operated by Larry Miller during the 2014 harvest. The teen, a fresh high school graduate, gladly accepted her new role as main harvester.



Female Farmer Steps Up in Ag

"She's not afraid of anything. She'll get in any kind of equipment and go," dad Lynn said of Jessie's fearless nature. "I was kind of surprised at first when she kicked me out of the combine last fall, but she did a great job."

While in high school, Jessie was a Lapeer County FFA member and spent one year in 4-H exhibiting beef at the Eastern Michigan State Fair. While in the FFA program, she started studying for her pesticide applicator license and looked forward to tackling that task after planting.

Lynn chuckles about the competitions that have cropped up between the two. Both father and daughter took the applicator test this spring — the first time for her — and when the results were tallied, Jessie bested her dad's score by ten points.

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"She won't let me live that down," Lynn said with a proud smile.

Jessie is just one example of successful female farmers here in Michigan. We've brought stories of other females who have stepped into the tractor or combine cabs to help run their family farms as well, and would welcome hearing your story of bringing diversity onto your family's farms. We also are looking for future leaders in this great soybean industry of ours. If interested, please contact MSPC's Executive Director, Gail Frahm at 989.652.3294 or by email at gfracm@michigansoybean.org. What's your story?

This spring, Jessie helped with tiling projects and performed tillage work ahead of the planter. The Waltons grow 2,400 acres of soybeans in Lapeer County.



Jessie's dad, Lynn Walton, said her fearless nature is a must when it comes to operating today's large machinery.



MSPC INTERNS HELP WITH CHECKOFF-FUNDED SOYBEAN RESEARCH

By: Brian Stiles, Research Technician

The Michigan Soybean Promotion Committee (MSPC) hired two summer interns from Michigan State University to help with the extensive sampling of the Nutrient Uptake Study as well as the Soybean Management and Research Technology (SMaRT) program samples.

Kate Knowlton, a junior in Agribusiness Management and Ryan Walker, an Animal Science graduate are handling all of the samples collected. Knowlton has been with MSPC for almost one year and Walker, hired in May, have been very busy collecting soil and tissue samples from the SMaRT plots across the state so that the samples can be turned into data and presented at the winter meetings. Another large portion of their work for MSPC this spring was spent taking soybean cyst nematode (SCN) samples from fields throughout the state for farmers that chose to have their fields sampled for SCN.

Now that we are halfway through the summer, a major part of the interns' jobs will be to partition the whole plant samples for the Nutrient Uptake Study. There will be nearly 1,000 samples handled which include separating the leaves, petioles, pods and seed from the stem and individually bagging each sample. The partitioned samples will be taken to MSU where Knowlton will grind and weigh each one before sending them to the lab for analysis. The summer has been very productive so far with each day the interns are on the road visiting fields in different areas of the state and giving them the opportunity to learn about the production side of the soybean industry as well as providing a return on investment to farmers of their checkoff dollars.



EIGHT STATE PARKS GOING GREEN WITH SOYBEANS

By: Noelle Byerley, Special Projects Coordinator

For the third consecutive year, the Michigan Soybean Promotion Committee (MSPC) is helping state parks go green with environmentally friendly soy biobased products. Eight Michigan state parks have won MSPC grants to demonstrate the benefits of soy biobased products such as cleaning supplies, lubricants, sealers, penetrants, building materials and biodiesel.

A biobased product is a commercial or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products. Consumers win with products that curb U.S. dependence on foreign oil as well as reduce greenhouse gas emissions. Soy biobased products can also offer environmental and health benefits, such as lower volatile organic compounds, reduced exposure to toxic chemicals and less irritation from odors.

"Biobased products are readily available, cost-competitive and perform as well as or better than traditional petroleum-based products," said Chris Case, retired chief of facility management at Pictured Rocks National Lakeshore.

Recipients of the 2015 competitive grants are: Baraga State Park and Field Office, Baraga; Bay City

State Recreation Area, Bay City; Clear Lake State Park, Atlanta; Harrisville State Park, Harrisville; Porcupine Mountains Wilderness State Park, Ontonagon; Sleepy Hollow State Park, Laingsburg; Tahquamenon Falls State Park, Paradise; and Waterloo Recreation Area, Chelsea.

Park officials submitted applications with lists of soy biobased products they plan to use. Parks will be using products such as bar chain oil, hand cleaners and biodiesel. Signs in the parks will let visitors know that Soybeans + Parks = Going Green.

Soybeans offer an abundant and renewable supply of ingredients for food and livestock feed. At the same time, they enable companies to reduce the petroleum content in commercial and industrial products.

Today, U.S. companies offer hundreds of biobased products made from soybeans. Furniture and carpet backing, cleaning supplies, industrial solvents, transformer oils and energy-efficient roofing materials are just a few of the many products. Find these innovations using the search engine at www.soybiobased.org.

Biobased products are readily available, cost-competitive and perform as well as or better than petroleum-based products.

—Chris Case



JIM WILSON TO HELP LEAD WISHH IN 2015-2016

Andy Welden Recognized as Outgoing Chair

By: Karen Coble-Edwards, KCE Public Affairs Associates

Jim Wilson of Yale will help lead U.S. soybean grower international trade development as the new Michigan representative to the American Soybean Association's (ASA) World Initiative for Soy in Human Health (WISHH) Program Committee in 2015-2016. Wilson will represent Michigan as Andy Welden, from Jonesville, retires as the WISHH chairman.

ASA President Wade Cowan confirmed Wilson's appointment. Wilson joins 16 other soybean growers from 11 states on the WISHH Committee.

"WISHH is a trailblazer for trade. It is very important," said Wilson who attended his first WISHH meeting this July in Washington, D.C. "WISHH gives us a tremendous way to support international market development. It is a small investment that is really important when we pool our monies together."

"Michigan soybean growers, like Andy Welden and now Jim Wilson, offer valuable strategic guidance to WISHH's work to create new customers for U.S. soy in fast-growing developing countries in Africa, Asia and Central America," said WISHH Executive Director Jim Hershey. "Through WISHH, U.S. soybean farmers diversify their marketing investments."

The Michigan Soybean Promotion Committee was active in WISHH since its beginnings in the early 2000s. Forward-thinking U.S. soybean leaders in multiple states recognized the growing protein demand in developing countries was a driver for their soybean sales. Well-researched studies showed that most future growth in food demand would be in developing and middle-income countries where populations and incomes were both on the rise.

Today, the trends are even clearer, proving WISHH-founding farmers planned well. According to U.S. Department of Agriculture (USDA) and other economic analysis, developing countries dominate world demand growth for agricultural products. USDA projects developing countries' demand for agricultural products will increase faster than their production. As a result, these countries will account for 92 percent of the total increase in world oilseed and meat imports in 2013-2022.

WISHH helps developing country businesses become more profitable by blending U.S. soy into breads, beverages, meats and more for humans as well as feeds for livestock and aquaculture. In addition to making money, WISHH's supply chain partners help fill the protein gap that exists in many developing country populations' diets.

WISHH and the U.S. Soybean Export Council (USSEC) pave complementary trade routes which grow U.S. soy markets. On October 1, 2015, WISHH will transition its Bangladesh operations to USSEC since the country's annual U.S. soy purchases have now reached more than \$2 million. USDA funding aided WISHH in forging key relationships with organizations like the Bangladesh Bakery Association that signed a February 2015 agreement to conduct soy flour trials under a USDA Quality Samples Program.

WISHH is a trade-development organization. Since U.S. soybean farmers founded WISHH in 2000, it has worked in 24 countries to develop long-term markets for U.S. soybean farmers while fueling economic growth and value chain development. The WISHH program, funded by the soybean checkoff, is managed from ASA's world headquarters in St. Louis, Missouri. For more information, visit www.wishh.org.

Jim Wilson and the 2015-2016 full WISHH committee.



2015 CROP PROGRESS

By: Mark Seamon, Research Coordinator

It is difficult to refer to the Michigan soybean crop this year as if it were all the same across the state. The variability across the soybean growing area continued to widen as Mother Nature threw some curve balls to us in severe and variable weather. The soybean crop in most areas was planted a little ahead of an average planting date into good seedbed conditions and emerged consistently and with good seedling health. Of course, there were exceptions of delayed planting due to continued wet conditions. The month of June brought extensive rainfall and crop damage to many areas of the state. Southern Michigan was especially hard hit by many large rainfall events and not enough time between them for soil drainage. While the damaged areas of some fields did not recover well (dead plants don't put on new growth), many fields improved after the soybeans were able to get some oxygen back to the water-logged roots and nodules began to produce nitrogen again.

Fields that were not damaged by excess rainfall were threatened by disease development, especially white mold. Good early season vegetative growth combined with cool and moist conditions had many growers thinking back to one year ago when white mold robbed many fields of thousands of bushels of soybeans. Where this was a concern, fungicide use was fairly common. On the bright side of this, the disease pressure should help the on-farm SMaRT trials and MSU disease research to provide valuable results to help manage this issue in the future.



Plant stress and initial early disease infection caused some issues throughout the pod and seed development stages. The stage had been set for these issues earlier, but many symptoms were delayed until August and September.

Most experts agree that the peak critical time for yield determination in soybeans is in August and early September, from growth stage R4 through R6. During this time the plant is still developing some pods, but it is really determined to fill the beans within the pods that have been initiated and retained. Even though it is difficult to tell, there is still significant vegetative growth at this stage.

Growth stages R7 and R8 include the physiological maturity and dry down of the soybean plant and seed. Physiological maturity begins at R7, at which time one pod anywhere on the main stem has attained its mature color. The seed is about 60 percent moisture and yield losses due to environmental stress are minimal once the plants reach R7. Full maturity (R8) occurs when 95 percent of the pods have reached their mature color. Dry-down is the main plant function during R8 and depending on the weather conditions, the moisture content of the seed will be less than 15 percent and harvest operations can begin five to ten days after the plants reach R8.

Hopefully the 2015 crop year finishes off successfully and safely for you. MSPC looks forward to gathering important research information at harvest and sharing it with you throughout the coming winter season.

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GOVERNMENT AFFAIRS NEWS

By: The Frederick Group

In our last *Michigan Soybean News* article we started it off with the old adage, "Never watch law or sausage being made. If you have to choose, choose sausage." What you end up with is often very different from what you started with and the Michigan Agriculture Environmental Assurance Program (MAEAP) bill, HB 4391, could not be a more perfect example.



Before we highlight the changes recently made to the program, let's review the MAEAP program's accomplishments thus far. Since its inception, MAEAP has certified more than 2,500 Michigan farms and the Michigan Department of Agriculture and Rural Development (MDARD) has a goal of increasing the number of certifications to more than 5,000 farms. Since 2011 alone, MAEAP verified farms have:

- Prevented approximately 109,000 dump trucks full of sediment from entering waterways;
- Prevented enough nitrogen from entering groundwater to contaminate 83,000 Olympic-sized swimming pools;
- Prevented enough nutrients from entering waterways to cover nearly all of Houghton Lake in algae;
- Implemented nearly 17,000 acres of buffer and filter strips;
- Placed more than 800,000 acres of land under nutrient management plans.

With the Groundwater Protection Fee scheduled to sunset or expire at the end of the year, the legislature needed to act in order to ensure the voluntary environmental stewardship program, MAEAP, continued. The Legislature worked with MDARD and other stakeholders to assemble a compromise that looked very different from the initial version that was introduced and passed the House of Representatives. The final version, which went through seven official revisions, will take effect as Public Act 118 of 2015.

Some Changes to MAEAP:

There will be a new fertilizer advisory committee created whose members will be appointed by the director of MDARD. The new advisory committee's charge is to provide recommendations on nutrient use and soil fertility. This is similar to the current pesticide advisory committee and will provide benchmarking and

evaluation of effectiveness of conservation practices within MAEAP. The environmental advisory council will be preserved in its current form and govern the program. The fertilizer advisory council is in addition to the environmental advisory council.

Under the old program, farmers would pay into this fund through a fee on nitrogen fertilizer. Now, the collection rate of the fee will be lowered, but it expands the revenue collection to encompass all fertilizers. There will also be audits required in order to verify compliance and proper accounting of remitted fees.

MAEAP emphasizes maintaining a high level of environmental stewardship and recognizes the challenges that participants must work through to receive MAEAP certification. More than 10,000 additional farms across the state have begun working on MAEAP by implementing conservation practices and, under the new reforms, will be recognized for their efforts through the MAEAP verification tiered recognition system. This new tiered system will highlight a farmer's efforts to implement best environmental practices.

The Benefits of MAEAP:

The benefits of MAEAP are legal liability protection, Right to Farm protection, and it demonstrates that voluntary programs can be successful without the need for burdensome regulations. As an extended benefit, MAEAP extends the verification time from 3 years to 5 years, one of the significant changes, which allows farmers to not have to revisit the verification process as often.

We want to thank each and every passionate farmer who reached out to their legislator either advocating or educating legislators about how MAEAP affects soy farmers. MAEAP is an important program for the agricultural industry because it strengthens environmental protections and encourages best practices.

Please feel free to contact us if you have any questions or if we can be of service: 216 N. Chestnut St., Lansing, MI 48933; 517.853.0413.



The Frederick Group attended the Bill Signing Ceremony for HB 4391 on behalf of Michigan Soybean Association.

Justin Clement is part of your Frederick Group team, which advocates for MSA members and promotes the Michigan soybean industry in the halls of state government.



Continued from page 3

Living in a country where it is not only our right, but also our responsibility to hold our government's feet to the fire and make them accountable for their actions is what sets us apart from much of the world. I know dealing with the government may sometimes feel like we are talking to a brick wall, but when you hear about other nations and how their governments rule by instilling fear in its citizens – we really don't have it too bad. Brave men and women fought and died to allow us the freedom to talk with government leaders. Sometimes we get results that we like to see and sometimes we don't, but that's life. But at least we can be heard and make our concerns known, without fear of persecution – or worse.

Matt's and my recent trip to D.C. is a good example of how blessed we are to live in this great country. We were there, as well as members of the National Corn Growers Association and many other organizations representing several groups from all over the country. We all were there to press our concerns and priorities to our elected officials. We also met an older fellow in the elevator that had a bone to pick with his representative. Now we didn't get into all the details with this guy, but he was there to "give 'em a piece of his mind." He obviously wasn't happy with something and he was going to let them know it. It's examples like this ticked-off constituent being able to speak his mind without fear of his government that makes you realize that with all her faults, we're still very blessed to live in the good old U.S. of A.

Wishing you a safe harvest,
Dan Keenan, MSA secretary

REPRESENTING SOYBEAN FARMERS' INTEREST IN DC

By: Matt Stutzman, ASA/MSA Director and Soybean Farmer

My farm is just three miles from the Ohio boarder. We had a truck driver ask if he could park his pup trailer in our farm lot so he could go to an elevator in Ohio, fill it up, bring it back, detach, finish filling and hook back up to haul his load through Michigan all to stay legal when in Ohio.

We in Michigan have multi-axle weight limits (up to 11) that allow heavy loads (up to 164,000 lbs.) for hauling, and bridges and road classifications set limits on certain routes. Federal interstates and designated highways limit those weights to 80,000 lbs. Some states have the same 80,000 lb. weight limit making it challenging to be most efficient when traveling interstate or on federal roads.

Dan Keenan, Mark Huston from Ontario Canada and I took messages like these to D.C. to consider a change in truck weight limits. Some of the congressional delegation are agreeable, or at least open to, the notion. However, not everyone wants to hear what we have to say. Sometimes a person's opinion can get in the way of gaining knowledge of a topic. When talking about increasing federal weight limits from 80,000 lb. five-axle trucks to 97,000 lb. six-axle trucks some may feel the roads will suffer from the increased weight and that the heavier truck will be more dangerous on the road. Studies show the sixth breaking axle stops in the same distance, the weight per axle is very similar and the need for fewer trips reduces the damage to the road. Not to mention the potential to save lives. In

2003 the UK increased their truck road weight limits exactly the same and fatal truck accidents decreased 35%. But if those legislators are sure increasing weight limits is unsafe and bad for roads, we might never get to share the benefits and how it can save lives and help an industry.

With limited time to share our views at each personal visit, we only could touch on three or four important topics. We usually started off with the Safe and Accurate Food Labeling Act which establishes voluntary federal labeling standards. This has minimal changes on what happens today other than specific requirements that have to be met before a food can be labeled which does or does not contain a biotech ingredient and keeps states from passing food label laws that would have different rules in every state. We also discussed topics like biodiesel, taxes, environmental regulation and trade.

While in D.C., Dan and I had the pleasure of attending the Agriculture Leaders of Michigan breakfast and a dinner with legislators and staff from Michigan. It was much more enjoyable to talk with everyone at these gatherings having no set time limit as well as being outside the office walls - unlike during our scheduled visits. Perhaps not as effective, it was a nice change from the usual, all-business trips I've had in the past. I noticed my visits this year seemed to have a more relaxed feel I think in part because of the meet and greet at the functions taking place before our business meeting.

Overall our trip was brief and effective. Our visits with both senators and eight of our representatives created the opportunity to share our opinions and concerns as well as tell our story of what farming is today. When we speak up about farming, it shows people we care and work hard to make a difference. Messaging and emails are good - but sometimes a handshake and face-to-face conversation are what it takes to get your message heard. I'm grateful to be able to represent MSA's members on issues of importance to our industry.

Matt and Dan visiting with Senator Debbie Stabenow.



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WHO SPEAKS FOR THE FARMER?

Instructors share their opinionated views about food and agriculture - too many times it's not even close to reality.

By: Laurie Isley, MSPC Director and Soybean Farmer

I was apprehensive as I walked into class at the local community college. The overview of the class series had been fairly vague, but the title was interesting and relevant: "Healthy Living in Today's World." I wanted to see how agriculture was portrayed, and was encouraged to attend by the Michigan Soybean Promotion Committee (MSPC).

The instructor was an attractive, slender woman in her mid-40s with medium-brown hair, wearing a classy flowing, knit dress. Her appearance and demeanor gave the impression of intelligence and openness as she greeted each student with a warm smile and a few friendly words. She encouraged us to participate in class discussions, but I quickly learned that was not the case.

Her opening statement to the class of eight students was, "We are the most advanced country in the world, with more technology than ever and advances in modern medicine. But do you know what hasn't improved in the last fifty years? FOOD."

What followed through the series of classes was a barrage of rhetoric that vilified numerous food products including pasteurized milk, sugar, corn, soybeans, wheat, eggs, poultry, pork and beef.

Her premise was that these foods were the primary cause of diseases, including; diabetes, asthma, allergies, eczema, obesity, ADD, ADHD, depression, learning disorders and autism. She was adamantly opposed to any type of processed food, genetically modified organisms (GMOs), products with gluten, most forms of oils or sugars, and conventionally raised crops and livestock.

At First, Shock and Disbelief

As a farmer and a retired science teacher, I was shocked by her statements and at first, I was unsure of how to respond. After all, she was the one who was supposed to be knowledgeable. She was in a position of influence, which should have made her a credible source. And aren't we taught not to question authority?

I wanted to believe that she was just misinformed and would willingly change her viewpoint once she heard the correct information and the agricultural perspective. Pretty naïve on my part, I quickly realized.

Although I was irritated by the statements she was making, I was equally perturbed by her lack of documentation and her failure to use scientific sources. At one point I asked for the references for a study to which she referred, and was told that she "didn't have time to reference all the information" she used. She added that I could "Google it" if I wanted more information.

At one point, she made the statement, "Never buy meat from the grocery store because it all comes from factory farms." When I asked her definition of a factory farm, she replied that it was "where they had lots of animals crowded together and they were all sick."

On another occasion, she stated first that "GMOs do not have to be tested for safety before entering the market" and then "Research studies on animals reveal serious long-term effects of GMOs." She followed this with "They haven't done any long-term studies to see how animals might be affected."

It is challenging to find logic when the information being presented is contradictory. I could see that some of the other students were uncomfortable with my questions, but clearly, they didn't have a knowledgeable grasp of modern agriculture, and as mentioned, the instructor was in the position of authority.

Doing Our Homework

I did some research of my own to verify or refute her information. With the help of my resources from MSPC, I was able to find several valuable sites with well researched facts, including The Center for Food Integrity (www.foodintegrity.org) and GMO Answers (www.gmoanswers.com). I brought this research to class and questioned some of her statements. She became very defensive and said that research from any government organization (USDA, FDA, EPA, CDC, etc.) could not be trusted "because Monsanto was involved in all of those organizations."

We can understand when activists don't want facts. After all, their intent is to mislead consumers, which thereby increases their coffers. But this was a college instructor who simply didn't want objective, scientifically-based research to dispel her preset opinions about food production.

Before the series of classes ended, I received an email asking me to withdraw from the class and offering a refund of my tuition. As it had been in each of the classes, it was obvious she was not open to hearing any opinion but her own. Any meaningful change would have to come from another approach. In lieu of a refund, I asked for and received a copy of the PowerPoints that would be presented in the remaining two classes, so I had a record of the content.

Taking Action

In the weeks following the class, I met with the director of Lifelong Education, who manages this and other classes at the community college. During our discussion, she fully supported her instructor, stating there were "lots of views" on this subject and the instructor was not required to present both sides or to provide documentation for her content. I also spoke with the president of the college, who seems anxious to support agriculture in his rural community and to develop an undergraduate agricultural program at the college. I am hopeful this will lead to a series of classes that shares the true message of agriculture as a dynamic, technological, diverse industry. I also met with the Farm Bureau board in the county where the college is located. They were equally appalled at the information being presented and also contacted the college to share their concerns.

Isolated Incident? Probably Not!

I would like to believe that my experience in this class was an anomaly. But, there are people across Michigan and throughout the United States who feel they have the right to speak about the food and fiber industry with no related degree, no agricultural experience and no sound research to support their



"Every farm family has a responsibility to find out what's being taught at the local high schools and colleges and take action if necessary."

Laurie Isley at her home office in Palmyra.

views. Most of them are well-spoken and confident. They spread fear and distrust by using half-truths, generalities and inflammatory language.

Many of us are not comfortable engaging these individuals in dialogue. We avoid them at gatherings. We skip over their posts on social media sites. We'd like to think that they will just go away or that someone else will tell them the facts. Unfortunately, that is increasingly unlikely. We need to support our industry by sharing our story and disputing the rhetoric.

There are seven things you can do:

1. Check your local listings for college continuing education classes.
2. Ask for the class syllabus for food and agriculture courses; if the information is inaccurate, question those who can bring about change.
3. Offer to serve as a resource, or to talk to the students so they can hear from a real farmer.
4. Attend seminars offered at the local health food store or community center.
5. Send replies to friends on social media sites who share inaccurate information; offer to sit down with them and provide the farmer's viewpoint.
6. Write letters to the editor in newspapers and magazines when you disagree with what is written.
7. Gather information from agricultural resources so you have brochures or pamphlets on modern agriculture that you can share with friends.

Your Involvement is Necessary

Keep in mind, this was a college course series, and if it is being offered at a small community college in a rural part of Michigan, you can bet that similar courses are available all over Michigan and across the country. The misinformation should alarm and frustrate you, just as it did me, but simply being upset won't change the outcome.

These are YOUR tax dollars at work. Every farm family has a responsibility to find out what's being taught at the local high schools and colleges, and take action if necessary.

I'm reminded of President John F. Kennedy's famous quote: "If not us, who? If not now, when?"

It can be intimidating to challenge or question what someone believes, especially if that person is in a position of authority, but when you know the information is incorrect, you have a responsibility to correct mis-truths. After all, it's your livelihood that's at stake. These six guidelines will help you feel more comfortable and be more effective in presenting your views.

- 1. Find Common Ground:** Your family's health, your care for the environment, your interest in being healthy. People don't care what you know until they know that you care.
- 2. Don't be an Antagonist:** You can ask questions about their sources or their statements, but do not make it a personal attack.
- 3. Keep Your Cool:** It's easy to get frustrated and resort to less-than-professional responses, but it will defeat your purpose.
- 4. Talk About What You Know:** Share what you do know and if a person raises other concerns, tell them you will find the answers, and then find them, or direct them to an expert in that field. It's also a great opportunity to follow up.
- 5. Use Personal Experiences:** They are powerful and irrefutable. Explain how you care for your animals and from whom you can buy seed.
- 6. Educate Yourself:** Know how conventional production differs from organic or natural production and how GMO's benefit the farmer and the environment. Use the many resources that are available to you.

Register Now!

MSU White Mold Field Day

Discussion and tour of the white mold fungicide trials, white mold epidemiology trials and breeding for white mold resistance.

Wednesday, Sept. 16th

2 p.m. - 4 p.m.

Montcalm Research Center
4629 W. McBrides Rd.,
Lakeview, MI 48850

Call Michigan Soybean Promotion
Committee at 877.769.6424
to register by Sept. 14th.

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UNIVERSITY

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January 27-28, 2016

Soaring Eagle Casino & Resort
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www.greatlakescropsummit.com

MSPC SUPPORTS MICHIGAN LIVESTOCK EXPO

By: Gail Frahm, Executive Director

The Michigan Soybean Promotion Committee (MSPC) proudly sponsored the July 2015 7th Annual Michigan Livestock Expo (MLE), held at the Michigan State University Livestock Pavilion.

In addition to contributing funds towards the buyer reception preceding the MLE Sale-Abatement, MSPC partnered with Zeeland Farm Services and numerous other groups to seal the bid on two livestock purchases throughout the evening.

First was Supreme Champion Dairy Showperson, Kristen Burkhardt. She is from Fowlerville and is the daughter of Sheila and Conan Burkhardt. Her animals come from Sheila's family farm in western Michigan. She's been showing for seven years and exhibits dairy and beef cattle, along with turkeys. She exhibits at the Fowlerville (turkeys) and Kent County fairs. Burkhardt is a junior in high school with hopes to attend MSU and complete their agribusiness program. She's a part of the Dairy Ambassador program, secretary of the Michigan Jr. Holstein board and vice president of the Rompin N Stompin 4H club.

Additionally, MSPC purchased the last Showcase Market Beef animal sold, that of Jacob Noll. He resides in Crosswell with his parents, Michael and Jordan, along

with his three siblings. He exhibits beef cattle at shows across the state. The Sanilac County family is in a dairy partnership with Mike's father and brother. They grow soybeans, corn, sugar beets, alfalfa, wheat and dry beans.

According to the MLE website (www.milivestock.com), youth traditionally apply their earnings to college expenses or invest it back into their livestock project. All proceeds above a sales cap support the Michigan Youth Livestock Scholarship Fund, which provides scholarships and educational awards to youth involved in livestock exhibition.

Per the 2012 USDA National Agricultural Statistics Service report, 98% of the soybean meal produced annually in Michigan is consumed in livestock feed. As the livestock industry is our largest consumer of soybean meal, and farm youth are the future of agriculture, Michigan's soybean farmers support both groups that are so important to our industry. In fact, nearly 500,000 tons of soybean meal are consumed by Michigan's livestock annually.

For more information about MSPC youth and livestock programs, visit www.michigansoybean.org.



Pictured (from left) are Mike Noll, Jordan Noll, Carl Bednarski (Michigan Farm Bureau President), Kim Clark (Varnum), Eddie Fahley (Helena Chemical/Asgrow Seed/Mycogen Seed), Gail Frahm (Michigan Soybean Promotion Committee), Jacob Noll, Spencer Smith (Kalmbach Feeds, Inc.), Steve Good (Vita Plus) and Peter Lemmer (GreenStone Farm Credit Services) and Joey Noll.



Pictured (from left) are Gail Frahm (Michigan Soybean Promotion Committee), Jim Sipiorski (NorthStar Cooperative), Ken Nobis (Michigan Milk Producers Association), Brian Troyer (Caledonia Farmers Elevator), Kristen Burkhardt, Dan Bailey (Zeeland Farm Services, Inc.), Michigan Dairy Ambassador Cameron Cook, Neil Bendixen (Dairy Farmers of America), and Michigan Dairy Ambassador Natalie Horning.

SOYLOCK HOLMES PRESENTS THE FREE SOYBEAN EDUCATION KIT

By: Noelle Byerley, Special Projects Coordinator

Kids are back to school and, once again, the Michigan Soybean Promotion Committee (MSPC) is offering a FREE "Soybeans Go To School" education kit to all Michigan teachers. The kit is recommended for grades three through five. Since 1999, MSPC has sent out over 4,800 education kits and reached over 157,400 students in Michigan.

Mrs. Karen Ennesser's 4th grade class from Kincheloe Elementary in Dowagiac took advantage of the six weeks of lesson plans provided by the soybean office. "We really appreciated the kit. We had a fun time," stated Mrs. Ennesser.

From Ashley Elementary, Ms. Amber McAllister also taught the lessons to her 4th graders. She said, "We loved all of the lessons. Students were very engaged and enjoyed the material."

The "Soybeans Go To School" kit includes lessons in which Soylock Holmes solves the mystery of soybeans. The elementary classes are able to learn about:

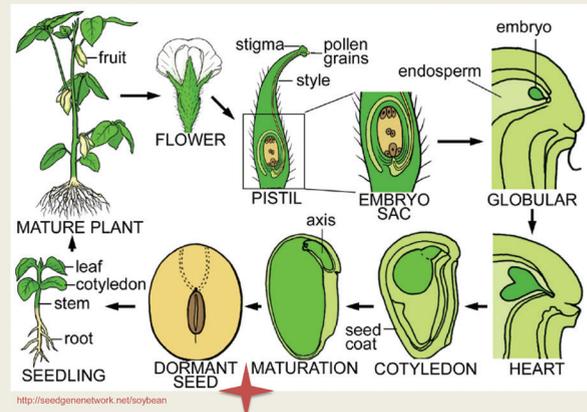
- The life cycle of the soybean plant and actually grow a soybean.
- How soybeans touch our lives every day in the foods we eat and the different products we use.
- The history of the soybean and the effect on different cultures.
- Different researchers such as George Washington Carver and Percy Lavon Julian with the many discoveries they had regarding soybeans.
- The innovations of Henry Ford and the fact that, to this day, Ford vehicles still use soy.
- And, the list goes on and on.

This soybean education kit is compliments of Michigan's soybean farmers through their investment in the soybean checkoff. Thanks to the generous product donations provided by: Star of the West-Reese, Michigan Farm Bureau and Snyder's of Hanover.

As we gear up for the 2015-2016 school year, look for our lessons and order form online. To review lesson plans or to place an order, visit our website at www.michigansoybean.org.



Soy Plant Life Cycle



The Michigan Association of Non-Public Schools (MANS) is hosting their 2015 convention on October 21-23, 2015, at Cobo Center in Detroit. The Michigan Soybean Promotion Committee will be exhibiting at the event to promote the "Soybeans Go To School" kit for Michigan teachers.

DIETITIANS, BLOGGERS AND CHEFS GAIN FAITH IN FARMERS ON TOUR

By: Elaine Bristol, MAC Program Coordinator

The Michigan Ag Council (MAC) recently collaborated with the Michigan Soybean Promotion Committee, United Soybean Board and Michigan Beef Industry Commission to host a Pasture to Plate tour for 11 dietitians, bloggers and chefs. Highlights included a beef and sheep farm, a cattle feedlot, a meat processing and packaging facility, a grocery store and a restaurant dining experience featuring a diverse beef menu.

"I learned so much," one participant said enthusiastically. "I think the most beneficial thing I learned was why animals are fed what they are fed and that antibiotics are used mainly to keep animals healthy. I have so much more faith in farmers and the food system in general now. I also learned a bit about soy and that I don't have to be worried about GMOs."

Dietitian Kristy Hegner, MPH, RD, who blogs at Chocolate Slopes, wrote after the tour, "I'm actually a little surprised that this type of tour was not included in my dietetics program. I may need to recommend it; it was such an awesome experience!" Among her comments following the tour:

- Farmers are very transparent. We need to remember that they are just as concerned about the cows' welfare, what they are fed, and what medicine is given since they eat the same food as the rest of us.
- 98% of farms in the United States are family owned.
- Food safety is of the utmost importance in every stage of the food chain.

"I gained an even greater appreciation and admiration for farmers and the hard work they put in every single day through rain, snow, sleet, hail and sickness," wrote Hegner. "No matter what, they have work to be done and there are no days off. One



of the farmers said, 'they eat before we eat,' which really shows the level of care they provide to their animals."

Herb Miller, a director of the United Soybean Board who grows soybeans and feeds cattle near Niles, observed the tour.

"As a farmer, I'm pretty amazed at how little people know about modern agriculture," he said. "It was an opportunity for those who attended to see the complete beef production cycle in a few hours. I'd like to see more people have this opportunity. I think everyone came away with a better understanding of where their food comes from. Most people don't have a lot of knowledge of practices that we're using, practices that are necessary to feed the world," Miller continued. "The more people are exposed to agriculture and realize that farmers are interested in providing a high-quality product that is produced safely and humanely, the better off we will all be."

Mary Kelpinski, president of the Michigan Ag Council, explained, "Our goal for these tours is to connect bloggers, chefs and other food stakeholders directly with farmers, dietitians, veterinarians and other agribusiness professionals to address questions relating to the food system. This includes animal care and other farming practices, food safety, product branding and labeling, health, nutrition and related topics. The Council serves as a hub of available resources relating to Michigan food and agriculture."

The MAC is a nonprofit organization supported, in part, by the Michigan Soybean Promotion Committee.

For more information, visit www.michiganagriculture.com

or contact Elaine Bristol at 517.679.5573 or elaine@miagcouncil.org

For more information, visit www.michiganagriculture.com or contact Elaine Bristol at 517.679.5573 or elaine@miagcouncil.org.

JUST WHAT THE DOCTOR ORDERED

By: Anita C. Stuever, Communication Contractor

A federal directive to eliminate trans fats from foods may be just what the doctor ordered – not only for public health, but also for the biotechnology industry. High oleic soybeans, introduced four years ago, represent the first soybean trait genetically engineered to directly benefit consumers.

Most of the biotech crops introduced in the past two decades have been aimed at helping farmers control weeds and insects. Although such crops have environmental benefits, including reductions in pesticide use, fuel consumption and soil compaction, they've been a hard sell to some consumers.

After beginning in limited areas of Ohio in 2011, farmers now grow high oleic soybeans in nine states, including Michigan. Competitive performance, demand for enhanced soybean oil and opportunities for a price premium equate to increasing acreage each year.

In 2013, through the national soybean checkoff, the United Soybean Board partnered with seed companies on a five-year plan to advance soybean varieties that produce high oleic soybean oil. Both Monsanto Asgrow's Vistive Gold soybeans and DuPont Pioneer's Plenish soybeans are engineered to dial down the expression of targeted genes in a plant, a process that scientists liken to a light-switch dimmer.

"High oleic soybeans are a great solution to address concerns surrounding trans fat and saturated fat," said Sarah Vacek, Monsanto's Vistive Gold product manager. "The soybeans deliver an innovative oil option that also provides the same great taste and texture that people expect from traditional oils."

The Trouble with Trans Fats

Trans fats, also known as trans-unsaturated fatty acids or trans fatty acids, are a type of unsaturated fats uncommon in nature, but commonly produced from partially hydrogenated vegetable fats used in

margarine, snack foods, packaged baked goods and frying fast food since the 1950s. Hydrogenation gives oil a longer shelf life, increases oxidative stability and makes it solid at room temperature. But recent research shows that trans fats negatively affect human health, and concerns about trans fats have mounted.

United States and the European Union have long required labels declaring the fat content of foods in retail trade. More recently, they have required labeling the trans fat content. Since 2006, U.S. food manufacturers have been required to include trans fat content on nutrition facts labels.

In 2013, the U.S. Food and Drug Administration (FDA) proposed removing the "generally recognized as safe" (GRAS) status from partially hydrogenated oils (which contain trans fats) for use in human food.

On June 16 of this year, the FDA finalized its determination that partially hydrogenated oils, the primary dietary source of artificial trans fat in processed foods, are not GRAS. Food manufacturers have three years to remove partially hydrogenated oils from their products.

The use of trans fats in human food products has effectively been banned in Denmark and Switzerland. In the United States, local legislation banned trans fats from restaurants and public kitchens in New York City and California.

How the FDA Ruling Affects Soybean Farmers

The United Soybean Board estimates that the soybean industry has lost 4 billion pounds of annual soybean oil demand since the trans fat labeling law went into effect in 2006. That translates to a market loss of 359 million bushels of soybeans. The USB estimates that an additional 2 billion pounds of partially hydrogenated soybean oil is used in food today.



The American Soybean Association said the move to remove the GRAS status of partially hydrogenated oils could cost soybean farmers up to \$1.6 billion a year in lost demand.

Soybean Farmers Poised to Solve the Trans Fat Problem

For more than a decade, the United Soybean Board has been working with the industry on solutions to help food companies reduce or eliminate trans fats while using domestically produced, sustainable soybean oil. High oleic soybeans are a production choice. Interesterification of commodity soybean oil provides a processing alternative.

Substituting saturated fats such as lard or palm oil is not a healthy alternative. A 2006 study supported by the National Institutes of Health and the USDA Agricultural Research Service concluded that palm oil is not a safe substitute because it results in adverse changes in the blood, just as trans fat does.

High oleic soybeans can help soybean farmers reclaim the 4 billion pounds of demand lost to other oils.

With no need for hydrogenation, high oleic soybean oil helps food companies improve their products' nutrition profiles. Unlike any other cooking oil, it meets dietary recommendations while allowing consumers to enjoy the foods they love.

Great Traits

High oleic soybeans provide:

- Increased functionality;
- Zero trans fat;
- The highest amount of heart-healthy mono-unsaturated fats (oleic acid) available in soybeans under commercial development, 72–80%, similar to that found in olive oil and three times the oleic acid of commodity soybeans;
- 20–60% less saturated fat than commodity soybean oil and 70–75% less than palm oil, without sacrificing flavor; and
- Linolenic content of less than 3% (versus 7% for commodity soybean oil) for greater oil stability.

One serving of high oleic soybean oil (14 g total fat) contains 1 g saturated fat and 0 g trans fat. The 1 g per serving of saturated fat compares to 7 g per serving in palm oil, 2.5 g per serving in fry shortening and 2.0 g per serving in conventional soybean oil.

The Future of High Oleic Soybeans

Both Pioneer and Monsanto sell high oleic soybean seed in Michigan. The full commercial release of the two high oleic traits on the market has been delayed as companies wait for international import approvals.

Pioneer's Plenish is grown in nine states, including Michigan. Acreage is limited while awaiting European Union approval for accepting imports.

Vistive Gold, built on Genuity Roundup Ready 2 Yield technology, is grown only in Michigan while awaiting global regulatory approvals, specifically from China and the European Union. A stewardship premium is available until Vistive Gold receives import approvals in key export markets with functioning regulatory systems.

The industry expects high oleic soybeans to receive full global regulatory approval in early 2016, opening the door for expansion.

The soybean industry's goal is for farmers to plant 18 million acres of high oleic soybeans by 2023 to meet 9 billion pounds of food, industrial and export demand. Through its funding to help accelerate high oleic breeding and promotion to the food industry, the national soybean checkoff is on track to make the goal a reality.

How You Can Grow High Oleic Soybeans

Start with using the calculator at www.SoyInnovation.com (click Map Your Opportunity at the top). The tool helps you see the availability of high oleic soybeans and determine whether growing them makes sense economically. Provided by the United Soybean Board, the calculator takes into account the costs of handling and segregating identity preserved soybeans, as well as potential added profits.

High oleic soybean oil will be identity preserved (IP) from seed production through refined oil delivered to end users. The value at each stage of the supply chain is directly related to the ability to keep high oleic



High Oleic Soybeans

✓ Investing Your Soybean Checkoff

soybean oil separate from commodity soybean and other vegetable oils.

That's why high oleic soybeans are grown under IP contracts. Processors pay growers an incentive for producing and delivering high oleic IP soybeans. To preserve identity and maintain purity, you need to clean seed hoppers before planting high oleic varieties, mark where the varieties are planted, clean the combine before and after harvesting the high oleic variety, and clean storage bins, trucks and wagons before handling high oleic soybeans.

The United Soybean Board expects more than 1,000 growers to plant up to 350,000 acres of high oleic soybeans this year. Pioneer helps arrange contracts for their growers with participating processors. ADM's Frankfort, Indiana, plant contracts acreage in Michigan with delivery to Ottawa Lake, in Monroe County. Vistive Gold growers in Michigan send their beans to Zeeland Farm Services in Zeeland, Ottawa County.

For now, Monsanto and Pioneer's high oleic traits are available in maturity groups 2 to 4, which limits the number of growers capable of raising them nationwide. The United Soybean Board is working with both companies to expand their respective traits into more maturity groups.

Industrial Applications

For the same reason the food industry wants the oil – high-heat stability – industrial markets are taking another look at U.S. soy. High oleic soybeans are a nontoxic renewable resource for biosynthetic industrial oils. There are opportunities for high oleic soybean oil to replace petroleum in synthetic motor oils, automotive lubricants and even cosmetics.

That makes the oil more marketable, which is good news for farmers. Andy Welden, a soybean farmer from Jonesville and president of the Michigan Soybean Promotion Committee, said, "Multiple uses of high oleic oil create greater demand for American soybean farmers and make our products more competitive in the world market."

Gregg Troub, a soybean grower from Carson City, said, "I believe farmers and the industry will benefit from these soybeans as a specialty crop. The premium is enticing, especially knowing they perform well even in a challenging growing season."

All photos in this article are courtesy of the United Soybean Board.



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Our Soy Checkoff
Progress Powered by U.S. Farmers

BIODIESEL - READILY AVAILABLE IN WESTERN MI

By: Lisa Pedderson, MEG Corp Fuel Consulting

If you live in western Michigan, getting a biodiesel blend just got a whole lot easier. Renewable Energy Group (REG) is offering a blended product, biodiesel blended into petroleum, in the Ferrysburg area. At the Buckeye Terminal, fuel distributors can choose blends between B2 and B20 (2-20% biodiesel/80-98% petroleum diesel). Fuel distributors do not need to have extra tanks or blending equipment in order to offer biodiesel blends to their customers. REG has made it easy. They simply pull their trucks up to the terminal in Ferrysburg and pick the product to be blended and load it directly into their trucks. REG produces high quality biodiesel and the Buckeye facility provides optimal blending resulting in a quality product reaching the consumer.

Harvest season is a great time to fill up with B2, B5, B10 or even B20. Biodiesel is good for your equipment. Ultra low sulfur diesel lacks lubricity. Blends as low as B2 provide excellent lubricity to prevent wear and prolong engine life. Biodiesel is better for the environment, reducing tailpipe emissions and reducing greenhouse gases. Biodiesel is designated as an Advanced Biofuel by the EPA because it reduces lifecycle greenhouse gases by 50 percent when compared to petroleum diesel. Biodiesel supports agriculture and local economies. Biodiesel is also renewable, sustainable and promotes U.S. energy independence. And, as if all that weren't

enough reason to get excited about biodiesel, a recent Informa Economics study revealed that biodiesel adds at least 73 cents of value to the price of a bushel of soybeans. Based on 2014 USDA yield estimates, that 73 cents equals approximately \$35,000 of profit per 1,000 acre farm; so support the biodiesel industry and ask for a biodiesel blend from your fuel supplier. Jon Scharingson, executive director, Sales & Marketing with REG, reported that B10 is competitively priced with straight #2 diesel in Ferrysburg.

REG is a leading North American advanced biofuel producer with ten active biorefineries. REG utilizes a nationwide production, distribution and logistics system as part of an integrated value chain model to focus on converting natural fats, oils and greases into advanced biofuels and converting diverse feedstocks into renewable chemicals. Supplying the Ferrysburg location with biodiesel was part of an agreement with Buckeye Terminals, LLC that included two other locations (Argo, Illinois and East Chicago, Indiana). REG felt that region was an underdeveloped market for biodiesel. Buckeye Terminals, LLC owns petroleum product storage and truck loading terminals in six states, thirteen of them in Michigan.

If you have questions about using biodiesel, contact the diesel helpline at 1.800.929.3437.

Biodiesel Just ask for it!

Biodiesel is a renewable, locally grown and environmentally friendly fuel.

Biodiesel pricing is very competitive with straight No. 2 diesel.

Biodiesel is out there. Ask your fuel distributor to carry it!



For technical questions about using biodiesel blends, call MEG Corp Fuel Consulting at **800.929.3437.**



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Jeff Fromm, Owosso
Dale Stuby, Constantine

RENEWING:

Carlton Blough, Lowell
Cornerstone Ag Enterprises,
South Haven
William Dimond, Kalamazoo
Randall Ettema, Frankenmuth
Greg Fountain, Marshall
Harold Gentz, Blissfield
Bruce Griffith, Charlotte

Ed Hanson, Alvinston ON
Ted Heath, Milan
Roger Huper, Freeland
Scott Jirgens, Kalamazoo
Ron Johnson, Birch Run
Tom Kendle, Edwardsburg
Lyle LeCronier, Freeland
Jack Lemmermen, Portage
Robert Lennard, Reading
Brian McKenzie, Marcellus
Doug Myers, Marshall
Lois Parrent, Sandusky
Joseph Peyerk III, Gagetown
John Simpson, Charlotte

William Szikszay, Otisville
Bruno Walter, Columbus
Wayne County Fair Association,
Belleville
John Wirtz, Freeland

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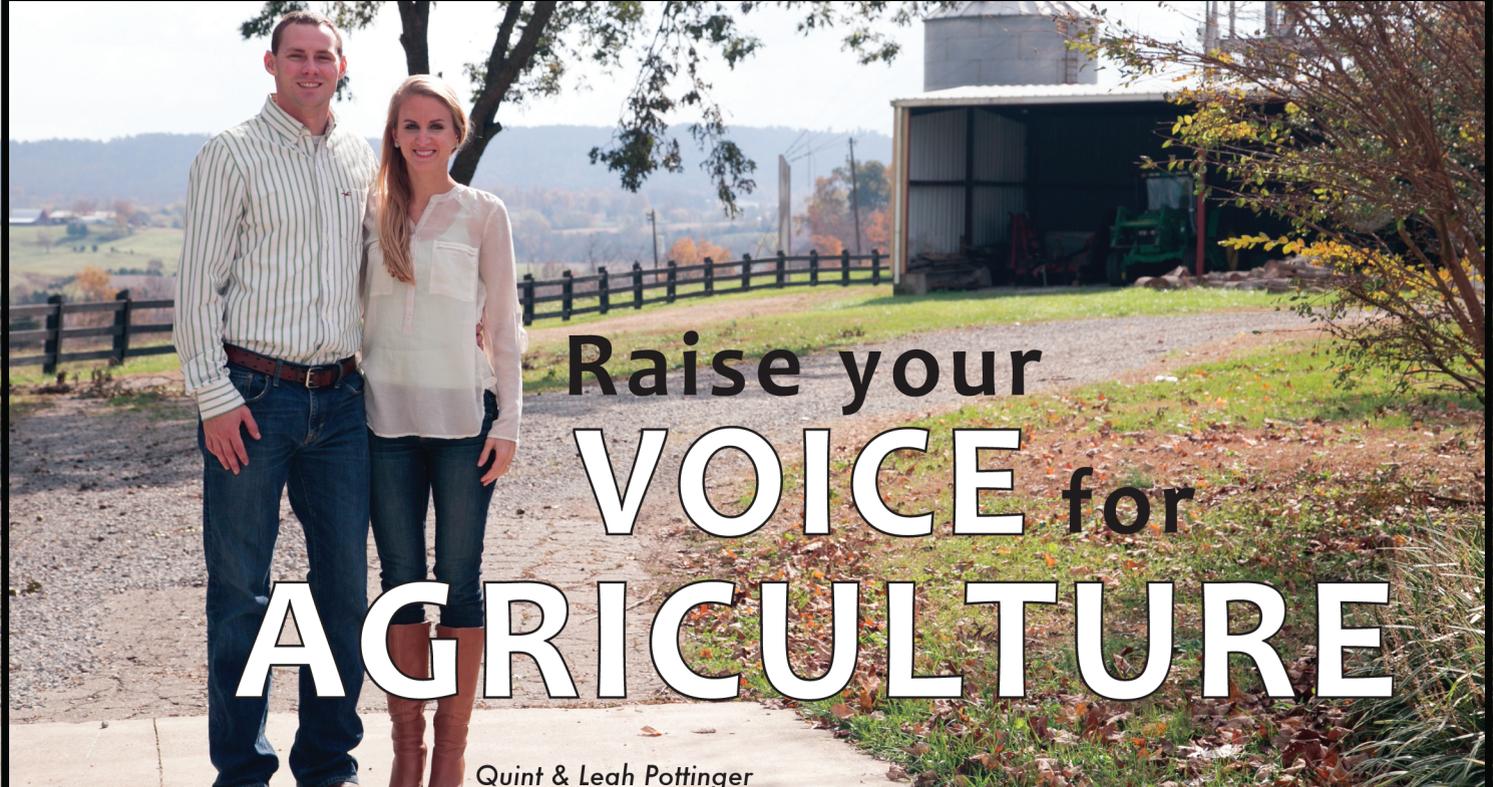
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SAVE THE DATE:

*42nd MSA Annual Meeting of Members
January 26, 2016 at 4:30 p.m.
Soaring Eagle Casino & Resort
Mt. Pleasant, Michigan*

*Register for the Annual Meeting by January 19th
at 877.769.6424 (USS.SOY.MICH).*



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AGRICULTURE

Quint & Leah Pottinger

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- Learn to communicate and influence on important issues more effectively
- Connect with farmers from other states and Canada

The ASA DuPont Young Leader Program is a two-phase educational program for actively farming couples or individuals 21 years or older. Spouses who attend are active participants in the program.

Phase I: December 1 – 4, 2015
DuPont Pioneer Headquarters
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Phase II: March 1 – 4, 2016
New Orleans, Louisiana
Held in Conjunction with Commodity Classic

“The knowledge gained from the ASA DuPont Young Leader Program can directly be applied to make your operation more effective. Along with all of the information gained from the program, you make lifelong friends. The relationships that have come out of this program are priceless.”

Quint & Leah Pottinger, KY

For More Information and to Apply
<https://soygrowers.com/learn/young-leader-program/>

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Lansing Seed Policy

REPRESENTATION Federal Training Benefits

"I've met several legislators that have never set foot on a farm. We as farmers need to be visiting with members of the Capital and represent our land."
 Jay Ferguson,
 MSA Director

People making decisions in Washington, D.C. and Lansing are getting further and further away from the farm. In the past, families had someone who was a farmer they could visit, but now generations are far removed from the farm. With college students making comments such as, "We don't need

farmers because the grocery stores do a good job of putting food on the shelves," or "I'm a vegetarian and I can eat chicken wings because they grow back," there is a lot of education that needs to occur to our politicians and the public. **Protect your farm and way of life, join the Michigan Soybean Association today!**

Are These Issues Important To You?

- Protecting your right to farm.
- Supporting farmers' freedom to operate without oppressive regulations.
- Supporting the use of soy biobased products.
- Keeping Michigan as a livestock production friendly state.
- Support transportation and energy infrastructure improvements.

Paying the soybean checkoff does not make you a Michigan Soybean Association member. Checkoff dollars cannot be used for lobbying.

\$5,000 **2015 new and renewing memberships will be entered into a drawing to be 1 of 2 WINNERS for a \$5,000 voucher towards an IntelliFarm equipment purchase!**

MEMBERSHIP BENEFITS:

- 5% member discount purchase incentive on all IntelliFarms equipment and free admission to grain school and workshops
- Monsanto BioAg™ is offering three options for use on your soybeans: 50 units of QuickRoots®, 100 units of soybean seed with Optimize® or 100 units of TagTeam® LCO for all new or renewing 3-year or Lifetime memberships
- Through Auto-Owners Insurance/Cedar River Insurance Agency, an offer of premium discounts up to 10% on select policies is available
- Scholarship opportunities for your children and grandchildren
- Preferred pricing on the purchase or lease of most new Chrysler, Dodge or Jeep vehicles
- Cabela's gift card purchase discount
- 10% multi-life discount for long-term care insurance with New York Life Insurance Company and an additional 15% marital discount
- Discounted registration to the Commodity Classic
- A 20% discount on an annual subscription to eLegacyConnect
- For 3-year and Lifetime memberships, a \$50 certificate good for either Great Lakes Hybrids Roundup Ready® or Genuity™ Roundup Ready 2 Yield® soybean seed **AND** a \$50 soybean seed certificate good for Renk Seed

The MOST IMPORTANT MSA membership benefit: *Having a voice in Washington, D.C. and Lansing!*

Testify **MICHIGAN** **CONSERVATION** *Discounts*
Membership *Advocate*
Scholarships *Believe*
Lansing **Involvement** *Leadership*

By joining the Michigan Soybean Association, you also become a member of the American Soybean Association. Membership in these organizations allows you to have a greater impact on the soybean industry at a state and national level. Make a decision to help influence the success of soybean farmers by joining today!

MSA MEMBERSHIP APPLICATION

First Name: _____
 Last Name: _____
 Address: _____
 City/State/Zip: _____
 Phone: _____
 Cell Phone: _____
 Email: _____
 Payment Amount & Method:
 1-yr: \$75 3-yr*: \$190 Lifetime*: \$750
 Check (Payable to MSA) or Credit Card
 Credit Card Type: _____ Expiration Date: _____
 Credit Card #: _____
 Signature: _____

Mail application with payment to:
 Michigan Soybean Association
 PO Box 287, Frankenmuth, MI 48734



Dues are not tax deductible as a charitable contribution for federal tax purposes, but may be deductible as a business expense. 18% of member dues are allocated to lobbying activities and are not deductible.



*3-year and Lifetime memberships can choose between receiving either (check one):

2-\$25 Soy Biodiesel Bucks certificates or
 2-\$25 Soybean Meal Bucks certificates

Date of Birth: _____
 Number of Soybean Acres: _____
 Total Farm Acres: _____
 Occupation (circle one):
 Farmer Retired Other

What issues interest you most?
 (Check all that apply)

Biodiesel/Biobased Products
 Farm Bill
 Transportation Infrastructure
 Trade Agreements
 Conservation
 Soybean Rust
 Biotechnology
 Freedom to Operate
 International Marketing
 Soy and Nutrition
 Other: _____

WORKING TOGETHER, EDUCATING POLICYMAKERS ON INDUSTRY ISSUES

By: Chuck Lippstreu, Byrum and Fisk

Michigan agriculture is impacted every day by policymakers and their staff in Lansing. By hosting monthly educational lunch events at the state capitol, Agricultural Leaders of Michigan (ALM) works together to keep lawmakers and their staff informed.

The coalition's "Lunch and Learn" events provide a chance for lawmakers, their staff and executive branch officials from the Michigan Department of Agriculture and Rural Development to learn about key issues in our industry. On the second Monday of each month, ALM brings expert speakers to the state capitol – including ALM member organizations, as well as outside experts who are well prepared to discuss key issues in our industry.

A wide range of topics are highlighted throughout the year – from updates on crop progress, to challenges from disease and weather events, to nutrition guidelines and opportunities to increase exports from Michigan.

"Legislators and staff handle multiple issues simultaneously, and many come from non-agriculture backgrounds," noted Gail Frahm, executive director for the Michigan Soybean Association (MSA) and Michigan Soybean Promotion Committee (MSPC). "The events provide an opportunity for busy staff members to learn more about agriculture and key policy issues affecting the industry."

By including many different commodity group leaders and outside experts, the lunch events emphasize the diversity of Michigan agriculture.

For example, the April Lunch and Learn featured Keith Reinholt with the MSPC, alongside leaders from

Zeeland Farm Services, to discuss the importance of logistics issues in agriculture.

Speakers highlighted Michigan agriculture's growth in recent years and the need for reliable road, rail and water transportation infrastructure for agriculture. At the briefing, Reinholt focused on the complexity of processing – and moving – soybeans produced in Michigan.

"Moving soybeans is slightly more difficult in Michigan because we're located north of major road and rail lines," said Reinholt. "This poses additional considerations when it comes to transportation and processing, and we count on reliable truck, rail and water transportation options to move crops to markets around the world."

Michigan farmers truck soybeans out of state (and often out of the United States) to be processed. That means modern, reliable transportation options are critical to taking advantage of market opportunity. Reinholt noted similar logistics issues exist for other Michigan-raised crops.

So far in 2015, Lunch and Learn topics have included:

- **Export Opportunities for Michigan Agriculture:** including discussion of an expanding middle class around the world, and the potential for open markets with Cuba, a new market of 11 million buyers just 90 miles from the United States.
- **Energy Issues:** a discussion of the need for reliable, affordable energy in rural Michigan, where growers and agribusinesses are unique energy users.
- **Transportation and Logistics:** the previously mentioned session discussing the importance of transportation options for Michigan agriculture – including the critical benefits of Michigan's unique truck weight restrictions.

Moving soybeans is slightly more difficult in Michigan because we're located north of major road and rail.

—Keith Reinholt

- **Nutrition Standards, Farms and Families:** an event focused on the federal Dietary Guidelines for Americans, a set of recommendations being updated in 2015 that have important impacts on the agriculture industry and the food Americans eat.
- **Weather and Climate Issues:** highlighting the heavy precipitation growers have faced in many parts of the state this year, and discussing the modern tools we have to overcome challenges and increase production.



Keith Reinholt of the Michigan Soybean Promotion Committee gives remarks on logistics and agriculture at a Lunch and Learn in April 2015 alongside Greg VanderWal and Gary Brower of Zeeland Farm Services.

ALM is a coalition of agricultural, commodity and agribusiness leaders committed to promoting Michigan agriculture, participating in the ongoing dialogue about issues affecting our state, and harnessing agriculture’s power and potential to further grow Michigan’s economy.

In addition to the MSA/MSPC, the coalition includes GreenStone Farm Credit Services; Michigan Allied Poultry Industries Inc.; Michigan Agri-Business Association; Michigan Corn Growers Association; Michigan Milk Producers Association; Michigan Pork Producers Association; Potato Growers of Michigan Inc.; and the Michigan Bean Commission.

You can learn more about ALM by visiting www.agleadersmi.com.

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The mission of the Michigan Soybean Promotion Committee is to manage checkoff resources to increase return on investment for Michigan soybean farmers while enhancing sustainable soybean production.

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LEGISLATIVE OUTREACH FARM TOUR 2015

By: The Frederick Group

Dave Williams, Michigan Soybean Association (MSA) board president and United Soybean Board director from Michigan, welcomed legislators, legislative staff and Michigan Department of Agriculture and Rural Development (MDARD) staff members to his farm for the inaugural Legislative Outreach Farm Tour sponsored by MSA and the Michigan Soybean Promotion Committee (MSPC).

President William's Michigan Agricultural Environmental Assurance Program (MAEAP) verified farm was an excellent location to host the tour according to MSA/MSPC Executive Director Gail Frahm who said the tour was, "A great opportunity to allow legislators and their staff to learn about agriculture and the significant economic impact soybeans have in Michigan." About 88% of Michigan soybeans are exported nationally and internationally making soybean products the #1 agricultural export of Michigan.

The tour's agenda included President Williams leading tour participants around his farm while engaging in discussion topics such as MAEAP's recent reforms made the beginning of summer, an educational experience related to biobased products and their versatile uses, soybean's economic impact, the potential for increased soybean processing here in Michigan, and infrastructure issues including transportation (roads), natural gas accessibility, cellular coverage and Wi-Fi accessibility. These issues in one form or another affect all soybean farms and are critical to the continued success of soybean farming here in Michigan.

All tour participants were excited to learn about and tour Dave's farm. Patrick Weaver, one of the attendees said, "I was happy to come out to learn about soybeans and biobased products. It is incredible that Dave's farm is a sesquicentennial operation. The advancement of the industry while maintaining environmental stewardship really impressed me." Weaver is the legislative aide for Representative Jason Sheppard (R-Temperance) who is a member of the Agriculture Committee.

Thank you to each and every one of the 12,000 Michigan farmers planting over 2 million acres of soybeans annually, making Michigan 12th in the nation for soybean production. It is because of you that the Promotion Committee educates and the Soybean Association advocates for your interests so passionately and effectively.



MSPC and MSA Executive Director Gail Frahm speaking about the importance of soybeans in Michigan.



MSA President David Williams is educating tour participants about soybean harvesting, pointing to his combine not featured in this photo.



Representative Joel Johnson (R-Clare) poses for a picture with his staff in front of the soybean combine.

Tour participants discuss the MAEAP program in Dave's fertilizer storage barn.



MAEAP program staff participate in the discussion about the importance of good environmental stewardship.



MSPC Research Coordinator Mark Seamon educates everyone on the uses and opportunities for soy biobased products.



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TOP-TIER PEOPLE



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 COMBINATION
 FOR YOUR ACRES**



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*Ryan Wangen
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