



NEWSBEET



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ALSO IN THIS ISSUE:

FACTORY NEWS: The Addition of AmCane

AWARDS AND RECOGNITION: 2016 Service Awards, Michigan Sugar Queen, and Scholarship Recipients

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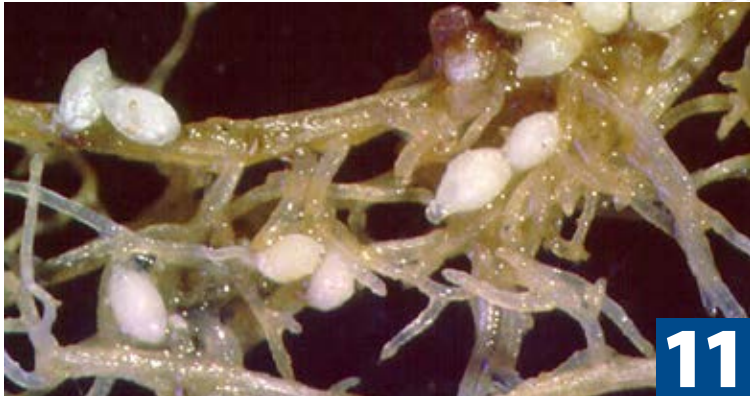


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A photograph of two men walking through a vast field of harvested sugarbeets. The beets are piled high, creating a textured, brownish-gold background. The men are dressed in work clothes; one in a green shirt and blue jeans, the other in a dark jacket and grey pants. They are walking from left to right, looking towards each other.

Things constantly change in this business. With the right partner, it can be change for the better.

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ROOT OF THE BUSINESS

by Mark Flegenheimer, President and Chief Executive Officer

HOW WE ARE INSPIRED BY GROWTH

The theme of this edition of *The Newsbeet*, "Inspired by Growth," can have multiple meanings depending upon one's perspective. Does it mean growth of the crop, growth of a factory, growth of the Cooperative or personal growth? In reality, it is all of these and many more. When discussing growth, there is one common denominator, growth means change. John Maxwell stated it this way, "If we're growing, we're always going to be out of our comfort zone." This issue of *The Newsbeet* looks at various aspects of our business and discusses opportunities for growth.

As shareholders work to cultivate the best crop possible, they are continuously changing how they grow the crop. Whether it is altering agronomic practices or upgrading equipment, the only constant on the farm is change. Deciding to shift from wide rows to narrow rows is not only expensive, but it is intimidating to switch from a tried and true standard. As growers push to increase the quality and yield of the sugarbeet crop, they realize they must try new techniques. Nearly 50% of our acres are now planted in narrow rows and those shareholders who have converted have seen yields increase by 1.7 tons per acre compared to beets grown in wide rows. Width of rows is just one example of how grower-owners have adapted their agronomic practices to propel quality and yields to higher levels.

With ever increasing yields brought on, in part, by innovative agronomic practices, Michigan Sugar Company has scrutinized our factory assets and

decided to upgrade the Crosswell factory to efficiently handle these larger crops. This overhaul will touch nearly every part of the process to maximize extraction and volume while minimizing fuel consumption. This multi-year project started this year and is scheduled to be completed in 2020.

In February of this year, the Cooperative took a unique path to growing its business by expanding into cane sugar production. The acquisition of the assets of AmCane Sugar, LLC, gave Michigan Sugar Company an entrée into cane sugar specialty products (see story on Page 22). AmCane allows the Co-op to offer a broader line of products to our current customers as well as selling sugar to businesses we have never serviced in the past. This acquisition will add \$60 million to Michigan Sugar Company's top line.

Personal growth is just that ... personal. Each and every person can and should have a different definition of what it means to grow on an individual level. One area of personal growth many individuals pursue is through education. In this edition of *The Newsbeet*, we highlight 12 exceptional students (see Page 26) who are continuing to grow by attending college. Each year, Michigan Sugar awards \$10,000 to college-bound students, many of whom are sons and daughters of shareholders and employees. We hope these scholarships inspire these students, as well as our employees through our tuition reimbursement program to continue to grow and flourish. ■





“When you are on very stable footing, and find yourself with a place to fall back on, you can afford to sometimes take a greater risk, and through risk, you become “inspired through growth.””

Grounded in our roots ... strengthened by tradition ... inspired through growth.

by Jim Ruhlman, Executive Vice President

As I begin a new chapter in my career here at Michigan Sugar Company, leading the Agriculture Department, I find myself challenged, honored, and excited for the opportunity.

I have great respect for those in farming communities where people are self-reliant, community-oriented and passion filled. It is refreshing to me to see all the good that comes from the general culture of farming. In no other occupation that I can think of, are life lessons taught at such a young age by those who have weathered the storms and studied their learned craft for generations and generations.

There is a certain “grounding” that comes from growing up on a farm that allows you to fall back on some basic principles as an adult; principles such as hard work, respect, faith in a greater being, family first, and giving of yourself to help a neighbor. As a child growing up on a farm, it seems as though these guiding principles are learned at a much younger age and become a deep part of our inner self as we grow older. This grounding is important as we encounter and face life’s experience as they are pillars to return to when confusion or doubt creep in. It is a foundation and safe landing that is always there.

Couple “grounded” with a rich tradition and you find yourself on really strong footing. To me, tradition means experience through the test of time. It has an implied meaning of pride and trust. It is a strength in knowing what

has failed in the past and what will work in the future, and it is symbolic of doing the right things in the right manner. In a family farm, there is most often tradition as farms are passed on and built up in the name of family and there seems to be an unspoken obligation to carry on that tradition for future family members.

When you are on very stable footing, and find yourself with a place to fall back on, you can afford to sometimes take a greater risk, and through risk, you become “inspired through growth.” Growth is contagious and can be an addicting mindset. It is certainly a “feel good” moment and sometimes mandatory for survival, but it needs to be managed. For me, growth is synonymous with hope, and without it, a world can become stagnant without purpose.

As an Ag Department, servicing more than 1,000 shareholders, we hold you in very high regard. We respect your precious grounded roots, and we honor your tradition as family farmers who work not only to foster and feed your own families, but to literally feed families around the world. Our mission as a department is to see you grow through research, field scouting / crop consulting,, and through preserving your crop once it is delivered. Those are our three pillars that we will build our services around. You can expect to see strides in all of these aspects as we grow as a department. It is an honor to serve you and I am excited for things to come! ■

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What's Going On in Washington?

by Ray VanDriessche, Director of Community and Government Relations

U.S./Mexico Suspension Agreements Sugar industry representatives and government-to-government discussions between the United States and Mexico continue on how to resolve the lack of sufficient volume of raw sugar for further refining coming in from Mexico. At issue is the amount of sugar that is being shipped from the Mexican sugar industry directly to melthouses and bypassing U.S. refiners for further refining. The move by the Mexican industry to ship sugar of a higher quality that can go directly to customers is not within the original intent of the suspension agreement. U.S. refiners who depend on imported raw sugar from quota holders and Mexico are currently operating at unprofitable prices.

GMO Food Safety Reports The National Academy of Sciences released a report on May 17 confirming what the sugar industry has been communicating to the public for years — **genetically modified products derived from GMO plants do not pose a health risk!** The study states, "An extensive study by the National Academies of Sciences, Engineering, and Medicine has found that new technologies in genetic engineering and conventional breeding are blurring the once clear distinctions between these two crop-improvement approaches. The study committee found no substantiated evidence of a difference in risks to human health between current commercially available genetically engineered (GE) crops and conventionally bred crops, nor did it find conclusive cause-and-effect evidence of environmental problems from the Genetically Engineered crops."

In addition, a joint Foreign Agricultural Office of the United Nations and the World Health Organization (FAO/WHO) meeting on pesticide residues determined that the herbicide Glyphosate is **"Unlikely to Pose a Carcinogenic Risk to Humans from Exposure through the Diet."** The link to the report is <http://bit.ly/29ytP5a>.

GMO Labeling Legislation On June 23, after well over a year of debate and negotiations, Senators Roberts and Stabenow came to an agreement on language for legislation that would implement a federal standard for GMO labeling requirements and preempt Vermont's GMO labeling law. Both senators then focused on acquiring enough bipartisan support of S.764, the Biotechnology Disclosure Bill, to assure the Senate passage of the bill. The final passage of the preemption bill by the House took place on July 14 with a tally of 306-117 in favor of the legislation. The labeling bill offers consumers transparency of food ingredients while not stigmatizing the sound and safe science behind genetically engineered foods. The President committed to signing the legislation into law as soon as it was delivered to his desk.

FDA's Added Sugar Declaration

The Sugar Association released the following statement:

"We are disappointed by the Food and Drug Administration's (FDA) ruling to require an "added sugars" declaration and daily reference value (DRV) on the Nutrition Facts Label (NFL). The extraordinary contradictions and irregularities, as well as the lack of scientific justification in this rulemaking process are unprecedented for the FDA. We are concerned that the ruling sets a dangerous precedent that is not grounded in science, and could actually deter from our shared goal of a healthier America."

"The FDA has openly admitted it deviated from factors traditionally considered for mandatory declaration of nutrients on the NFL (e.g., chronic disease, health-related conditions). Instead, FDA arbitrarily selected from general dietary guidance and science of low evidentiary value to support its proposal for "added sugars" labeling and to set a DRV. The FDA also ignored comment from the European Commission inviting them to reconsider their position, citing lack of distinction between total and added sugars."

The Sugar Association remains confident that if an official Dietary Reference Intake process was undertaken by the National Academy of Science, the science used by FDA to propose "added sugars" labeling and a DRV would not withstand the scrutiny of a quality, impartial evaluation of the full body of scientific evidence.

WOTUS: EPA's Waters of the U.S. Regulations In the upcoming House Appropriations bill there is language that has been submitted to cut funding over EPA's refusal to change language in the Clean Water Act that gives the EPA unreasonable control over standing water on agricultural operations. In addition, the U.S. Supreme Court ruled unanimously that Army Corps of Engineers wetlands determinations can be challenged in court. The eight justices agreed on the outcome in the case of *U.S. Army Corps of Engineers v Hawkes Co., Inc.*, that the Army Corps' jurisdictional determinations which delineate wetlands and streams on a property are subject to Clean Water Act permitting requirements.

Remember to Vote! *One of the greatest freedoms we enjoy as citizens of the U.S. is our right to vote in to office those we believe will best serve the needs of our country and our livelihoods. The Presidential elections coming up in November make it even more imperative that we vote to ensure that we have the right people in office when the next Farm Bill and sugar policy is voted on in 2018. Study the candidates and get out and vote!*



Celebrating Our Independence with a Fabulous Fireworks Reception!

The fireworks reception hosted by Michigan Sugar Company held on July 2 at the new Uptown Corporate Office location was attended by over 150 invited guests. The reception provided a “front row seat” to the main event of the Bay City Fireworks — a 45-minute display which took place directly across the river from the Corporate Office. The reception was an evening of fun and relaxation as guests enjoyed each other’s company and watched the sky light up with one of the largest fireworks displays in Michigan. A huge “thank you” to the shareholders and employees who were top-level contributors to the Michigan Sugar Company Grower’s PAC fund! Supporting the PAC fund at the top-tier level provided them the opportunity to enjoy the fireworks reception while at the same time increasing our industry’s ability to educate legislators about the sugar industry! ■



Ray VanDriessche, Michigan Sugar Company’s Director of Community and Government Relations, is also a third-generation farmer in mid-Michigan. He travels to both Lansing and Washington D.C. often to follow and advise on political activity that will affect agriculture in Michigan.



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LEFT: White females on lateral roots.

BEET CYST NEMATODE MANAGEMENT

by George Bird, Fred Warner and Angie Tenney, Michigan State University

The beet cyst nematode (BCN) was discovered in Halle, Germany, in 1859, the USA in 1895 and Michigan in 1950. It is widely distributed throughout Michigan's sugarbeet growing areas. BCN can cause yield losses greater than ten tons per acre, and reduce sugar content. It is one of more than ten types of cyst nematodes known to exist in Michigan. The others, including soybean cyst nematode (SCN) do not damage beets. The purpose of this feature article is to describe the fundamentals of BCN Management.

NEMATODES

Nematodes are microscopic round worms. They are everywhere, including soil, freshwater and marine environments. Two important groups are those that feed on plant tissue and reduce growth (bad nematodes) and those that feed on bacteria, mineralizing nutrients essential for plant growth and development (good nematodes).

BCN feeds through a hollow spear that it inserts into root tissue to withdraw food and inject chemicals (the way a mosquito feeds). At beet planting, young BCN are inside eggs, encased in protective cysts in soil. Juveniles hatch, emerge from cysts, migrate to beet roots, penetrate and travel to their final feed site. Then, BCN signals the plant to produce nurse cells to feed young females. This reduces the matter and energy available for beet growth and sugar production. White females, containing hundreds of eggs, become visible on beet roots. Old females become brown cysts protecting the eggs until the next beet or other host crop is planted.

PROBLEM IDENTIFICATION

A wise individual once said, before a problem can be resolved, its cause must be properly identified. Symptoms/signs of a BCN infestation include mid-day plant wilting, white females on roots, low beet yield, deformed beets and low sugar content. For confirmation, soil/root samples should be sent to Diagnostic Services at MSU (www.pestid.msu.edu or 517-432-1333). For accurate BCN-level identification, soil samples need to include root tissue. Another good method is to collect soil from the harvester during the beet digging process. BCN records should be maintained for all fields. Sites with poor soil health (<45% water stable aggregates, low nitrogen mineralization potential and inadequate active carbon) are believed to be high risk locations for BCN.

MANAGEMENT PLAN

The management plan should have two parts: problem avoidance and problem resolution. The four most important tools for avoidance are:

- 1) power washing all equipment used in BCN infested sites prior to using it in non-infested fields,
- 2) use of multiple year rotations with crops like corn, soybean, dry beans, wheat and potatoes that are not hosts for BCN,
- 3) avoid spreading tare soil on land used for beet production and 4) inclusion of soil health building practices.



ABOVE: Mid-day plant wilting caused by BCN.

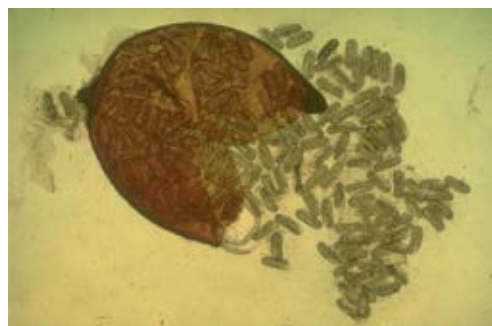
Procedures for BCN problem resolution include growing a BCN trap crop following wheat or dry beans, planting BCN tolerant varieties and use of a biological nematode control seed treatment. Michigan beet growers have successfully used specific oilseed radish varieties such as Defender, Colonel and Adagio, as trap crops to reduce BCN population densities. Cover crops that are hosts for BCN, including many radish varieties, should not be grown in BCN-infested fields. Excellent BCN tolerant varieties are available for use in infested sites. These are strong enough to provide high beet yields while providing the nematodes food. They do not result in reduction of BCN populations available for infecting the next beet crop. This is different than SCN resistant varieties that yield well and reduce SCN populations. A bacterium that parasitizes nematodes is available as a sugarbeet seed treatment. ■

THANK YOU

As MSU nematologists, it is a pleasure to work with Michigan Sugar grower cooperators and the broader agribusiness community as a team for discovery of future BCN management practices.



FAR LEFT: Nematode head with stylet (spear) for feeding on plant roots.



LEFT: Brown cyst broken open to show nematode eggs.



Dr. George Bird, Professor, Department of Entomology, MSU, has worked with the sugarbeet industry since joining Michigan State University in 1973. After receiving his BS and MS from Rutgers and a PhD from Cornell University, he held research and teaching positions with Agric. Canada and the University of Georgia.



Fred Warner, Nematode Diagnostician, Department of Plant, Soil and Microbial Sciences, MSU, received his BS and MS in Entomology in 1980 and 1986, respectively. As MSU's Nematode Diagnostician, he is annually responsible for nematode identifications related to 3,000 to 4,500 samples. Fred is a highly regarded speaker at grower meetings and as a university classroom lecturer.



Angie Tenney, Nematode Technician, Diagnostic Services, MSU, is a native of Michigan. She received her MS degree in Entomology from the MSU in 1999. Her thesis was on the distribution and management of sugarbeet cyst nematodes. She is highly regarded for her nematode identification and population density determination talents.



Winning on the Field in the Fourth Quarter

ABOVE: Spray fields with 90 to 100 pounds pressure, 20+ gallons water.

by David Pratt, Chief Agronomist

If you're a fan of football, you understand that many games are either won or lost in the fourth quarter and even in the last two minutes. In fact, some games are a total bore for the first three quarters, then all of a sudden all kinds of excitement happens in the fourth. Kind of like last year's leafspot season.

It is critical for a team to play the entire game with 100% effort if they are planning to win. They cannot afford to take a play off or let up at any time during the game or results can be very disappointing.

Managing your beets for leafspot infection is no different. You should have a game plan that is effective against the enemy and proper execution is even more critical. You can have the best plan in place and I am confident we do, but if it isn't properly executed the plan will not be effective.

Our game plan includes the use of the proper products applied at the right time and for the entire game. We can't afford to let up or think we have the game won before the clock runs out. Our clock does not run out until mid-September. We need to continue to perform at our highest level, which means continue fungicide applications until mid-September based on the spray schedule for your region and variety planted.

Last year, based on spray records and field observations (game tape doesn't lie), it appears we began to let up in the fourth quarter because we thought we had the game won based on past experience of previous years. Unfortunately, the other team came to play the entire game

with a different game plan and showed up in the fourth quarter with 100% effort and some new plays we had not seen before (late season infection conditions). In some cases, we had the wrong players in the game (products with known disease resistance). In some cases, we took our foot off the gas (spray intervals too wide) and we got our rear ends kicked as a result.

I don't know about you, but I'm not about to lose to this team again (Cercospora leafspot) and I want revenge. We should all have a clock in the locker room counting down when the game starts based on DSVs for your area. Your game plan should be effective based on Michigan Sugar Company's 2016 recommendations, available online, in the 2016 Growers' Guide, from your agriculturalist or myself. You may have to make adjustments as the game goes on, based on current conditions; consult your agriculturalist or myself for game plan adjustments.

I certainly don't mean to make light of this topic by comparing it to a game because to you this is real and it affects you more than any football game. Hopefully, the football analogy helps get the point across in a more entertaining manner and without me preaching to you. You all



GAME PLAN AND OR EXECUTION NEEDS SOME ADJUSTMENT



GOOD GAME PLAN GOOD EXECUTION

know what to do and how to do it. You're the best in the world at what you do. You have the ability, the knowledge and experience.

I have no idea what this year will bring for potential Cercospora infection. We need to execute and have a well-designed plan, with the anticipation that on any play the other team can score. Weather conditions can and will change. We can go from very low infection potential to very high in just a few hours. Although prevent defense tends to lose games we have a prevent offense that prevents the other team from scoring. Leafspot management is a preventative and it works if well executed.

Once leafspots show up, they get momentum that is difficult and almost impossible to stop. They must be prevented!

Don't try to save \$30 or less per acre by not spraying when you should. It could cost you hundreds per acre not to spray when you should, or until the clock runs out. ■



David Pratt is Chief Agronomist at Michigan Sugar Company. He works with staff to identify research opportunities and evaluate data and assists agriculturalists and growers with educational training and support. David joined the Company in 2015.

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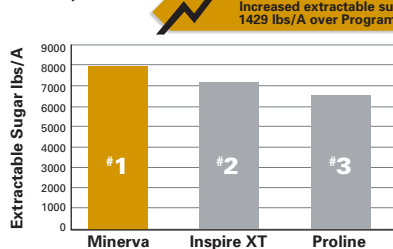
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WISE CHOICE FOR CERCOSPORA LEAF SPOT CONTROL

Minerva Field Report

2015 Southern Minnesota Beet Sugar Cooperative
Sugarbeet Cercospora Leaf Spot Trial

Location: Raymond, MN



Fungicide Program:

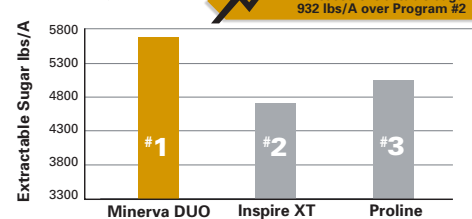
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Minerva Duo Field Report

2015 Michigan State University Sugarbeet
Cercospora Leaf Spot Trial

Location: Richville, MI



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- #3 **Proline®**
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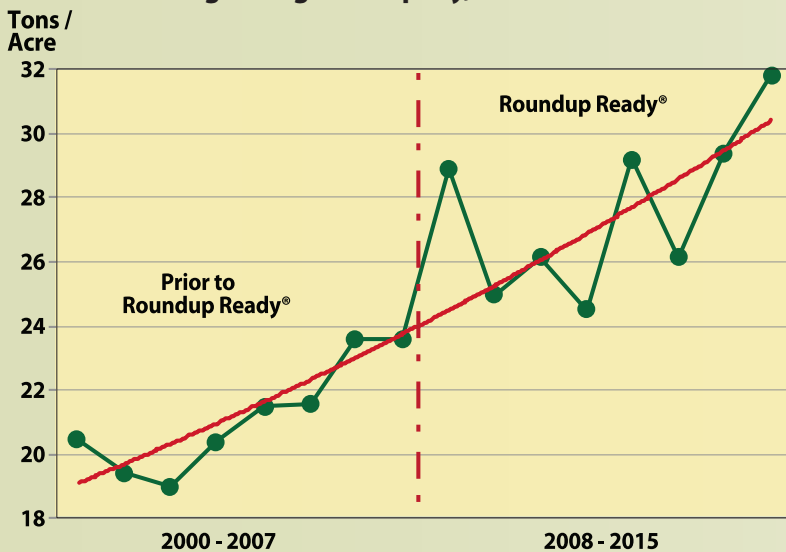
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Growth Through Improved Yields

by Jim Stewart, Director of Research

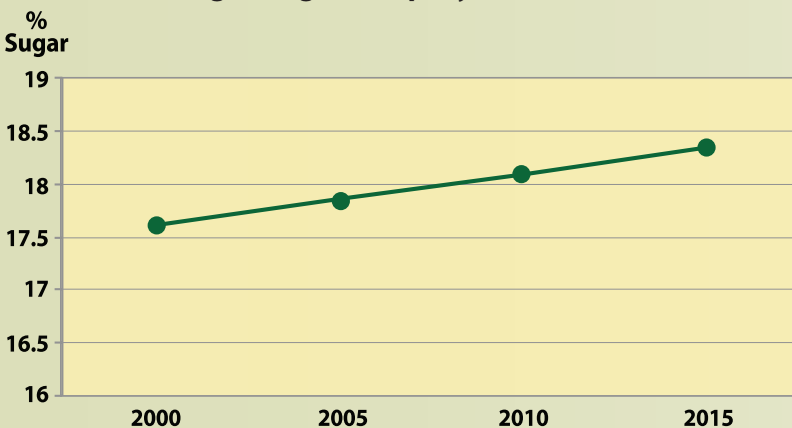
Figure 1. Sugarbeet Yield Trends
Michigan Sugar Company, 2000-2015



The success of our Cooperative depends upon our ability to produce a high yield, high quality crop of sugarbeets. The Research Department is conducting almost 90 trials on 18 different farms in 2016. Some are devoted to variety improvement, others to Cercospora leafspot and Rhizoctonia trials, and the remainder are designed to evaluate weed control, soil fertility and other miscellaneous issues.

Sugarbeet yields have been increasing at approximately 0.7 tons per acre per year in recent years (Figure 1). We experienced a large yield increase in 2008 when the Cooperative converted to the Roundup Ready® system. Sugar content has increased slowly but steadily during the same time period (Figure 2). The percent sugar graph has been converted to a trendline graph which evens out yearly fluctuations. This sugarbeet yield and quality information includes “early harvest” which has become more common in recent years. When calculating yields and quality without the early harvest data, yields would be higher and we would be approaching our goal of 19 percent sugar.

Figure 2. Sugarbeet Quality Trends
Michigan Sugar Company, 2000-2015



Yield and quality improvements have resulted primarily from new higher-yielding varieties, including Roundup Ready® and nematode tolerant varieties. Improved disease control (Rhizoctonia and Cercospora) and better agronomic practices (earlier planting dates, higher plant populations, narrow row production, etc.) have also contributed to yield increases. Technological advances including auto-steer and self-propelled harvesters have been quickly adopted by Michigan growers and have helped improve sugarbeet production in the region.

continued on page 16



RESEARCH UPDATE

Growth Through Improved Yields, continued from page 15

The Research Department is conducting almost 90 research trials on 18 different farms this year. About one-third of the research is devoted to variety improvement. We also have a large number of Cercospora leafspot and Rhizoctonia trials. The remainder of the work is designed to evaluate weed control, soil fertility and other miscellaneous trials.

New and improved varieties are vital to the health of the Cooperative; however, new varieties cannot be planted until they pass approval standards for yield, quality, and Cercospora leafspot tolerance. The Official Variety Trial (OVT) program is designed to measure these parameters and facilitate approval so that improved varieties can be utilized. This year, we are evaluating 40 varieties, including 21 that have nematode tolerance. Eight OVT yield trials are being conducted throughout the growing region. At this point (late June), three trials are considered to be of very good quality, two are rated good, two fair and one trial is questionable. We normally have four to six good quality trials at harvest time.

In addition, four Cercospora variety trials, two Rhizoctonia variety trials and two nematode variety trials are being conducted. When Cercospora starts developing in the trials, we evaluate each variety for tolerance to Cercospora. Each location will be rated six to eight times. We evaluate the Rhizoctonia plots by rating the roots for disease tolerance. Nematode variety trials are evaluated by rating roots and by harvesting for sugarbeet yield and quality.

The Cooperative lost at least \$25 million due to the late season Cercospora infections in 2015. Because of fungicide resistance and losses incurred last year, we are devoting more resources to Cercospora research this year. We are evaluating fungicide application timings (BEETcast) and trying to make improvements to the predictive model. When we first starting using BEETcast, we had only one recommendation — spray at 55 DSVs and make repeat applications at 55 DSVs. Over time, we have identified Cercospora leafspot risk zones; red, high risk; yellow, moderate risk; and green, lower risk. Spray recommendations for tolerant, moderately susceptible and susceptible varieties and for different types of fungicides (Triazoles, EBDCs, Coppers, etc.) have also been developed. In other trials, we are evaluating rainfastness of spray stickers, the effectiveness of different spray sequences and of tank mixing, new products from chemical companies and several miscellaneous trials.

This year we are also evaluating a promising new Rhizoctonia seed treatment at four locations. Several generic formulations of azoxystrobin (Quadris) have been registered and we have designed trials to compare these products to Quadris. We are also looking at experimental and commercial fungicides for Rhizoctonia control.

Due to weed resistance, we are conducting trials to evaluate the optimum rates and timings of soil active herbicides like Nortron, Dual, Outlook, and Warrant. Fertility trials are being conducted to determine nitrogen needs for early harvested fields. Other miscellaneous trials including harvest date, lime, etc., are being conducted.

The purpose of the Research Department is to ensure a continuous supply of improved sugarbeet varieties and to develop effective methods for controlling pests and developing recommendations for other agronomic practices such as planting date, populations, row spacing and soil fertility. The success of our Cooperative depends upon our ability to produce a high yielding, high quality crop of sugarbeets. Continued research will be needed to keep the Cooperative moving forward. ■



RIGHT: Aerial view of the Huron County variety trial field.



Jim Stewart, Director of Research, coordinates the agricultural research activities at Michigan Sugar Company and specializes in weed disease and pest control, soil fertility, and other sugarbeet production practices. He has been with the company since 1999.



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MSU Agriculture Innovation Day: Focus on Soils

August 24, 2016

Saginaw Valley Research and Extension Center • Frankenmuth, Michigan

Hear from experts and see the results of cutting-edge techniques on crop growth and soil quality. Learn about soil testing and plant diagnostics, academic programs and other MSU resources.

Participate in sessions focused on:

- **Nutrient management.** Enhance decision making about nitrogen usage and rates through technology.
- **Soil quality.** Improve soil quality, including the architecture of cover crops, extended rotations and interseeding.
- **Compaction.** See the effects of soil structure, controlled traffic and various tillage methods.
- **Tile technology.** Get an in-depth view of the movement of nutrients from the soil to tile lines.

CCA credits in soil and water will be available.



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UNIVERSITY

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MSU AGRICULTURE INNOVATION DAY: Focus on Soils

*by Steve Poindexter, Senior Sugarbeet Educator
Sugarbeet Advancement, MSU Extension*

Improving soil quality is important to improve productivity of all crops. It is particularly important to root crops such as sugarbeets which often appear to magnify the effects of poor soil quality.

Michigan State University will host a unique field event, "Agriculture Innovations: Focus on Soils," on August 24, 2016, at the Saginaw Valley Research and Extension Center (SVREC) near Frankenmuth, Michigan. The field day will deliver practical, cutting edge information on a variety of topics to improve soil structure and quality. The educational tour will include nine field stops encompassing nutrient management, soil quality, compaction, and tile technology. Registration will begin at 8:00 a.m. and the event will wrap up around 4:30 p.m. The event is free and includes lunch.

Improving soil quality is important to improve productivity of all Saginaw Valley crops. It is particularly important to root crops such as sugarbeets. Root crops often appear to magnify the effects of poor soil quality. This will include soil crusting, sprangled roots, increased root diseases, reduced yields, and quality. Waterlogged soils that exhibit poor soil water infiltration often indicate soil structure problems. Soil health is a broad topic that plays an important role for farmers across all cropping systems.

Throughout the day, farmers will have the opportunity to participate in nine sessions conducted by experts from Universities, USDA and private industry. Attendees will be able to tour the new research facilities, exhibits and hear from MSU President Lou Anna K. Simon during lunch. MSU recruiters will be on hand to provide potential students information on potential degrees offered through the College of Agriculture and Natural Resources. The day's events will deliver innovative information to help producers take the next step in improving soil structure while maintaining environmentally sound production practices. The tour stop includes:

continued on page 20

MSU AGRICULTURE INNOVATION DAY: **Focus on Soils** *continued from page 19*

HEALTHY SOIL — DIG A LITTLE, LEARN A LOT

Get to the bottom of soil health by viewing a root pit. Learn how management practices, aboveground, can produce vast differences in soil health beneath the ground's surface. See how cover crop usage and a diversified crop rotation create better functioning, healthier soil that is dark, crumbly, and porous. Learn how to have soil that is home to worms and other organisms that squirm, creep, hop, or crawl, and that has the right amount of air, water, and organic matter for microorganisms to thrive and for plants to grow. Dig a little and learn a lot about healthy soil from the bottom up. Dr. Dean Baas, MSU Extension Sustainable Agriculture Educator, will teach this session. Baas is involved in cover crop, soil health, and organic agriculture research and education. Lisa Tiemann, Ph.D., from MSU's Department of Plant, Soil, and Microbial Sciences, will share the latest research on soils from fundamental soil analyses to isotopic traces and metagenomics.

SUCCESSFUL COVER CROPS — FROM SEED SELECTION TO PLANTING TECHNIQUES

Dr. Erin Hill, academic specialist in MSU's Department of Plant, Soil, and Microbial Sciences, will focus on innovative management strategies to maximize biomass, determination of synergistic ratios of species in mixtures, soil health impacts for particular commodities and whole systems, and variety trials in cover crops. You'll examine several types of equipment for interseeding and hear directly from other producers about their successes and failures with different techniques. Dr. Karen Renner, Professor in MSU's Department of Plant, Soil, and Microbial Sciences, will also discuss her latest research on interseeding and plant competition.

HOW DO YOUR SOILS HANDLE RAIN? UNDERSTAND THE IMPACT OF RAINFALL ON VARIOUS TILLAGE AND CROPPING SYSTEMS

MSU Extension Field Crops Educator, Paul Gross, will demonstrate a rainfall simulator. Observing rainfall infiltrating into the soil provides important insights into the physical properties of soil that affects crop production. These properties include surface sealing, porosity, aggregate stability and the interaction between these properties, crop residue, and the plant canopy. Rainfall simulation evaluates the effectiveness of various systems to maximize water infiltration into the soil. Systems that will be observed include conservation tillage, conventional systems, cover crops and no-till. Jim Marshall from the Natural Resources Conservation Service will also be on hand to demonstrate the impact of cropping systems on aggregate stability and soil's ability to handle heavy rainfalls.



MAKING THE MOST OF YOUR NITROGEN AND YOUR DOLLAR

Learn new strategies for applying nitrogen that optimize plant growth while minimizing nutrient movement to surface and groundwater. Dr. Peter Scharf, University of Missouri Professor in Plant Sciences, will demonstrate the latest technology in crop sensors to evaluate corn nitrogen status in fields throughout the year to help producers make the best decisions about nitrogen application practices. He will also discuss best practices to use with crop-sensing technology from managing crop height and ground temperature to leaf wetness. Leave this session with all the resources you need to improve your yield and bottom line.

SAVE MONEY AND PROTECT YOUR WATERSHED WITH WISE PHOSPHORUS DECISIONS

Hear an overview of contemporary phosphorus application recommendations from Dr. Kurt Steinke, Assistant Professor of Soil Fertility and nutrient management at MSU. Gain a better understanding of soluble phosphorus and make better sense of soil test reports while finding ways to save money with various phosphorus application and management strategies. Learn how to prevent nutrient movement into surface and groundwater while still optimizing plant growth.



MAKE YOUR SOIL SMOKE AND LOAD YOUR TOOL BOX FOR OPTIMUM SOIL HEALTH

Watch smoke rise from the ground during certified soil scientist Frank Gibbs' demonstration of how water percolates in tilled fields with various soil structures. Learn about the importance of soil structure to water holding capacity as well as techniques to manage and improve soil quality, all while reducing direct pathways for nutrient displacement. Determine how best to build your management strategy toolbox including the 4-Rs (right source, right rate, right time, and right place) and various drainage conservation practices to help ensure a safer water supply and improve your soil quality.

REDUCING COMPACTION (AND INCREASING PROFITS) WITH THE RIGHT TIRES, AIR PRESSURE, AND WEIGHT DISTRIBUTION

Ever wonder if field compaction can be reduced through minor adjustments to tractor tires and tracks? James Crouch, Michelin's North American Farm Segment Marketing Manager, will show how this is possible, particularly when dealing with certain Michigan soils and the unique tillage or harvesting methods associated with many of Michigan's crops. Learn how proper air pressure, new tire and track technology, field traffic patterns, and other tactics can reduce or prevent tire and track compaction and help increase the bottom line.



ABOVE: An aerial view of the Saginaw Valley Research and Extension Center, located near Frankenmuth, Michigan, where the MSU Agriculture Innovation Day will be held.



LEFT: The effects of soil compaction.

**DIGGING INTO THE SCIENCE OF SOIL COMPACTION:
HOW TO PREVENT, DETECT AND ALLEVIATE IT**

View the impact that compaction has beneath the surface in a soil pit and discover ways to minimize compaction problems using modern farming practices. Dr. Francisco Arriaga, Assistant Professor in the University of Wisconsin — Madison’s Department of Soil Science, will discuss how soil compaction affects soil properties and crop production, and how to alleviate soil compaction with tillage and other methods. He’ll explain methods for detecting soil compaction and ways to avoid compaction from occurring in the first place. Arriaga’s research supports the development of management systems that promote crop productivity as well as soil and water conservation.

GET WATER AND NUTRIENTS WHERE YOU WANT WITH DRAINAGE MANAGEMENT

Examine how soil drainage strategies not only help improve the bottom line but also improve overall water quality. Dr. Larry Brown, Professor in Ohio State University’s Department of Food, Agricultural, and Biological Engineering, will showcase the benefits and impacts of sub-surface drainage, controlled drainage structures, bio-filters, sub-irrigation and more. Walk away with new tools and techniques to make better drainage decisions for specific soil types and field topography.




Steve Poindexter is the Senior Sugarbeet Educator with Sugarbeet Advancement, MSU Extension. Steve has been with the Extension since 1980 and served as Director of Sugarbeet Advancement since 1997.

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Precision Planting Meters Can..

Adding AmCane into the Mix...

RIGHT: Cane sugar granules — small crystals are extra fine granulated and larger crystals are coarse A granulated.



In February of this year, Michigan Sugar Company acquired the assets of AmCane Sugar, LLC, which launched the Cooperative into a new segment of the sugar business — cane sugar. The Taylor, Michigan-based company produces a number of specialty products at its refinery that Michigan Sugar Company does not produce. This wholly-owned subsidiary of Michigan Sugar Company has broadened the Co-op's product offerings into various grades of liquid sugar as well as a number of different value-added granulated products.

Sugar processed at AmCane arrives via large (15,000 to 25,000-ton) vessels and is discharged at a deep water terminal in Trenton, Michigan, prior to being trucked 12 miles to the refinery. This raw sugar is shipped from countries such as Guatemala,

Mexico, and Brazil, which have trade agreements in place with the United States to supply sugar needed to meet domestic consumption. The sugar is nearly fully processed in the country of origin, but since it is shipped in bulk, it is not fit for human consumption until it has gone through a purification and refining process. This process involves filtration, clarification, adsorption, and crystallization.

The addition of AmCane to the Michigan Sugar family will allow the Cooperative to grow its topline revenue by nearly \$60 million while offering our customers seven new products. Total sales volumes will climb by two million cwt. This synergistic acquisition will provide a platform for growth for Michigan Sugar for many years. ■



ABOVE: Sugar processed at AmCane arrives via large (15,000 to 25,000-ton) vessels and is discharged at a deep water terminal in Trenton, Michigan.

RIGHT/BELOW: The addition of AmCane has broadened the Co-op's product offerings into various grades of liquid sugar as well as a number of different value-added granulated products



FACTORY FOCUS: NEW BUSINESS





PERSONNEL PERSPECTIVE

Holding a High Regard for Employee Length of Service

| 5 Years | Department | Location |
|-----------------------|-------------|------------|
| Cam Krzywosinski | Agriculture | Bay City |
| Michael Reed | Agriculture | Bay City |
| Robert Rangel | Agriculture | Bay City |
| Rudy Schlatter | Agriculture | Bay City |
| Allen Seaver | Operations | Bay City |
| Austin Horstman | Operations | Bay City |
| Bart Fournier | Operations | Bay City |
| Donald Blanchard | Operations | Bay City |
| Donald Ward | Operations | Bay City |
| Jeffery Grevel | Operations | Bay City |
| Matthew Urban | Operations | Bay City |
| Robert Mitchell | Operations | Bay City |
| Todd Genow | Operations | Bay City |
| William Mavis | Operations | Bay City |
| Andrew McDonald | P&W | Bay City |
| Anthony Baranek | P&W | Bay City |
| Brett Barber | P&W | Bay City |
| David Darland | P&W | Bay City |
| George Hartsfield | P&W | Bay City |
| Irelida Amthor | P&W | Bay City |
| Joseph Baranowski | P&W | Bay City |
| KC Gaeth | P&W | Bay City |
| Kenneth Keister | P&W | Bay City |
| Lori Blohm | P&W | Bay City |
| Nicholas Dupuis | P&W | Bay City |
| Rachel Schatzer | P&W | Bay City |
| Raymond Novak, Jr. | P&W | Bay City |
| Rodrigo Nunez | P&W | Bay City |
| Walter Haire, Jr. | P&W | Bay City |
| Gregory McPhail | Agriculture | Caro |
| Anthony Polega | Operations | Caro |
| Eddie Williams, Jr. | Operations | Caro |
| Loren Ames | Operations | Caro |
| Matthew Provo | Operations | Caro |
| Michael Cryderman | Operations | Caro |
| Russell Coutcher, Jr. | Operations | Caro |
| Steven Jones | Operations | Carrollton |
| Amy Rodriguez | Accounting | Corporate |
| Katherine Bellows | Accounting | Corporate |
| Mary Hildebrandt | Accounting | Corporate |
| Brian Deutsch | Safety | Corporate |
| Bonita Kaminski | Sales | Corporate |
| Rebecca Benz | Sales | Corporate |
| Glenn Martus | Agriculture | Croswell |
| Charles Luzier | Operations | Croswell |
| Derrick Woolman | Operations | Croswell |
| Joseph Weaver | Operations | Croswell |
| Kevin Parker | Operations | Croswell |
| Matthew Bales | Operations | Croswell |
| Anthony Kolowich II | P&W | Croswell |
| Cameron Mooney | Operations | Fremont |
| Jason Ollom | Operations | Fremont |
| Charles Heritier | Operations | Sebewaing |

| James Rabun Jr. | Operations | Sebewaing |
|--------------------|-------------|-----------|
| John Brenner | Operations | Sebewaing |
| Randy Lesniak | Operations | Sebewaing |
| Ronald Graves, Jr. | Operations | Sebewaing |
| Shawn Munn | Operations | Sebewaing |
| Thomas Bignall | Operations | Sebewaing |
| Trevor Gross | Operations | Sebewaing |
| David Fischer | P&W | Sebewaing |
| Georgia Chard | P&W | Sebewaing |
| Glen Vliet | P&W | Sebewaing |
| Timothy Holland | P&W | Sebewaing |
| 10 Years | Department | Location |
| Cynthia Swincicki | Accounting | Bay City |
| Rudy Sepeda | Agriculture | Bay City |
| David Cobb Jr. | Operations | Bay City |
| David Makovics | Operations | Bay City |
| Keith Rang | Operations | Bay City |
| Matthew Villaire | Operations | Bay City |
| Wayne Brindley | Operations | Bay City |
| Deborah Blohm | P&W | Bay City |
| Jimmy Alexander | P&W | Bay City |
| Patrick Rangel | P&W | Bay City |
| Ralph Switala | P&W | Bay City |
| Rocky Jacobs | P&W | Bay City |
| Don McPhail | Operations | Caro |
| Jason Lynk | P&W | Caro |
| Lowell Willis | Operations | Croswell |
| Matthew Gordon | Operations | Croswell |
| Edward Keaton | Operations | Findlay |
| Mark Thomas | Operations | Findlay |
| Ashley Scoles | P&W | Findlay |
| Cynthia Chipman | Accounting | Sebewaing |
| Brandon Wood | Operations | Sebewaing |
| Eric Ballard | Operations | Sebewaing |
| Michael Gast | Operations | Sebewaing |
| Michael Matthews | Operations | Sebewaing |
| Donald Musolff | P&W | Sebewaing |
| 15 Years | Department | Location |
| James Decraene | Operations | Bay City |
| James Futia | Operations | Bay City |
| James Jasienski | Operations | Bay City |
| Mario Salcedo | Operations | Bay City |
| Carlin Wilson | P&W | Bay City |
| Crystal Smith | P&W | Bay City |
| Lawrence Schalk | P&W | Bay City |
| Robin Toyzan | P&W | Bay City |
| Paul Regnerus | Operations | Caro |
| Jeffery Duffy | Operations | Croswell |
| Jose Gallardo | Operations | Fremont |
| Craig Rieman | Agriculture | Sebewaing |
| Dean Sweeney | Operations | Sebewaing |
| Kim Loeffler | Operations | Sebewaing |
| Paul Goslin | Operations | Sebewaing |

| 20 Years | Department | Location |
|-------------------|-----------------|-----------|
| Steve Van Hove | Operations | Bay City |
| Daniel Goslin | Operations | Caro |
| Matthew Hill | Operations | Caro |
| Richard List | Agriculture | Corporate |
| Sheryl Adams | Operations | Corporate |
| Gerardo Cepeda | Operations | Croswell |
| Donald Graf | Operations | Sebewaing |
| 25 Years | Department | Location |
| Dawn Premo | Accounting | Corporate |
| Mark Wedding | Operations | Corporate |
| Gerald Pathic | Agriculture | Croswell |
| Larry Joles | P&W | Croswell |
| Patrick Terrill | Agriculture | Sebewaing |
| Steven Kelcher | Operations | Sebewaing |
| Norman Miller | P&W | Sebewaing |
| 30 Years | Department | Location |
| Allen Makovics | P&W | Bay City |
| Marie Davis | P&W | Bay City |
| Arthur Schneider | P&W | Caro |
| Joey Szczygiel | P&W | Caro |
| Cher Beiser | Human Resources | Corporate |
| Brian Rogers | Operations | Sebewaing |
| Kelly Scheffler | Operations | Sebewaing |
| Mark Engelhardt | Operations | Sebewaing |
| Ronald Engelhardt | Operations | Sebewaing |
| Ronald Wing | Operations | Sebewaing |

A company is often only as good as its employees, and good businesses typically have employees stay long term. We congratulate — and thank — these great employees for their length of service!

| 35 Years | Department | Location |
|------------------------|------------|-----------|
| Gene Leinberger | Operations | Bay City |
| Kirk Fournier | Operations | Bay City |
| Robert Knochel | Operations | Bay City |
| Scott Sebald | Operations | Bay City |
| Marion Kuehnemund | P&W | Bay City |
| David Kurish | Operations | Caro |
| Robert Braem | Purchasing | Corporate |
| Richard Schroeder | Operations | Croswell |
| Harold Weisenbach, Jr. | Operations | Sebewaing |
| 40 Years | Department | Location |
| Gary Westbrook | Operations | Croswell |
| Bob Drysdale | Operations | Sebewaing |
| Neal Myers | Operations | Sebewaing |



Ernest Flegenheimer Award 2016

Congratulations to Mr. Jerry Sorenson, this year's recipient of the Ernest Flegenheimer Award. This prestigious award is given each year to a current employee who shares the qualities of wisdom, character and integrity that Ernest Flegenheimer did when he led our company during the early 1960s through the early 1990s.

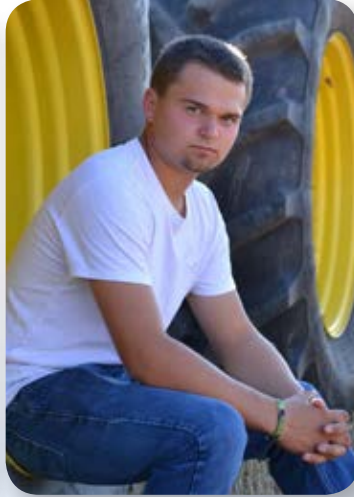
Jerry has been with Michigan Sugar for more than 20 years, serving in two of our factory locations where he was responsible for electricity and instrumentation. Jerry has also served in leadership roles, as both a union president and a salaried supervisor, and has never wavered from his core values or compromised his strong integrity. Jerry has always set an example as a kind, thoughtful, dedicated leader. We were honored to award Jerry this year's Ernest Flegenheimer Award and we thank him for his many years of service and hard work on behalf of Michigan Sugar Company.



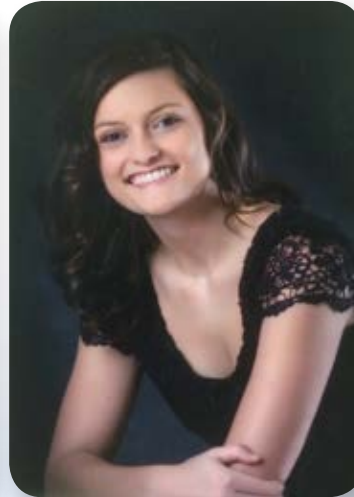
Area Youth Receive Support



Cassandra Keinath



Luke Gehring



Jennifer Gentner



Cole Coutcher

This year's deserving scholarship recipients are:

Albert Flegenheimer Memorial Scholarship

Cassandra Keinath, of Frankenmuth, Michigan. She is the daughter of Allen and Cindy Keinath, and a graduate of Frankenmuth High School, with plans to attend Central Michigan University to pursue a career as a physician.

Guy Beals Scholarship Recipient

Luke Gehring, of Harbor Beach, Michigan. He is the son of Paul and Tracy Gehring, and a graduate of Harbor Beach High School, with current plans to work locally on the farm and in the construction trade.

Next Generation Scholarship

Jennifer Gentner, of Minden City, Michigan. She is the daughter of Craig and Mary Gentner, and a graduate of Ubly High School, with plans to attend Saginaw Valley State University to pursue her dream of owning her own company.

Michigan Sugar Employee Scholarships

Cole Coutcher, of Mayville, Michigan. He is the son of Russell (Jr.) and Tammie Coutcher, and a graduate of Mayville High School, with plans to attend Delta College and Saginaw Valley State University, majoring in engineering.

Brandon Niemi, of Saginaw, Michigan. He is the son of Karyn Niemi, and a graduate of Heritage High School, with plans to attend Michigan State University.

Madison Diehl, of Auburn, Michigan. She is the daughter of Andy and Laura Diehl, and a graduate of Valley Lutheran High School, currently attending Michigan Technological University, studying chemical engineering.

Jenna Smith, of Owendale, Michigan. She is the daughter of Scott and Karen Smith, and a graduate of Elkton-Pigeon-Bay Port High School, with plans to attend Michigan State University.

Central District Scholarships

Isaac Elston, of Pigeon, Michigan. He is the son of Jeffrey and Beth Elston, and a graduate of Elkton-Pigeon-Bay Port High School, with plans to attend Michigan Technological University.

Grant Gremel, of Sebewaing, Michigan. He is the son of Joel and Lyndsay Gremel, and a graduate of Unionville-Sebewaing Area High School, with plans to attend Michigan State University.

Brian Fox Memorial Agriculture Scholarships

Bernard F. Wierenga, of Ridgetown, Ontario, and a graduate of Ridgetown District High School, with plans to attend the University of Guelph in Guelph, Ontario, to pursue a Bachelor of Science degree in Agriculture.

Kaleigh C. Bell, of Camlachie, Ontario, and a graduate of North Lambton Secondary School in Forest, Ontario, with plans to attend the University of Guelph in Guelph, Ontario.

Loren Humm Memorial Sugar Beet Grower's Scholarship

Brock Hardman, of Ithaca, Michigan. He is the son of John and Jill Hardman, and a graduate of Ithaca High School, with plans to attend Trine University in Angola, Indiana, to pursue a degree in civil engineering. ■

AT RIGHT, LEFT TO RIGHT:
Kaleigh C. Bell and Bernard F. Wierenga

Continuing and furthering education is important to Michigan Sugar Company and its growers. The Co-op, and a number of groups or districts of growers, are pleased to award annual scholarships that were created in recognition of the service of past board members and leaders of our industry.

Through Scholarships



Brandon Niemi



Madison Diehl



Jenna Smith



Isaac Elston

Grant Gremel



Brock Hardman



52nd Michigan Sugar Queen & Court Crowned

by Barb Wallace, Events & Promotions Coordinator

...and the Sweetest Girl in Michigan is... McKenzie Reinhardt of Sebewaing!

McKenzie was crowned Michigan Sugar Queen at the annual Michigan Sugar Festival in Sebewaing on June 17. Megan Bajena of St. Louis was crowned as first runner-up and Candice Neering of Bay City as second runner-up.

McKenzie, the daughter of Marc and Jodi Reinhardt, is a 2014 graduate of Unionville-Sebewaing Area High School. She currently attends Saginaw Valley State University, majoring in marketing and minoring in finance, aspiring to become an insurance agent.

First runner-up Megan, is the daughter of Scott and Carmen Bajena. Megan recently graduated from St. Louis High School and will be attending Delta College in the fall. Megan will be majoring in crop and soil science and minoring in agri-business.

Candice, second runner-up, is the daughter of David and Jackie Neering. Candice is a recent graduate of Bay City Central High School. Candice will be attending Delta College this year majoring in dental assisting.

The Royal Court will be touring the state on the Pioneer® Sugar float while making appearances in many local parades; the Michigan Sugar Festival Grand Parade in June; and two national parades, the National Cherry Festival Parade and National Baby Food Festival Parade, in July. They will also attend the ever-popular Cheeseburger Festival in Caseville in August and the Richmond Good Old Days Parade in Richmond in September.

Be sure to check the Pioneer Sugar website and Facebook page for upcoming dates and times of appearances of this year's Sugar Queen and Court.

Michigan Sugar Company solely sponsors the Michigan Sugar Queen competition. As the sponsor, the Company and grower-owners provide the queen with a \$2,000 scholarship for use at the university of her choice. The first and second runners-up will each be awarded a \$1,000 scholarship. ■

SCHEDULED APPEARANCES in 2016

- July 2 Lexington Independence Day Parade
- July 4 Port Austin Fourth of July Parade
- July 9 Traverse City National Cherry Royale Parade
- July 23 Fremont National Baby Food Festival
- July 31 Munger Potato Festival Parade
- Aug 2 Saginaw County Fair (Queen only)
- Aug 6 Bay Port Fish Sandwich Parade
- Aug 6 Croswell Swinging Bridge Festival Parade
- Aug 17 Caseville Cheeseburger Festival
- Aug 20 Montrose Blueberry Festival Parade
- Aug 20 Mackinac Island Fudge Festival (Queen only)
- Sept 5 Fairgrove Michigan Bean Festival Parade
- Sept 11 Richmond Good Old Days Parade
- Sept 30 Sebewaing Sugar Bowl
- Oct 9 Caro Tuscola County Pumpkin Festival
- Nov 19 Sebewaing Holiday Parade
- Nov 25 Croswell Christmas Parade
- Nov 26 Bad Axe Christmas Parade
- Dec 3 Sandusky Lighted Farm Implement Parade
- Dec 3 Harbor Beach Christmas Parade

Visit the Pioneer Sugar® website and Facebook page for additional dates and times of appearances of the 2016 Michigan Sugar Queen and Court!

FACING PAGE The 2016 Queen and Court, left to right, Candice Neering, McKenzie Reinhardt and Megan Bajena immediately after being crowned at the Michigan Sugar Festival in Sebewaing on June 17.

LEFT McKenzie Reinhardt's calling card has her favorite recipe, Strawberry Pretzel Dessert, printed on the reverse side so you can make this delicious treat featuring Pioneer® Sugar!

2016 MICHIGAN SUGAR QUEEN

McKenzie Reinhardt

As the 2016 Michigan Sugar Queen, McKenzie represents the sugar industry through the grower/owners and employees of Pioneer™ Sugar. The Michigan Sugar Queen pageant is conducted and sponsored by Michigan Sugar Company — a locally grown, locally owned sugarbeet cooperative.




For appearances and interviews, please contact:
Barb Wallace • Michigan Sugar Company, Queen Activity Coordinator
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MSC PARTNERSHIP WITH BAY ARENAC ISD CAREER CENTER

by Tiffany Sheppard, Work-Based Learning Coordinator
Bay-Arenac ISD Career Center

At Bay-Arenac ISD Career Center we pride ourselves on the ability to offer hands-on training to students in today's high skilled career fields. With more than 23 program offerings, we are fortunate to have a diverse portfolio of classes to offer students who attend our facility from 21 participating high schools. A key element in making sure students are career ready is developing beneficial business partnerships with employers in our area.

This year, we had the goal of selecting a business who would serve as our partner in the manufacturing sector. Michigan Sugar Company was at the top of our list, due to its span of skilled trade careers, wide range of employment opportunities and deep roots in our community. We are so fortunate to have entered into this educational partnership with Michigan Sugar Company. Over the course of this last school year, 32 students enrolled in our Welding and Precision Machining programs were selected to work alongside Michigan Sugar Company craftsmen, where they not only were able to put their technical skills to the test, but also expand their knowledge of the company and its integral involvement in the region.

Our long-term goal is to not only better prepare students for their future careers, but to also develop a talent pipeline for Michigan Sugar Company that will allow them to sustain the technical taskforce they require.

The feedback we have received from students has been phenomenal! Their testaments have definitely created a level of excitement with our younger students who now are aiming to be selected for this opportunity. Students who have had the opportunity to mentor with Michigan Sugar Company have come back with renewed confidence that they have the skills to apply in a real-world employment setting. Even more importantly, students learned how employees play a bigger role in the complete operation of a company as large as Michigan Sugar Company. Alex Scheffler, a welding student from Essexville-Garber High School, reaffirmed this, "It gave me a hands-on, real workplace experience that allowed me to see how workers across departments communicate and work alongside each other for the greater good of the company."

Next year we look forward to expanding the skill areas of students who will be involved in this program. The goal is to include our Building Trades and Electronics/Robotics programs as well as Welding and Precision Machining in the student rotations. Our long-term goal is to not only better prepare students for their future careers, but to also develop a talent pipeline for Michigan Sugar Company that will allow them to sustain the technical taskforce they require. ■



Tiffany Sheppard is a Work-Based Learning Coordinator with Bay-Arenac ISD Career Center, where she works to develop sustainable partnerships that link youth to employers. Her primary work is to establish business partnerships in the region for student placement opportunities. Tiffany plays an active role in employability skills training, where students receive critical instruction in career preparation.



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Summer 2016

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