MICHIGAN SUGAR COMPANY • SUMMER 2011

THE NEWSBEET

Michigan's agricultural diversity is one of its greatest strengths. Our "top crops" include blueberries, pickling cucumbers, corn, cherries, dry beans, asparagus, sugarbeets and wheat.

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THE NEWSBEET

SUMMER 2011 • VOLUME 25, NO. 2

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THE NEWSBEET

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Root of the Business

by Mark Flegenheimer, President and CEO

Establishing Sugarbeets as the "Crop of Choice"

Blueberries, wheat, corn, asparagus, pickling cucumbers, cherries, sugarbeets, dry beans, apples, celery, soy beans — what does this hodgepodge of food have in common? All of them are produced in Michigan. In the Great Lakes State, we have the second most diverse agricultural industry (California is first) in the country, and we lead the nation in the production of 19 different crops. We are blessed in Michigan with fertile soils, abundant rainfall, and a unique climate, which allows us to produce such a wide spectrum of crops.

In the Thumb and Great Lakes Bay Region, we find numerous cash crops being produced. Our shareholders have many choices of what to grow each year. This diversity of cropping options is quite unique. In other sugarbeet growing regions across the United States, growers' alternatives are much more limited. Having so many options for growers to choose amongst can be seen as both a weakness and a strength for our Co-op.

The weakness is that certain sugarbeet growers are not willing to make a long-term commitment to the Co-op. They choose to rent shares annually instead of buying shares in Michigan Sugar Company. With the wide range of alternate crops, these growers prefer to jump in and out of various commodities trying to chase high prices. This lack of certainty can be challenging when the board and management try to decide where and when capital investments should be made; however, having a wide array of choices, from soybeans, corn or wheat, to dry beans or pickles, I feel is a real strength for our Co-op and our producers. This variety allows our shareholders to spread their risk and avoid having any single market or commodity weigh them down economically if prices tumble or there is a poor crop. These alternate choices also require us to maximize the returns to our shareholders from sugarbeets in order to keep them attractive. Competition for finite acreage requires the Co-op to work tirelessly to keep beets competitive.

A few years back, during one of our strategic planning sessions, the board of directors and management team established a vision for our Co-op — it is simple and straightforward, we want sugarbeets to be the "Crop of Choice." In order to be the "Crop of Choice," we felt that we needed to make strategic capital investments, implement a well designed marketing plan, store and process the crop as efficiently as possible, and fully utilize our factory assets.

In the last few years, we have seen the benefits of those actions. With the help of a strong sugar market and the successful implementation of numerous parts of our strategic plan, we have been able to provide returns to our shareholders which places sugarbeets as the "Crop of Choice" in our region. As prices for competing crops continue to climb, we must consistently refine, update and carefully execute our Co-op's strategic plan in order to maintain beets at the top of the diverse crops we are able to grow.

We are truly fortunate to have so many crops in Michigan which can deliver a bountiful harvest. Sugarbeets have been an important part of this wonderfully diverse agriculture industry in our state and if we continue to commit the resources, energy and attention to this crop, it will remain "The Crop of Choice."

"For sugarbeets to be the "Crop of Choice," we need to make strategic capital investments, implement a well designed marketing plan, store and process the crop as efficiently as possible, and fully utilize our factory assets."

Crop Update

by Paul Pfenninger, Vice President of Agriculture

Looking Back One Year. Looking Forward to Fall.

"We would like to produce a 26+ tons per acre crop again despite the challenges presented thus far in 2011."

What a difference one year can make. In Crop Year 2010, the spring planting season was wrapping up by mid-April and it was "a season to remember" — in a very good way. We can say the same thing about Crop Year 2011, but with a totally different meaning.

Crop year 2011 will be "a crop to remember" — however, this planting season will be remembered in a much different way. Our first field was planted on April 11, 2011, in the Sebewaing area. By the week's end, we had planted nearly 20,000 acres and the planting season was under way. Little did we know what was in store for us.

We were able to plant 37,342 acres by Easter Sunday, which was late this year (April 24). Unfortunately, we did not get back into the fields until nearly two weeks after Easter, and it was slow going until May 9. We had a good five day stretch (May 9-13) where nearly 70,000 acres were planted before heavy rains stopped all activity once again.

As Memorial Day approached, we still had beets to plant the first time around. Rainfall was recorded on 14 out of the first 23 days in May and soils were saturated. On the bright side, the persistent rains helped all of the replants and most of the beets planted in May to emerge. Crusting was not a concern; and as of this writing, it is too early to tell if seedling diseases will be a concern or not.

The late planting season this year caused concern for total production and, on April 21, the board of directors held a conference call and increased the acreage allowance from 95% to 103%. At the time of the increase, we had 157,562 acres contracted to plant. With the increased allowance, we contracted an additional 5,135 acres to bring our anticipated planted acreage to 162,697 acres. Most of the increase in contracted acreage came from the East District (3,155 acres) followed by the Central District (1,615 acres) and then the West District (365 acres).

Harvest Acreage Summary

Year	Acres	Yield	Total Tons
2010	156,551	26.07	4,082,015
2009	145,215	24.69	3,585,770
2008	142,385	28.89	4,113,738
2007	158,354	23.60	3,736,734

Our goal for harvested tonnage is 4,000,000+ tons companywide. We must manage this crop to maximize yield and sugar and overall recoverable white sugar per acre. Early season weed control and applications of Quadris for Rhizoctonia control were required early in the season. Controlling Cercospora leafspot will be critical to sugar accumulation and storage of a high quality beet. Lastly, we will need to determine the value of an early harvest and new sugar production versus the impact of overall throughput.

We must continue to take care of this crop regardless of what Mother Nature throws at us. We can do it! It is probably a safe bet that we will not start on August 23 like we did in 2010, but we are not ruling out an early or mid-September startup.

We will anxiously await our certified acreage report and the potential of this crop. We have had a string of several good years in a row and we want to continue this trend.

Does anyone want to predict a final yield per acre or total tons of production? In 2010, we had a very dry August and early September, and still managed to produce a 26+ tons per acre crop. We are thinking we would like to do it again.

Have a safe harvest.

Update: Washington

by Ray VanDriessche, Director of Community and Government Relations

Current Sugar Policy at "No Cost" to the

"As a witness at the 2012 Farm Bill hearings in Lansing, I had the opportunity to testify on behalf of Michigan Sugar Company and the U.S. sugarbeet industry."

The first of the 2012 Farm Bill hearings was held by Senate Ag Committee Chairwoman Stabenow in East Lansing on May 31. As a witness, I had the opportunity to testify on behalf of Michigan Sugar Company and the U.S. sugarbeet industry.

The message from the industry to the Committee was: "no cost" to the taxpayer. The current sugar provisions should be maintained in the 2012 Farm Bill for the following reasons:

- First, dependence on unreliable and unstable foreign suppliers is a threat to our nation's food security.
- Second, the U.S. sugarbeet and sugarcane industries in 18 states generate more than 146,000 jobs and over $10 billion per year in economic activity.
- Third, 40 countries have duty-free access to our market of 1.4 million tons of sugar each year, as required under trade laws. In addition, Mexico has enjoyed unlimited access to the U.S. sugar market, exporting nearly four million tons since January 1, 2008.
- Finally, American food manufacturers, consumers and taxpayers continue to benefit from a reliable supply of sugar that is reasonably priced, high in quality, and safe to consume. Sugar is the only major commodity program that operates at no cost to taxpayers, and government projections say it will remain at no cost through 2021.

The Annual Challenge to the Sugar Policy

A group of Senators and Representatives, who have confectioners and bakers in their districts, have formed a Congressional Sugar Reform Caucus with the goal of terminating the sugar provisions in the upcoming Farm Bill. Their real goal is to lower the price of sugar drastically so large users can reap even bigger profits. Past history has shown that when prices are lowered, the large users do not pass the savings through to consumers. "The Free Market Sugar Act" is just one of a number of legislative proposals by the caucus that would cripple the domestic industry in favor of dependence on foreign suppliers. The proposed legislation would result in oversupplying the U.S. market with world "dump market" sugar that does not meet our quality standards or on-time delivery capabilities. The caucus' banner for reform is "sugar shortages and high costs." The U.S. sugar industry has called their bluff on the misleading claims and proven time and time again, that the domestic industry has the ability to meet the needs of large users and consumers alike. Recently, the United States Department of Agriculture (USDA) released official government market projections that dramatically increased projected domestic sugar surpluses. As a matter of fact, according to the USDA, the United States will have an estimated 1.6 million tons of leftover sugar on the market at the end of FY 2011. This is just another example of how USDA has managed the current provisions of the sugar policy well, ensuring adequate supplies for the users and at market levels that will allow our industry to survive.

These challenges are nothing new to our industry. We see this type of legislation proposed annually and, when voted on, defeated every time. Our successes of the past in defeating efforts to eliminate the sugar provisions in the Farm Bill does not mean that we do not take the new challenges very seriously. With the current emphasis in Congress to cut spending across the board to help reduce the budget deficit, all commodities in the farm bill will come under pressure for "reform." In the past, we have had to "share in the pain" along with commodities that receive direct payments, even though our policy runs at no cost. As the 2012 Farm Bill language is drafted, our industry will be monitoring the discussions closely to combat misinformation and provide factual data to the legislators involved in the process. As part of an industry-wide effort, seven Michigan Sugar Company grower representatives visited just under 40 legislative offices on Capitol Hill, in July, to reinforce the message that we need to retain the current sugar provisions in the 2012 Farm Bill.

Ensures Ample Supply Taxpayer!

Challenges are nothing new to our industry. We see legislation proposed annually that affects agriculture and, when voted on, is defeated every time. Our successes of the past, however, do not mean that we do not take the new challenges very seriously.

The WTO DOHA Negotiations

After nearly ten years of negotiations between 153 countries with on-again off-again starts, little progress has been made in bringing the trade round to a successful end. Agriculture seems to be the hurdle that is the most difficult to overcome with respect to market access between the major players in the talks. There is still some resolve to arrive at a beneficial resolution, but many of those involved believe that it is time to bring the talks to an end.

The North American Sugar Market

U.S. and Mexican sugar industry representatives continue to work together to look at viable recommendations to the U.S. and Mexican governments that would reduce the amount of sugar that is entering the North American sweetener market through third world countries, in excess of requirements by existing trade agreements. In the 2008/09 marketing year alone, Mexico shipped in to the U.S. market 1.4 million tons, which is equivalent to the total amount that the other 40 countries, with duty-free access, are allowed to ship in. Since January 1, 2008, when Mexico achieved unrestricted access to the U.S. market under the NAFTA agreement, a total of 3,839,748 tons of sugar have been shipped in to the U.S.

The Great Lakes Sugarbeet Growers PAC Fund is now being supported by grower/shareholders at a participation level of 96%, based on allowable acres. This level of participation signifies that growers realize the benefit of having the opportunity to educate our legislators and their staffers on the value of a strong domestic sugar policy just prior to the writing of the 2012 Farm Bill. All growers and employees benefit from strong sugar provisions in the Farm Bill. We encourage and welcome those that are not currently supporting the GLSBG PAC fund to join in supporting the efforts of your fellow growers and employees. This PAC lapel pin (picture) was distributed to growers/shareholders who contributed in 2011 at the suggested goal level.

The GLSBG PAC Committee would like to thank all who are currently participating in the GLSBG PAC fund!

DID YOU KNOW?

That the Michigan agricultural industry ...

- **Is the 2nd most diverse in the U.S.**
- **Produces over 200 commodities**
- **Leads the nation in production of 19 commodities**

An Academic Look at the Michigan Sugar Company Piling Operations

by Danilo Sirias, Ph.D

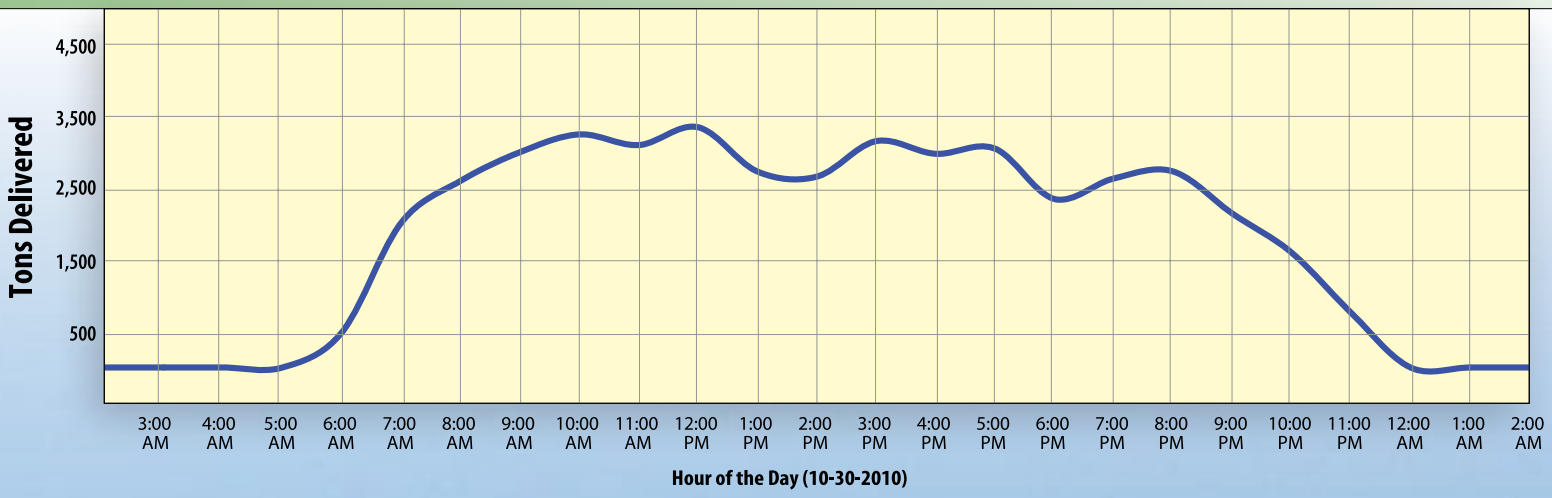
What do a ride at Disney, a drive-through at McDonalds, an emergency room at a hospital, and the piling operation at Michigan Sugar Company have in common? You may say "not much," but the reality is that they are all governed by the principles of an area of operations research known as queuing theory. The first known article on queuing theory, also referred to as waiting lines, was written in 1909 by A.K. Erlang on his work on calculating the percentage of people who would have to wait due to telephone lines being busy. Even today, complex phone networks are based on that original work.

More than a hundred years later, we are now looking at the piling operations at Michigan Sugar. The question is, what can we learn from an obscure science developed in the last century? The answer is, quite a lot…

A great deal can be inferred about how a queuing system is managed by analyzing the loading profile of the service mechanism. In plain English, we need to determine the tons of beets at the piling operation (either waiting to be piled or being piled) during the day. The loading profile at the piling operations looks like Figure 1, which is known in probability theory as a bell curve. The figure shows a peak load between 10:00 AM and 7:00 PM. During the peak times, the load is much higher than the available capacity—this creates a series of problems. The obvious one is the increase in waiting times, which has a direct impact on growers' satisfaction. Also, piling operators and equipment are subject to a higher level of stress, which could result in more errors, accidents, and maintenance problems. More personnel is also required to cover the peak hours, which increases costs. But that is not all…

This profile can also indicate the existence of a vicious cycle. When a queuing system continuously experiences high peaks, it is not unusual for users to behave in ways that create potential negative ramifications for the system as a whole. Peaks are seen as indication of scarce resources and individual users are tempted to act in their best self-interest and create mechanisms to "acquire" as much of the scarce resource as possible. That does not mean that users are acting negatively, it is just normal human reaction. Since the scarcity is perceived at the point where the peaks are higher, the behavior often results in more demand at the time when the system is already overwhelmed!

Figure 1:
Tonnage Received Per Hour – Peak Day • Bay City Pileground



Let's see how this cycle can manifest at the piling operation. As the waiting initially increases, the natural reaction of growers is to buy or rent more trucks to ensure that their harvesters are not idle for too long or simply to reduce their individual waiting times. As a result, the load on the piling operation becomes even larger which results in even longer waits—this leads to growers getting even more trucks, which keeps the negative cycle going. The impact is an increase in capital and operational costs for all growers, even longer lines, and more waiting for everyone in the system: a lose-lose situation.

How do we solve this problem? The first reaction, when waiting times are long, is to try to buy more capacity, but this is usually very inefficient. Once capacity is acquired, it is money stuck in the system that could have been used in other places where it is more needed. The cost of a new piler, for example, is over a million dollars. Making a capital investment of that magnitude for assets to be used for a few weeks in the year does not make much sense, if an alternative exists.

In managing waiting lines, other leverage points to improve operations exist. You can make process improvements in the service mechanisms. For example, Greg Clark suggested, in his Winter 2011 article in The Newsbeet, to look into finding ways to reduce the time it takes a truck hoist to descend. This time reduction will allow dumping more beets per hour with the consequent gains in productivity and waiting time reductions.

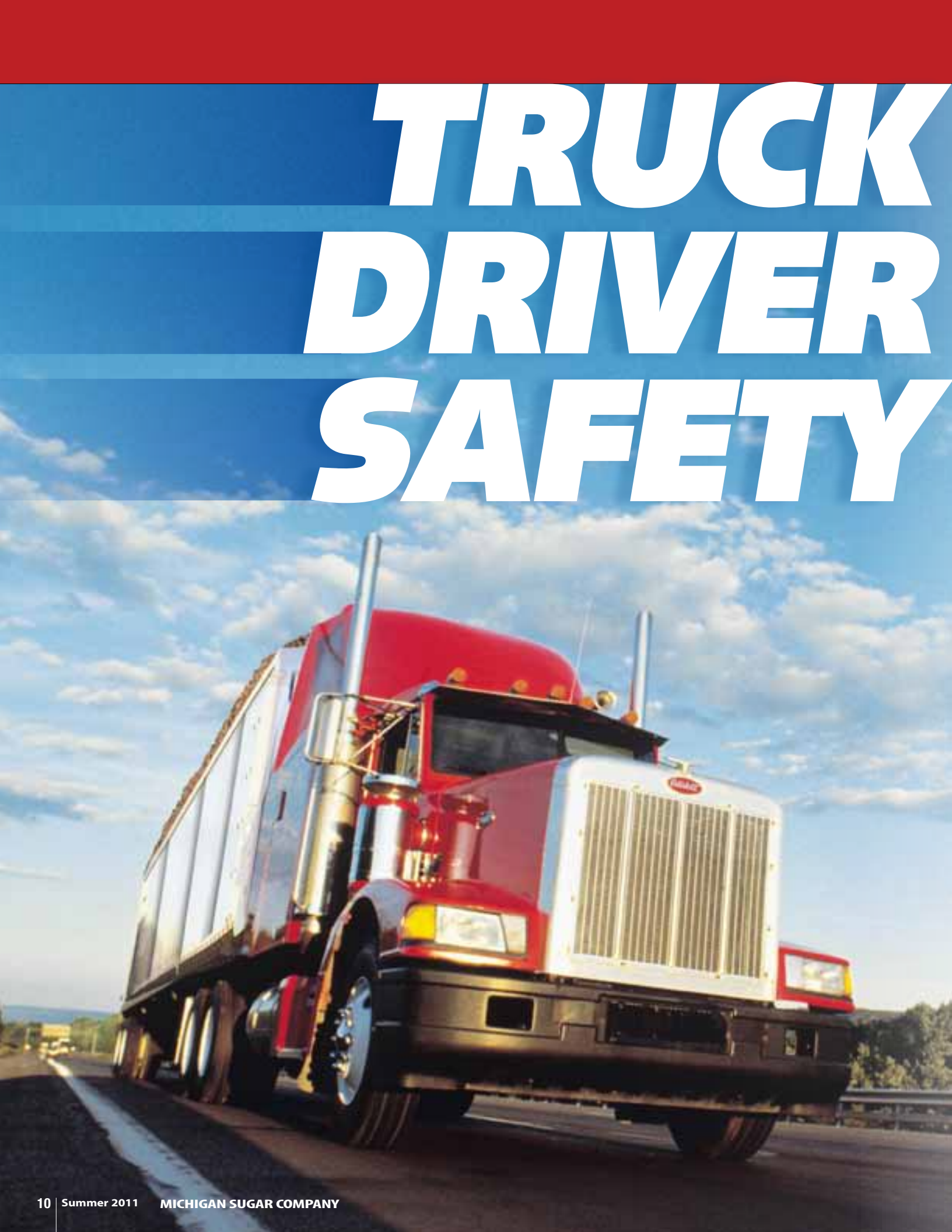
One of the most-used strategies in queuing theory is to balance the load at the service mechanisms. Going back to Figure 1, we can see there are intervals in the curve where the load is lower than the existing capacity. If some of the load from the peak times can be transferred to those intervals, one can reduce waiting times without having to acquire additional capacity. To do this, an incentive can be provided for growers who make the effort to come at a time that is not as convenient. Of course, this idea can be extended by opening the piling operations for more hours, which further reduces waiting times and increases capacity. A positive cycle can then occur where lower waiting times result in less need for trucks to a point where the capital and operational costs stabilize to a more optimal point.

Opening the piling operations for more hours increases the amount of beets that can be piled per day. This opens the possibility of delaying harvesting for a few days, which according to my conversations with Paul Pfenninger, Vice President of Agriculture, can result in a higher production of sugar. A delay of a couple of days in harvesting allows beets to gain extra weight, which translates into more beet tonnage and, therefore, more sugar production. Of course, weather, as well as other factors, plays into the equation, but the potential is obviously there.

In short, doing operational improvements, balancing the load, and extending piling operation hours can result in lower waiting times, a reduction in capital and operational costs, a higher beet tonnage, and a larger production of sugar … a win-win scenario. It sounds like music to my ears…or should I say, sugar to my taste?

Danilo Sirias, Ph.D., Department of Management and Marketing, Saginaw Valley State University. *Dr. Sirias has a Master's degree in Industrial and Systems Engineering and a Ph.D. in Business Administration both from The University of Memphis. He is currently a Professor in the Department of Management and Marketing at Saginaw Valley State University. Dr. Sirias, a Fulbright-LASPAU scholar, has published in several journals including the* ***Journal for Quality and Participation, the International Journal of Applied Quality Management, the International Journal of Production and Operation Management, International Journal of Production Research and the Journal of Education for Business.*** *Professor Sirias has been involved in consulting and counseling for businesses in the service as well as manufacturing sectors.*

TRUCK DRIVER SAFETY



by Brian Rayl

Each year, as a shareholder of the Cooperative, I always take the time to get with our drivers and go over a checklist of safe practices before the mad rush of harvest begins. Whether we have new drivers, or individuals who have helped out for decades, it is important that we ensure the safety of not only our truck drivers, but also our employees at the factories or pile grounds, when our trucks are delivering sugarbeets.

This year, with the RoundUp Ready compliance rules, I will be emphasizing the importance of my drivers ensuring sugarbeets are kept in our trucks and not spilled on the road.

At Rayl Farms, we have put together these eight bullet points we review annually with our drivers.

EIGHT SIMPLE STEPS TO SAFE SUGARBEET TRANSPORT

1. ***Safety*** • *Drive within the speed limits on the road and at the delivery locations. Haste makes waste.*
2. ***Emergencies*** • *Each truck will have a fire extinguisher and caution triangles in case of a roadside emergency (discuss more in depth at Drivers meeting).*
3. ***Communicate*** • *Do not be afraid to ask questions. Be courteous of others.*
4. ***Equipment Problems*** • *Report all issues so they can be addressed and repaired, if necessary. If during unloading products, there is spillage, report it and let's come up with an idea to fix it and prevent it from happening again.*
5. ***Personnel*** • *Employees at delivery locations are trying to perform their job also. Be courteous if there is a problem; report it to us. Do not confront the person. We will talk to the proper person and try to resolve any problems.*
6. ***Contract Cards*** • *At the sugar factory, your contract card is very important. Do not lose it. If that does happen, let us know. We do have extra cards. After unloading at the piler, it is important when you weigh out to let the scalehouse operator know which piler you used to unload.*
7. ***Power Lines*** • *In the field, know where the power lines are and stay away from them when raising your box. Exit the truck, look around and up to be sure you are clear of any power lines. Enter the truck and unload your tare dirt. Do not raise your box all the way to the top, due to the possibility of hoist damage.* *(See more electrical safety practices on Page 24)*
8. ***After Unloading*** • *After unloading dirt, thump your tires to check for flats. Clean your chute on the back and wipe off the lights so you can be seen. Check to be sure your tailgate is locked and secure.*

Hopefully, all growers go over a similar checklist with their drivers each and every year.

Brian Rayl is the Central District President with Michigan Sugar Company and Vice President of Rayl Farms, Inc., founded in 1968. Brian is a fourth generation farmer and has been farming for 30 years.

MICHIGAN VEHICLE CODE (EXCERPT) Act 300 of 1949

257.720 - Sec. 720: Construction or loading of vehicles to prevent contents from escaping; exception; closing tailgates, faucets, and taps; exemption; proof of violation; loading of vehicles not completely enclosed; prima facie liability; exceptions; front end loading device; violation; penalty; "logs" defined.

(1) A person shall not drive or move a vehicle on a highway unless the vehicle is so constructed or loaded as to prevent its contents from dropping, sifting, leaking, blowing off, or otherwise escaping from the vehicle. This requirement does not apply to a vehicle transporting agricultural or horticultural products when hay, straw, silage, or residue from a product, but not including the product itself, or when materials such as water used to preserve and handle agricultural or horticultural products while in transportation, escape from the vehicle in an amount that does not interfere with other traffic on the highway. The tailgate, faucets, and taps on a vehicle shall be securely closed to prevent spillage during transportation whether the vehicle is loaded or empty, and the vehicle shall not have any holes or cracks through which material can escape. Any highway maintenance vehicle engaged in either ice or snow removal shall be exempt from this section.

(6) Subsection (3)(a) does not apply to a motor vehicle transporting items of a load that because of their weight will not fall off the moving vehicle and that have their centers of gravity located at least 6 inches below the top of the enclosure nor to a motor vehicle carrying metal that because of its weight and density is so loaded as to prevent it from dropping or falling off the moving vehicle.

Pull out the handy SAFE SUGARBEET TRANSPORT CHECKLIST included in this issue! Put it in all of your transport vehicles for a quick reminder to drivers!

Crop Records Update

Every Vote Counts: Crop Records Will Help Us Become the "Crop of Choice"

If beets are to be the "Crop of Choice" for today and the future, we need to work together to incorporate the best management practices that each of you use on your farm. Michigan Sugar Company, Sugarbeet Advancement and the university research can only direct you to better practices. What works for you on your farm is what's most important.

To gather that information, Crop Records is no longer an option — it is a necessity! We need your data to generate information for everyone in our Cooperative. By gathering this data and summarizing the results, we can further guide you and our Cooperative in the right direction.

How else will we achieve our "Road to 19"?

Having a format like Crop Records at our disposal has been a tremendous resource for staying in compliance with the partial deregulation of RoundUp Ready. How else would we be able to track and report planting dates, replant dates, and bolter inspections to APHIS?

Just like every vote counts, every entry into Crop Records is critical to generating usable data.

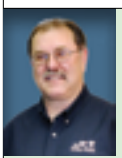
Our agricultural staff cannot enter all of the data for you, but we are more than willing to help you where we can. If you need help or have questions, we expect you to call and ask us how to proceed.

We see Crop Records as another tool to increase our potential for future crops by looking back over the previous crops. Are our trends going in the right direction? Are we continually improving and providing a higher quality product to our four factories? Where can we emphasize more changes?

It is our intent to continually emphasize the importance of Crop Records and good grower information. We will couple the Crop Records with our first equipment survey to get a better understanding of grower capacity to plant and to harvest. Good data will help us make good decisions down the road.

It takes a little time in front of a computer, but that is a sign of our times. Computer-generated information is an everyday occurrence for the younger generation. Who knows what the next generation of technology will bring. Smartphones will continue to improve, and it is our guess that most of you will have access to one model or another before too long. It is estimated that approximately 40% of our producers currently use a "smartphone" today. That number is expected to grow.

Crop Records are here to stay and we plan to make good use of them. Please make a concentrated effort to completely fill out all of your Crop Records.



Paul Pfenninger, Vice President of Agriculture,
has been with Michigan Sugar Company for 30 years.

Trait Stewardship Responsibilities Notice to Farmers

For Genuity® Roundup Ready® Sugarbeets in the U.S.: On February 8, 2011, the U.S. Department of Agriculture (USDA) published its decision to implement interim measures of deregulation with conditions for the planting of Genuity® Roundup Ready® Sugarbeets root crops, and of planting under USDA permit for Genuity® Roundup Ready® Sugarbeets seed crops. **Genuity® Roundup Ready® Sugarbeets can only be sold, transported and planted in compliance with the conditions imposed by USDA and as set forth in mandatory compliance agreements with USDA, which must be in place prior to transport or planting.** Growers must comply with the Monsanto Technology Stewardship Agreement (MTSA) Amendment and the Genuity® Roundup Ready® Sugarbeets Technology Use Guide (TUG) Addendum on www.Genuity.com.

For Genuity® Roundup Ready® Sugarbeets in the U.S.: The Monsanto Technology Stewardship Agreement is amended as follows: Grower agrees to transport and plant Genuity® Roundup Ready® Sugarbeets only for the production of a root crop, and not for seed production, and in compliance with the conditions imposed by the USDA under the deregulation with conditions and as set forth in mandatory compliance agreements with USDA, which grower agrees will be in place prior to transport or planting.

Based on the decision of the U.S. Department of Agriculture (USDA) on January 27, 2011, **Genuity® Roundup Ready® Alfalfa** seed is available for sale and distribution by authorized Seed Companies or their dealers for use in the United States only. This seed may not be planted outside of the United States, or for the production of seed, or sprouts.

Monsanto Company is a member of Excellence Through Stewardship® (ETS). Monsanto products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Monsanto's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. This product has been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from this product can only be exported to, or used, processed or sold in countries where all necessary regulatory approvals have been granted. **Do not export Genuity® Roundup Ready® Alfalfa seed or crop, including hay or hay products, to China pending import approval.** It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for this product. Excellence Through Stewardship® is a registered trademark of Biotechnology Industry Organization.

***B.t.* products** may not yet be registered in all states. Check with your Monsanto representative for the registration status in your state.

Cottonseed containing Monsanto traits may not be exported for the purpose of planting without a license from Monsanto.

Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand agricultural herbicides. Roundup® brand agricultural herbicides will kill crops that are not tolerant to glyphosate. Acceleron and Design®, Acceleron®, Biotech Yield Assurance℠, Bollgard II®, Genuity and Design®, Genuity Icons, Genuity®, Respect the Refuge and Cotton Design®, Roundup Ready 2 Technology and Design®, Roundup Ready 2 Yield®, Roundup Ready®, Roundup®, SmartStax and Design®, SmartStax®, VT Double PRO™, VT Triple PRO™, YieldGard VT Triple® and YieldGard VT® are trademarks of Monsanto Technology LLC. Ignite® and LibertyLink® and the Water Droplet Design® are registered trademarks of Bayer. Herculex® is a registered trademark of Dow AgroSciences LLC. Respect the Refuge® and Respect the Refuge and Corn Design® are registered trademarks of National Corn Growers Association. All other trademarks are the property of their respective owners. ©2011 Monsanto Company.

RESPECT THE REFUGE® RESPECT THE REFUGE® Roundup Ready 2 TECHNOLOGY LIBERTY LINK® IGNITE® HERBICIDE TOLERANT

Insect Resistance Management Planting Refuges, Preserving Technology

Before opening a bag of seed, be sure to read, understand and accept the stewardship requirements, **including applicable refuge requirements for insect resistance management,** for the biotechnology traits expressed in the seed as set forth in the Monsanto Technology/Stewardship Agreement that you sign. By opening and using a bag of seed, you are reaffirming your obligation to comply with the most recent stewardship requirements.

CLEAN FIELDS
WITH MORE CONTROL

Increased efficiency and reduced labor **saves time and improves profit potential.**

More flexibility, simplicity and dependability.

Proven crop safety of the Roundup Ready® system.

Broad spectrum weed control.

genuity®

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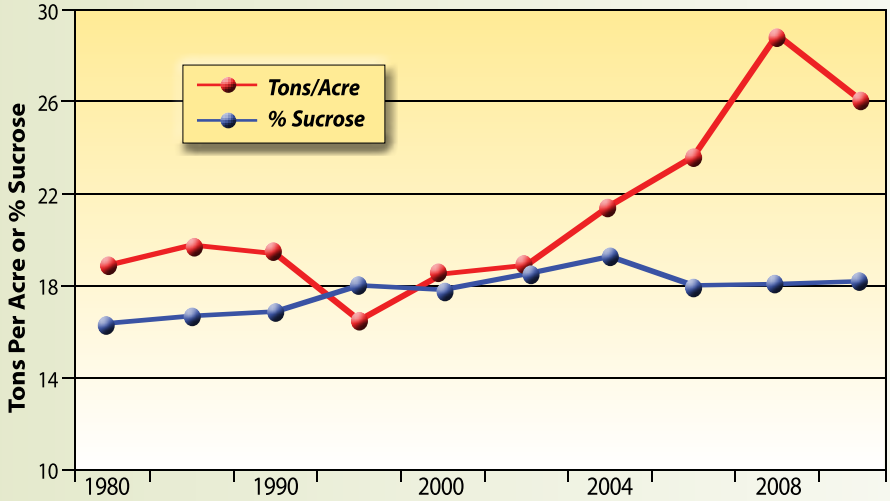
Research Helps Ensure That Sugarbeets Are The Crop of Choice

Figure 1. Yield and Quality of Sugarbeets Grown in Michigan from 1980-2010




Blumfield Research Farm

by Jim Stewart and Lee Hubbell

Recent sugarbeet yield improvements, along with the favorable sugar price, have really solidified sugarbeet's standing as the "Crop of Choice" for Michigan Sugar Company growers. An extensive research program by Michigan Sugar Company has contributed to yield advances by making high yielding and high quality varieties available and by developing best management practices for producing sugarbeets in Michigan. It is the goal of the Research Department to keep sugarbeets as the "Crop of Choice" for our growers. Sugarbeet yield and quality trends have improved since 1980 (Figure 1).

The cornerstone of our research program is our Official Variety Trial (OVT) program. The OVT program provides an orderly system for introducing improved sugarbeet varieties to our growers. In the testing program, varieties are evaluated for yield, quality, emergence, and disease tolerance. To ensure more successful disease trials, we have installed an irrigation system at our Blumfield Research Farm (photo at left).

We also spend a lot of time and resources working on agronomic issues such as Rhizoctonia, Cercospora, nematodes, row spacing, planting and harvest dates, and nitrogen management. A large part of our work this year is on Rhizoctonia, particularly in the western region. We will be working on 20 farms this year in six counties conducting numerous trials (Table 1).

Much of the research equipment that we use looks strange because we alter or fabricate most of it. We must be able to haul our equip-

***Jim Stewart**, Director of Research, coordinates the research projects of the agronomists with Michigan Sugar Company and specializes in sugarbeet breeding development and variety testing. He has been with the company for 12 years.*

***Lee Hubbell,** Research Agronomist, is a specialist in sugarbeet breeding development and variety testing and has been with Michigan Sugar Company for 26 years.*

Table 1.
Research Trials Conducted by Michigan Sugar Company, 2011

TRIAL	# of Varieties/ Treatments	# of Locations	# of Replications	# of Plots
Official Variety Trials (OVT)	42	8	8	2688
Cerc/Rhizoc/Nem Nurseries	42	8	6	2016
OVT Emergence	42	2	6	504
Plant to Stand Variety	14	3	6	252
Priming/Emerg Trials	25	10	5	1250
BEETcast Trials	16	4	6	384
Tachigaren	3	4	4	48
Carryover Seed	35	6	6	1260
Harvest Date Trials	6	3	6	108
Cercospora Trials	23	2	6	376
Rhizoc Control New Products	27	1	6	162
Rhizoc Control Bandwidth	12	2	6	144
Rhizoc Control Applic Timing	16	2	6	192
Rhizoc Control Quadris / Variety	16	1	6	96
Rhizoc Control Quadris Tank Mixes – Mustang etc.	15	2	6	180
Rhizoctonia Control, In-furrow	14	2	6	168
Row Spacing 22" vs. 30"	18	3	6	324
Seed Trt Trials (Tach, Dynasty, etc. from Chemical companies)	7	3	6	126
In-furrow Insecticide Trials	10	7	5	350
Nitrogen Fertility 2x2	24	1	6	144
Misc Fertility Trials	34	2	8	544
Penthiopyrad Seed Treatment for Rhizoctonia Control	9	2	6	108
Nematode Trials Including Univ and Seed Company	60	3	6	1,080
Grand Total Plots				12,504

A


B


C

ment around the growing area to all of our trials. All equipment, except the harvesters, are put on a trailer and we keep everything under 12 feet wide, because of permits. We still must have oversize load permits for transporting most of our equipment (Photo A). To be able to safely haul our tractors, with tires at 88-inch centers, our crew added wings (Photo B) to make four trailers wider. We have five trailer units that are all on the road, hauling equipment to apply treatments and maintain the trials. During the early summer, we have two additional trailers hauling portable toilets for crews that are thinning, counting stands and hoeing. These two crews this summer will have 25 people. We take stand counts in many trials such as seed treatment, priming, and where the treatment might affect emergence. The Official Variety Trials and nurseries are planted thick and must be thinned. A large crew thins the first time and a second crew will do stand counts and check the thinning a second time. To be able to thin as fast and accurately as possible, we make painted lines across the rows and three or four beets are left between the lines in different trials. Lines are made with a four-wheeler (Photo C) or a larger sprayer (Photo A) that also works up the beets for a break between the treatments. We have a full line of equipment to care for our trials, from planting to harvest including tillage for land owned by the Cooperative. We have a new variety planter, which is a huge improvement over our previous planter. It has row cleaners and can plant through heavy organic residue in no-till and minimum-till fields. It is a 12-row Monosem that was customized by Seed Research Equipment Company for research use (Photo D, next page). It is capable of changing seed without stopping. The planter units (Photo E, next page) have been modified to clean out with vacuum to change seed quickly. There are places to hold hundreds of seed packets and seats for

continued on page 16


D


E


F


G


H


I

up to six people to ride to dump the packets (Picture F). There is a headphone system for closed circuit communications, including the tractor driver. We added a setup to spray Quadris in-furrow for 2011. There are thousands of individual seed packets we make each year (Photo G).

We also have a six-row Monosem Agronomy Planter, that has been customized to conduct various Agronomy type trials. This planter has row cleaners and we can plant through cornstalks or other heavy residue fields. We have built several quick attach options, which make it easy to perform fertilizer trials, in-furrow spray trials such as Quadris or starter fertilizer, insecticide-type trials using Gandy units, inoculators for disease trials, etc. This planter (Photo H) also has a seed vacuum system so that variety trials can be easily planted. The planter has two fertilizer belts and two Gandy units.

Our small plot sprayer is one of a kind (Photo I). This sprayer is very useful when evaluating numerous chemicals in small plots. The sprayer has 12 tanks, 12 spray booms, 12 regulators, 12 on/off switches, etc. The sprayer is powered by compressed air. Treatments are mixed and poured into 12 2½-gallon tanks. Two people operate the sprayer, a tractor (JD 990) driver and a spray helper. Before entering the plots, the tractor driver turns on all 12 switches and charges all the booms. Then they drive straight through the plots and spray each plot that they come to using the appropriate tank. Our plots are designed so that we spray through eight plots, then turn around and spray back through eight more. As the sprayer turns around, the spray helper opens the eight tanks to be sprayed on the return trip and blows air through the bottom of the tanks to agitate and mix the pesticide, then closes the tanks and pressurizes them. We use this sprayer for low pressure weed sprays, Quadris band applications and high pressure leafspot sprays.

Spray application timing is critical for pesticide trials. In the past, we have missed application timings, due to weather, and this year we are using a Polaris Ranger as a lightweight sprayer. We built a two-wheel spray frame, which trails the Ranger, which keeps the nozzles at the correct height. We have been able to apply RoundUp and Quadris to plots when tractors could not have driven through the field. We carry 50 gallons of water in the bed of the Ranger, which is enough to spray most of our sites at 15 gpa.

Another useful tool we built a few years ago is a four-row beet popper. The digger is attached to a scale so that beets can be popped and then weighed. We use this beet popper for the nematode nursery trials and for the Rhizoctonia nurseries. Beets need to be handled gently for both of these nurseries.

We have four plot harvesters; all of them are converted from very old original sugarbeet harvesters. The harvesters that we use most of the time are two-row harvesters. We only use the one-row harvesters for 30-inch row plots when comparing 22-inch to 30-inch row plots. Although the frames of the harvesters are old, the working parts are modern. The renk beds have been replaced with grab rolls. A potato chain raises beets to the top of the harvester and dumps them onto another set of grab rolls, which moves them to a weighing basket (load cell scale) with a digital printout, which records


J


K


L

to a computer. The top of the harvester has a large platform (Photo J) where three to five workers perform their tasks. We can harvest a test plot in about 40 seconds. After we weigh a plot, we take a tare sample (Photo K) and dump the beets to a holding tank below, then move to the next plot. We can normally harvest about 24 plots (2 rows X 672 ft) before the holding tank is full. That is up and back for most of our layouts. Then we unload into a truck. We have a crew at the Research Center that processes the beets with a single saw blade (Photo L) and the juice is analyzed at the MARL. We also analyze samples for MSU, USDA and for Canadian researchers.

For this issue of ***The Newsbeet***, we have focused on the scope of trials that we are conducting this year and on some of the specialized equipment that we have made for our research trials here at Michigan Sugar.

With the continuation of a robust research program, we feel that we can help keep sugarbeets the crop of choice in Michigan.

Reporting the Results from Our Research

by Steve Poindexter, MSU Extension Senior Sugarbeet Extension Educator

The mission of the Michigan Sugarbeet Research and Educational Advisory Council (REACh) is to be the central trusted source of agronomic information for the sugarbeet industry. The 24-member council provides direction for Michigan and Ontario sugarbeet researchers and distributes research and agronomy information. Cooperative educational efforts are conducted with the goal of improving productivity and profitability for all shareholders. REACh was developed just over 18 months ago and has become an official committee of Michigan Sugar Company.

MICHIGAN SUGARBEET REACh
Research Education Advisory Council

The REACh committee is composed of representatives from different segments of the sugarbeet industry. Members from Michigan Sugar Company include an agronomist, an agriculturist, researchers, and a Co-op board member. University members are from Michigan State University, University of Guelph and MSU Extension. Agribusiness representatives include seed, chemical, and fertilizer suppliers. Sugarbeet producers make up one-third of the membership and the committee is currently chaired by Kurt Ewald, a producer from Unionville. This committee is the guiding force on giving direction to researchers and educators on needed research, educational efforts, and disseminating information that is important to Michigan Sugar Company (and its growers). All information and efforts have been conducted under the REACh umbrella, which should assure you of high quality materials and targeted educational events.

The educational events conducted by REACh include the Research Reporting Session; Seed Week; Harvester Clinics; Beet and Bean Symposium; and multiple grower seminars. REACh has been successful in modifying and improving the educational formats of these events. Based on recent evaluations taken at the January Research Reporting Session, 100 percent indicated they intended to incorporate information gained at that meeting into their farm operation and 94 percent said this would have positive economic impact on their operations. A second evaluation taken at the February grower seminars yielded similar results indicating that 100 percent felt the program(s) would have a positive economic impact on their operations. Furthermore, 100 percent felt REACh efforts were meeting their needs in sugarbeet research and education.

Major efforts have also included the development of REACh education materials and research reports. Research conducted without education slows the implementation of new management practices. Materials that have been developed include management guidelines for Rhizoctonia control, Cercospora leafspot and Sugarbeet Cyst Nematode. This information has been/will be distributed to all Michigan sugarbeet producers. On the research side, shareholders now receive the Sugarbeet Variety Trials Results and Agronomic Research Trial Results books, which combine the research results from Michigan Sugar Company, Sugarbeet Advancement, university, and USDA researchers. This allows growers to have a central source of information for each year's research results.

We are fortunate that the Michigan sugar industry has a tremendous amount of research being conducted. This includes basic research conducted by USDA/ARS personnel developing disease-resistant breeding lines for the future and understanding disease variability and impacts on sugarbeets. Most of the small trial-applied research is being conducted by Michigan Sugar, Michigan State University, and University of Guelph researchers. This type of research often works with testing new products for efficacy, evaluating hundreds of new varieties and improving production management practices. Michigan Sugar Company researchers, Jim Stewart and Lee Hubbell, coordinate a very extensive and nationally respected program. The final type of research involves field/strip trials that are being conducted by MSU Sugarbeet Advancement (SBA). These trials normally utilize growers' equipment and are smaller in treatment number. Often the best results, from the small trial research, are taken to this step. For example, only 12 of the newest or best approved varieties are tested in variety trials and agronomic trials are often two to ten treatments. The combined efforts of these three research programs have significantly improved sugarbeet management and industry profitability.

Michigan Sugar Company has invested significant dollars in supporting all phases of sugarbeet production research. With the development of REACh, researchers and educators now have the means to identify specific research issues and disseminate information effectively. Results from program evaluations indicate REACh efforts are being helpful in moving the Michigan beet industry forward. The combined research and educational efforts in Michigan are nationally recognized as a leader in high quality effective educational programs.

***Steve Poindexter**, is the Senior Sugarbeet Educator with Sugarbeet Advancement, MSU Extension (Saginaw County). Steve has been the Director of Sugarbeet Advancement for 13 years.*

CHANGES IN Tare Collection

by Richard List, Ag Operations Manager

Ever since the merger, tare samples have been treated differently at Michigan Sugar Company. Some locations brush samples to remove tare dirt from beet samples, where Bay City uses a washer/dryer system to remove tare dirt.

Even though their results were similar, it was deemed necessary to use only one system to do all tare samples; however, bringing all the samples to Bay City will cause logistic, as well as production, concerns.

Michigan Sugar Company's policy is to collect samples from 50% of all loads; however, with all the additions for small fields and large trucks, we actually collected samples from 63% of the loads. Bay City cannot handle all the samples, so lowering the percentage of tare samples taken to the industry norm of 30%-35% seemed necessary.

When lowering the percentages of tare samples from 63% to 30-35%, a couple of concerns arise. How will lowering the number of samples impact Company tare percentage and RWST? Statistical analysis shows minimal differences for company tare and RWST when changing percentages. For individual growers, when lowering tare samples to 30%, grower tare and RWST can be slightly affected either up or down.

Based on this data, the Board has recently approved a program to lower the number of samples taken and centralize all tare samples to Bay City.

In the first year, Bay City will handle tare samples from all outstations and the Bay City and Caro factories. Sebewaing will still run their in-house samples, while Croswell will take care of their in-house samples and samples from Ontario. When reducing the number of samples by about 50%, each sample becomes that much more important. In the past, we used a simple woven plastic bag, which has a tendency to tear, hence losing samples. We feel a sturdy vinyl bag, with Velcro straps and an outside pocket for the grower ticket, also an industry norm, is necessary. This will eliminate the need for our tare employees to transfer the beets from tare bags to wash tubs before running the samples through our washer/dryer system.

Additional items to be integrated into this new system in the first year will be to place new conveyors and develop a more efficient way to rotate employees in the Bay City tareroom. The new conveyors will eliminate the need to push or drag sample bags from one end of each unloading bay to the original conveyor.

This should also save bags from tearing and reduce the number of employee injuries.

We also plan to run our washer/dryer on a continuous basis. In the past, when breaks were taken, the washer/dryer was shut down until the break was over. The new plan is to hire a few extra workers to fill in as employees take their breaks. These changes should increase our production by 10-20%.

To finish this new program and handle all the tare samples from all locations in Bay City, we look to add two new unloading bays and a couple more conveyors in 2012. With the addition of bays, conveyors, improved bags, and efficiencies with tare room employees, we hope to handle all samples in Bay City, thus giving the growers a more consistent analysis of tare samples.

Is Stacking Successful?

by Keith Kalso, Croswell Agricultural Manager

The harvest of 2010 marked a milestone for Michigan Sugar Company and its growers by piling beets into long-term storage piles without using a conventional beet piler.

This first ever attempt utilized two pieces of equipment new to North America in recent times. At the field level, a Ropa Maus was utilized to clean field-piled beets and load trucks, and at the storage site a simple "stacker" conveyor was used to "stack" the crop into long-term storage piles.

The term "stacking" best describes this new process of piling pre-cleaned/pre-harvested sugarbeets since the machine is not needed to clean soil or debris just unload trucks and stack the roots. Michigan Sugar Company's goal for 2010 was to stack 50,000 tons at three locations using converted beet pilers. Results, after harvest, were in excess of 60,000 tons total at two of the three locations. Cooperative officials initiated "stacking" as a research project since beets tend to not store very well if they are re-handled after initial piling. From a physiological standpoint, the roots undergo a rest/storage phase once they are harvested. Removing roots from this phase usually "wakes" them up causing increased respiration, heat, and then rots. The theory being tested was to pile the crop very briefly in the field (three days or less), remove clinging soil in the field utilizing the Maus cleaner/loading machine, and then place into stacker piles immediately for long-term storage. It was hoped that moving the beets before three days expired would be soon enough before beets enter the rest/storage phase. The direction of this research is to stack on a limited basis for three years, do intensive storage studies and then expand, if results are favorable.

The Co-op converted three small, older beet pilers into stacker-conveyors last summer by removing or bypassing the grab-roll cleaning beds and the accompanying dirtbelt system. These stacking machines were used exclusively by pre-selected Maus operations.

The two stacking operations that ran during the harvest of 2010 utilized the Sandusky and Dover piling grounds. The Sandusky operation loaded out grower fields from the Ruth and Ubly areas using the Maus owned by growers Chris Guza, Les Volmering and Doug Volmering. The Dover facility was the second stacking location; the Maus used for this Ontario operation is leased to Michigan Sugar from Ropa North America. This machine is operated by Co-op employees and managed by Wayne Martin, the Ontario agriculturist. Stacking began in Sandusky on October 30 and concluded on November 12, with 32,189 tons stacked in two small piles. The Dover stacker began on October 19, with the final load stacked on November 10,. totaling 29,824 tons.

It was found that stacking requires intense management of all people and resources involved in the process for its success. Very careful attention had to be devoted to monitor beet temperature and quality before committing field piles access to stackers. When field piled beets froze, they were shipped to factory wet hoppers; if piles warmed up too much, they were shipped away as well.

Beet storage of the stacker piles was monitored very closely for this first time project. A conservative approach was taken since the stacker beets had actually been piled once, picked up and moved, then piled (or stacked) a second time. The protocol set up before harvest was to recover and process the stacker piles in mid-December before any significant deterioration could take place, if truly the double piling of the crop was a negative. To assist cooperative

employees with pile management, temperature sensors were installed in both Sandusky stacker piles and Dover's stacker pile. The Sandusky sensor system consisted of 24 temperature sensors in each pile wired to a central computer controller. Two conventional piles were also wired for comparison. Real-time data was transferred wirelessly to a computer in the Sandusky shop. The Dover system was very similar consisting of five sensors on the stacker pile and five sensors on one non-stacker pile.

Beet storage of both stacker locations far exceeded expectations. Pile temperatures stayed normal compared to conventional piled beets. Recovery of stacker piles was intentionally delayed until mid-January with positive results, since storage was going so well. Results of the first year's data and observations proved that in 2010 beet storage was not compromised by the two-time piling practice that stacking requires.

Michigan Sugar Company will operate stackers again in Sandusky, Dover, and the Gratiot piling station for 2011. The Sandusky machine will be renovated to increase volume significantly. Since the crop is "cleaned" in-field by the Maus, stackers can operate very rapidly; they are not limited due to cleaning surface like beet pilers. The future looks bright with the innovative ways to handle and store our sugarbeets. If the stacker project continues to work well, there could be a day when this cooperative has more stackers than beet pilers.

Advantages of Stacking

Grower	Cooperative
May be able to reduce freight cost	Fewer lines at piling yard
No lineups to deal with at piling yard	Tare soil stays in the field
No cross-contamination of soil at the piler	Maus is gentler on beets vs. piler
Mud up loading zone only; no road mud	Less labor required to operate stackers
Fewer trucks required; trucks stay off the road	Efficiency - predictable supply to stacker
Harvest and piling disconnected; harvest at your own pace	Grower shares responsibility of cleaning the crop
Maus adjusts to field conditions for cleaning; better than pilers	Convert old piler to stacker; less cost than buying new pilers

Disadvantages of Stacking:

Grower	Cooperative
Field piles need to be accessible, despite the weather	Intense management required
Management controls schedule; less flexibility	Dealing with frozen beets
Tare soil in fields is concentrated	Try to ship in less than three days

The three C's of Success Stacking

Cooperation – of all involved
Commitment – to "make it happen right"
Communication – all the time

Keith Kalso, Croswell Agricultural Manager, has worked for Michigan Sugar Company for 25 years.

Early & Direct Beet Delivery

By Richard List, Ag Operations Manager

If 2010 is remembered as the year the Ruth beet receiving station remained closed during early delivery, 2011 will be remembered as the year of major MAUS expansion. It all started back in 1998 when growers in Ontario used a Ropa Maus to load and clean beets in growers' fields and delivered them directly to the factory in Croswell via commercial trucks. This unique process was then expanded in 2010 to the Ruth growing area. Key Michigan Sugar Company personnel in this challenging endeavor were Keith Kalso, Ag Manager in the Croswell (East) District, Wayne Martin, Agriculturist in Ontario, and Bob Corrigan, Agriculturist in the Ruth area.

At the same time these growers in the East District were Mausing their beets to different factories, Moore Seed Farms was Mausing beets to Bay City from the far reaches of the West District. In 2004, Bay City set up a contract with Allan Moore to load and clean 2,000 to 3,000 acres of beets from places such as Lainsburg, Elsie, St. Johns, Greenville, and Portland. About 2,500 tons of beets each day, six days a week, were hauled by commercial carriers from about October 10 to November 15, each year, and unloaded directly into the dry screen equipment in Bay City.

Building on the success of the past years, Michigan Sugar Company plans to expand the Maus operations to three new locations. The new locations will be around the Verona, Meade, and Breckenridge beet receiving stations. Michigan Sugar Company will contract with three different Maus operations to clean and load sugarbeets out of grower fields. Commercial trucking will be used to move beets to the different factories as needed. The plan is to haul as many beets out of these areas during early delivery to have enough room for all the beets during long-term piling.

Over the summer, meetings will be held with the growers from each area to discuss concerns and procedures. Growers wanting to participate in the new early delivery programs will be asked to follow specific rules for loading and cleaning their field piled beets with a Maus. Some of the more important rules to follow are pile accessibility, construction, width of pile, and pile distance from truck. As stated in previous articles, this can be a win-win situation for growers and company when participants communicate and cooperate with each other.

As in 2010, Ruth Direct will be handled by the Guza-Volmering Maus operation. The new direct delivery in Verona will be operated by the Helena Valley Maus group, the direct delivery in Meade will be overseen by the Herford Maus group, and Breckenridge Direct will be supervised by the Moore Seed Farms Maus operation. Direct hauls in early delivery in Lambton will be handled by the same Maus operation as in the past.

As we begin another chapter in our early delivery program at Michigan Sugar Company, communication and cooperation continue to be the most important issues we must work on in order for these new operations to be a success for everyone.

Richard List, Ag Operations Manager for Michigan Sugar Company, has been with the company for 14 years.

Neighbors Helping Neighbors

By Randy Stec, Regional Vice President, GreenStone Farm Credit Services

It may seem like second nature to many of you, but the willingness to assist those in need is something that escapes many parts of the American landscape. Several years ago, we had a very early freeze in the Thumb area, and a few of our customers still had sugarbeets to dig; with the forecast calling for an extended period of below freezing temperatures. The day before the "big freeze," a large sugarbeet grower had located four harvesters and 16 trucks to finish off their beets. Each of the neighbors had plenty of their own corn or fieldwork to complete, but they knew that if those beets weren't dug that day, chances are they would be lost. Commitment to their neighbor and fellow producers prevented a loss of those beets and contributed to the success of everyone.

GreenStone Farm Credit Services and Michigan Sugar Company also share a lot of common values, and today are two of the largest Agricultural Cooperatives in the state of Michigan. For example, both were formed in the early 1900s (Michigan Sugar in 1906 and the Farm Credit System in 1917) to meet the needs of the farm community. Being in business for that many years, both organizations have had their challenges and fortunately a lot of success. As a result of working together, both of our cooperatives are much stronger. For example, back in 2002, when the initial beet stock purchase was offered to growers, GreenStone was pleased to offer a Special Financing Program to provide funds for stock purchase. These reduced rate loans, secured by the grower stock provided needed capital to start a new grower-owned initiative. Some of you may remember that 2004 was the year of poor beet storage, and it was once again our pleasure to also provide a specific loan program that year to assist with cash flow shortages to producers. Most of the loans from both of these programs have since been paid off, but serve as examples of how working together can make both of our organizations stronger.

The sugar industry brings much needed diversity to our loan portfolio as well. Much like your farm does not just grow one commodity (that would be putting all your eggs in one basket), the very diverse commodities produced in Michigan spread out the risk to your lender. The revenue generated from beets has long been referred to as "the mortgage lifter," and while this term may be a little dated, the message still rings true that beets are a great source of income to this area of Michigan. In addition to the high profits generated from raising beets, the schedule of beet payments assists all operators with cash flow throughout the calendar year. In our business, there are a noticeable amount of loan payments -- on "beet payment day." Speaking of payments, since many of the Michigan grower members are also GreenStone customers, we want to remind you of the ability to establish an automated process through Michigan Sugar Company to have your beet proceeds directly deposited to your GreenStone account. This ACH process can save you interest by getting funds deposited on the day of payment and avoid mailing delays as well. Many producers are taking advantage of this option, but we certainly encourage the rest of you to contact your local GreenStone office and get this feature established for your operation.

It is our pleasure to play a small part in the success of your Cooperative and we look forward to being a neighbor who is always willing to help your Cooperative and your individual farm as well.

Randy Stec is a Regional Vice President in the East Region of GreenStone and is responsible for operations in Caro, Bad Axe, Sandusky and Bay City. You can contact Randy at 989-673-6128 or randy.stec@greenstonefcs.com.

Look Up for Overhead Lines! It could save your LIFE!

by Rick Ewald, Assistant Operations Supervisor/Safety Coordinator, Thumb Electric Cooperative

A farmer was operating a crop sprayer in a field when one of its wings contacted an overhead power line. In climbing from the cab, the farmer was severely burned when he stepped down into the field (creating an electrical path to the ground), and eventually died of his injuries.

Thousands of accidents like this happen every year when large equipment makes contact with overhead power lines. Individuals on the ground who touch or even approach energized equipment can also be killed.

Over 400 electrical fatalities occur every year, and electrocutions on farms are the fourth highest of any job, according to the National Institute of Occupational Health and Safety (NIOSH). Most of the electrical deaths investigated in a NIOSH survey could have been prevented.

When farmers or equipment operators enter a field or start a new project they must observe and be conscious of their surroundings. They need to keep their eyes open and be aware (and beware) of overhead lines, poles, and guy anchors. They must not forget about them and become complacent when working around these potential hazards. Any projects that involve digging, 811 (the Michigan Miss Dig Emergency Hotline) needs to be called to find out if there are any buried utility lines prior to starting.

Thumb Electric Cooperative urges everyone to keep at least 10 feet away from overhead power lines when operating large equipment, and notes that new standards for some construction equipment require a 20-foot clearance.

Combines and grain wagons with extended augers can reach well into the 10-foot radius around a power line. Farm vehicles with wireless communication system antennas can also make contact and energize the vehicle with deadly current. On farmsteads, grain augers often tower over power lines when extended to reach the top of grain bins.

All farm workers should know to stay clear of overhead power lines — as well as what to do if equipment does become entangled with an overhead line.

The best action is to stay on the equipment and warn others to stay away until the local electric utility arrives to ensure the line is de-energized. Until you have that assurance, do not get off unless it is absolutely necessary, such as in the case of a fire.

In the event of a fire, an operator should jump clear from the equipment, without touching the equipment and ground at the same time. Land with both feet together, and shuffle away to avoid deadly step-potential, which is current flowing through the ground.

One of the more frequent mishaps reported by NIOSH involves electrocutions and electrical burns suffered by individuals around truck beds raised high enough to contact overhead lines. Trucks must be able to unload their contents, and when raised, the top front of the bed can easily reach overhead power lines.

Farmers and all operators of large equipment are encouraged to use a spotter when necessary, take steps to keep equipment away from power lines, and make sure everyone knows how to survive if there is an accident.

Thumb Electric Cooperative has for years offered a "hot-line demo" to groups, clubs, and organizations to bring an awareness of the potential dangers of Electric Power Lines. If you haven't seen our hot-line demo, I would encourage you to do so. It is an informational presentation that could save your life.

Brandon Bruce, Thumb Electric Cooperative Journeyman Lineman, demonstrates the effects of a broken/failed insulator during a recent Hot Line Demonstration.

Thumb Electric Cooperative provides electric service to approximately 12,300 members throughout Huron, Sanilac and Tuscola Counties.

Benefits of Stale Seed Bed

by Greg Clark, Agronomist

Stale seedbeds are seedbeds that receive primary tillage in the fall and are planted in the spring without any additional tillage. This has started to gain momentum as a common practice in Michigan. Twenty-five percent of sugarbeet acres are planted into a stale seedbed in Michigan.

There are several reasons why this practice has increased in sugarbeet production. A stale seedbed allows growers to get a good stand count. By planting into a stale seedbed, the soil is fractured just enough to provide adequate seed-to-soil contact to ensure germination. Stale seedbeds also reduce wind injury to young seedlings during windy conditions; however, there is one disadvantage to a stale seedbed. It inhibits warming of the soil, because there is no secondary tillage done in the spring.

One thing that growers have to watch for when planting into a stale seedbed is when it is too wet. In this instance, the surface of the field is dry enough to drive on, but it can be too wet underneath, requiring growers to wait a couple more days to plant the field.

With the introduction of RoundUp Ready sugarbeets, tillage for weed populations prior to planting is not necessary. Research agronomists, agriculturists and growers believe that planting into a stale seedbed may be a good management practice when RoundUp is used to kill early weed flushes, especially on soils prone to crusting. By eliminating unnecessary tillage operations, farmers will save money on fuel and machinery wear as well.

Bob Kernstock is a longtime stale seedbed practitioner. He and his wife, Carla, who farm in the Bay City area, have been planting beets into a stale seedbed for the past eight years.

Kernstock's sugarbeets traditionally have followed dry beans in their rotation. Bob recounts, "We were really sold on the stale seedbed, and liked it." Kernstock's stale seedbed operation consists of a fall soil sample to determine what is needed to get the optimum production out of their fields. Following the recommendations from the soil test, he applies lime and potash and then chisel plows the field to level it out. He then broadcasts between one to one and one-quarter bushels of wheat followed by a field cultivator.

In the spring, Bob applies liquid fertilizer (16-17-0) in a 2 X 2 placement, along with boron and manganese. RoundUp is applied in a 7-inch band at planting time to kill the wheat. Following the first true leaves, he broadcasts about 85-110 pounds of granular urea. According to Bob, "We have seen an increase of two to three tons per acre over our previous conventional tillage operation."

Stale seedbed with wheat sprayed with RoundUp

So what is the benefit of stale seedbed for the Kernstocks? Replanting issues from crusting (except for this year, due to excess rain followed by dry conditions) have not been seen in their operation since switching over to a stale seedbed. "Protecting young beets from spring winds is another key consideration, which has been achieved by planting wheat in the fall," according to Bob. Other advantages, from his perspective, include maintaining moisture in the soil and having no extra tractor tracks from secondary tillage in the spring; thereby improving soil tilth.

Greg Clark is an Agronomist at Michigan Sugar Company. He has 13 years of experience in agronomy. Greg joined Michigan Sugar Company in October 2010.

Pigeon Growers' Hunger Relief Project

by Roger Elston, Agriculturist, Sebewaing

In January 2003, a group of sugarbeet growers, non-sugarbeet growers and businessmen met at the Pigeon River Mennonite Church to listen to Norm Braksite from the Foods Resource Bank. He told them how the organization is involved with helping people overseas help themselves. The money raised from local grower projects is sent overseas, not to feed the hungry, but to buy tools, seed, and technology in order for them to feed themselves. When Foods Resource Bank members visit, the recipients of the donations show the members what they have done with the money received.

That night, the group formed a working committee of both farmers and businesspeople to raise crops on rented fields, sell the crops, and donate the profits to the Foods Resource Bank. The committee agreed to lease the Laker School land lab consisting of about 34 acres.

In 2011, they are farming 177 acres. Most of the land is donated for the Pigeon chapter called the Hunger Relief Project. Inputs are nearly all donated by various businesses and sponsors who have donated money to the project. Use of the necessary equipment, as well as the time needed from planting to harvest for each crop, is donated by the grower members.

As more people learned about the work of their organization, the membership has grown. To date, the Hunger Relief Project has sent $397,000 to the Foods Resource Bank.

Now that they have 177 acres to plant, the Hunger Relief Project decided to add sugarbeets to the rotation. Mike and Ken Richmond have contracted to grow 26 acres of sugarbeets for the Foods Resource Bank. As shares are necessary in order to grow sugarbeets, Dean Haubenstricker, of Frankenmuth, donated the use of the needed amount of shares to the Hunger Relief Project. ACH Seeds donated seed to the cause. Fertilizer was donated by various companies.

Darrel Yoder offered Michigan Sugar Company the use of a five-acre field for a disease research plot. The profits from the plot will go to the Hunger Relief Project.

There are 220 local grower projects around the United States. These projects have donated $3 million to various programs of the Foods Resource Bank.

The present active committee members of the Hunger Relief Project want no recognition for their work. Their names are listed so anyone interested may obtain information about their organization.

Food Resource Bank Members
Burt Keefer 989-551-3078
Mike Richmond 989-551-3699
Tom Ziel 989-553-4046
Dale Ackerman
Eugene Gascho
James Licht
Clifford Maust
Lori Maust
Johnathan Shupe
Dennis Weidman
Merlin Yoder

www.foodresourcebank.org.

Michigan Sugar's Research Crew planting the Food Project plot (far left); Darrel Yoder (middle photo) and Ken Richmond and Mike Richmond (left to right, below) inspect a Michigan Sugar Food Project plot prior to planting.

Helmreich Farms

by Ron Meyer, Agricultural Manager, Bay City

The Helmreich family has had a long tradition of sugarbeet production in the Saginaw Valley. This all started when John George Helmreich came to the U.S. from Germany 150 years ago. This makes the current caretakers of the farm, Mark and Matt Helmreich, the sixth generation of sugarbeet growers in the U.S. When John George Helmreich came here in the 1860s, there were no sugarbeets grown in Michigan. In fact, he had to clear the land of trees to start farming in the valley. The sugarbeet factory was built in Bay City in 1901 and John George and his son George started growing sugarbeets at that time. George passed the farm on to John and then John passed it on to Walter, who then, in turn, passed the farm over to Ronald, and now Mark and Matt are taking the reins from Ron.

A lot has changed in the operation over the years of growing sugarbeets in the Saginaw Valley. Walter used to haul eight tons of sugarbeets at a time into the factory on his wagon and make one trip per day. Today Helmreichs run 12 trucks to the factory with an average of 40 tons per load and make several trips a day.

John George and John started with ten acres of sugarbeets; today Helmreichs grow just over 1,300 acres, which Mark and Matt plant with their 24-row planter in just a few days. Things on the farm have even changed in the last two generations with Ron starting with a two-row harvester and Mark starting with a four-row; now as Matt joins the operation, they will be harvesting with an eight-row machine. The Helmreich family has seen a lot of things change in sugarbeet production over the last six generations, but one thing has stayed the same. Sugarbeets are still grown on their farm!

With the diversity of crops in Michigan (second most diverse state after California), Helmreichs have chosen sugarbeets to be their specialty crop along with growing corn, soy beans and wheat. They used to also grow dry beans, but stopped when the big bean companies bought out the small bean elevators in the area. At that time, they had a meeting and decided they would plant more beets instead of dry beans. Mark said, "We chose sugarbeets because we are 'under the smokestack' of the Bay City factory and it only makes sense to grow them being this close." Their grandfather, Walter, always said that sugarbeets make the farm payments, and this is also the belief shared by the newest generation of the family. They also enjoy the smell of the fresh dug sugarbeet fields at harvest and Ron does not think the sugarbeet plant smells bad, it just smells like hard-earned money to him. Helmreichs also decided to keep sugarbeets in their operation because "the beet factory has been more loyal to the growers over time than some of the other companies in Michigan." This is especially true today because it is a cooperative and the growers own Michigan Sugar. Mark and Matt Helmreich say they have sugarbeets in their bloodline and will have them on their farm for the foreseeable future.

Mark Helmreich (right) with his grandfather Walter's wagon wheel that he used to haul beets and Matt Helmreich (left) with a wheel from the set of doubles that they use to haul beets with today.

THE POWER OF YOU AND I

by James Ruhlman, Vice President, Administration

Every spring, we gather as a company to honor our full-time employees for their dedicated service and recognize them for special accomplishments. The event is held at Saginaw Valley State University. In May of this year, over 100 employees were recognized for their contributions and for their record-setting performances.

The theme for this year's banquet was, "The Power of You and I." The theme came from a song sung by Canadian music artist, Nikki Yanofsky. It is a song that tells a story of hard-working people striving for personal success, and later finding out that the bigger pleasures in life come from, not personal achievements, but through achievements accomplished through embracing the talents, hearts, gifts, and emotions of one another. I personally believe that achievements that are shared are much more powerful and fulfilling than those that are not.

When you consider the phrase, "The Power of You and I," it can take on many, many meanings. Sometimes the "power" comes from hard work; two individuals, two teams, two groups or two companies simply working hard to accomplish a common goal. More times than not, however, the power comes from more of a humanitarian standpoint. It's the offer of an outreached hand, it's a word of encouragement, it's a smile, it's knowing that you're doing the right thing, it's knowing that you're included, it's someone telling you that you'll be okay, and it's knowing that someone else is in your corner to lift the weight off your shoulders when it's too heavy to bear. It's when these acts of humanity are displayed that gives us the power to move on in tough times.

Our cooperative is the perfect example of "The Power of You and I." Once separated as growers and company, in February of 2002, we pooled our talents and bonded together to form a unified company. Yes, it was hard work that helped make it happen, but as we traveled that bumpy, winding road with what seemed to have endless stops, we relied on acts of faith, trust, courage, and belief to overcome fears and uncertainty in our quest to become one. The calluses and scars accumulated along the way have made us stronger and tougher than ever before.

The guest speaker for our banquet was nationally acclaimed, and Emmy Award winning, Mark Scharenbroich. He set a new standard for guest speakers as he captivated all of us with real life stories and thoughtful insight through his program titled, "Nice Bike." While his talk had several thought-provoking messages, his program focused on our need to be part of a group. It might be a church group, a charity group, the company that you work for, or your family. Additionally, as a member of a group, we all have a craving to be recognized and complimented.

Scharenbroich tells a story about he and his wife driving a tan Ford Taurus rental car and accidentally entering a town where the 100-year celebration of Harley Davidson was taking place. He found himself surrounded by thousands of motorcycle drivers who made the long trip to participate in the celebration. It was a group of people sharing a common bond who had a true love for their bikes! He asked us, "What two words would have made your day if you were sitting on your Harley, in this town on the weekend of the celebration?"

Mark Scharenbroich singled out Michigan Sugar Company employee, Pat Terrill, to participate in his talk, since Pat owns a Harley of his own. He was such a good sport, that we've highlighted him by including a photo of Pat on his 100-year anniversary edition Harley Davidson.

The obvious answer was, "NICE BIKE" …not "Where are you from?" not "How was the drive?" not "Where'd you get it? The answer was, "NICE BIKE" … a sincere compliment.

Mark Scharenbroich's message drove home the very theme of our banquet, "The Power of You and I." The POWER comes from the collective pieces of a group working in unison and supporting one another.

Sometimes it's difficult to make a team sacrifice when you're thinking about personal successes or personal achievements. Selfish thoughts can blind us from recognizing the contributions and talents that surround us. We can fall into a trap of short-term pleasures that sacrifice the long-term good of a team or organization. Our banquet was a humbling reminder to all of us that "the whole is greater than the sum of our parts" and that the "parts," when recognized and appreciated, make the "whole" that much more powerful.

Employees Honored at the Michigan Sugar Company Employee Service Awards, May 2011

Operations

Jason T. Lynk (5)	Caro	Eric J. Ballard (5)	Sebewaing
Larry McWilliams (10)	Caro	Brandon D. Wood (5)	Sebewaing
Mitch Titus (10)	Caro	Michael L. Matthews (5)	Sebewaing
Paul Regnerus (10)	Caro	Paul F. Goslin (10)	Sebewaing
Daniel L. Goslin (15)	Caro	Dean R. Sweeney (10)	Sebewaing
Matthew S. Hill (15)	Caro	Kim Loeffler (10)	Sebewaing
James J. Matuszak (20)	Caro	Donald A. Graf (15)	Sebewaing
Andrew L. Sopchik (25)	Caro	Norman L. Miller (20)	Sebewaing
Thaddeus Z Habdas (25)	Caro	Steven D. Kelcher (20)	Sebewaing
David G. Kurish (30)	Caro	Brian J. Rogers (25)	Sebewaing
Garry C. Timmins (35)	Caro	Craig R. Cross (30)	Sebewaing
Dave B. Makovics (5)	Bay City	Harold Weisenbach Jr. (30)	Sebewaing
Keith D. Rang (5)	Bay City	Neal G. Myers (35)	Sebewaing
David J. Cobb Jr. (5)	Bay City	Robert I. Drysdale (35)	Sebewaing
Matthew K. Villaire (5)	Bay City	Kelly J. Scheffler (25)	Sebewaing
Wayne R. Brindley (5)	Bay City	Gregory G. Soule (35)	Croswell
James A. Futia (10)	Bay City	Matthew Allen Gordon (5)	Croswell
James A. Decraene (10)	Bay City	Randy DuCharme (5)	Croswell
Steve D. VanHove (15)	Bay City	Jeffery E. Duffy (10)	Croswell
Kirk J. Fournier (30)	Bay City	Gerardo Cepeda (15)	Croswell
Gene J. Leinberger (30)	Bay City	John J. Geiser (20)	Croswell
Scott B. Sebald (30)	Bay City	Jack Lechnyr (25)	Croswell
Bob Mix III (30)	Bay City	Richard Schroeder (30)	Croswell
Robert V. Knochel (30)	Bay City	Terry L. Stone (30)	Croswell
Norman Wegner (35)	Bay City	Gary Westbrook (35)	Croswell
		Mark A. Wedding (20)	Corporate Office

Packaging & Warehousing

Edward R. Wallace (40)	Carrollton	Marie A. Davis (25)	Bay City
Arthur Schneider (25)	Caro	Allan J. Makovics (25)	Bay City
Dennis Phillips (25)	Caro	Marion K. Kuehnemund (30)	Bay City
Joey J. Szcygiel (25)	Caro	Larry M. Joles (20)	Bay City
Elden J. Hutchinson (35)	Caro	Donald L. Musolff (5)	Sebewaing
Leonard J. Helms (5)	Bay City	C. Scott Wiltse (10)	Sebewaing
Weston K. Horn (5)	Bay City		
Rocky J. Jacobs (5)	Bay City		
Patrick M. Rangel (5)	Bay City		
Cynthia K. Kolka (5)	Bay City		
Roger A. Pinnow (5)	Bay City		
Anthony M. Pena (5)	Bay City		
Gary L. Ackerman II (5)	Bay City		
Charles F. Alderton (5)	Bay City		
Jordan J. Amthor (5)	Bay City		
Jimmy L. Alexander (5)	Bay City		
Deborah A. Blohm (5)	Bay City		
Ralph N. Switala (5)	Bay City		
Carlin Wilson (10)	Bay City		
Lawrence C. Schalk (10)	Bay City		
Robin J. Toyzan (10)	Bay City		
Ronald S. Commire (10)	Bay City		
Suzette Jajo (10)	Bay City		
Roxie K. Satkowiak (10)	Bay City		
Crystal L. Smith (10)	Bay City		
Thomas Amthor (10)	Bay City		

Accounting

Cynthia I. Chipman (5)	Sebewaing
Cynthia Swincicki (5)	Bay City
Sherri L. Adams (15)	Corporate Office
Dawn M. Premo (20)	Corporate Office
Lois J. Koeplinger (20)	Corporate Office

Human Resources

Cher Beiser (25)	Corporate Office

Agriculture

Patrick A. Terrill (20)	Sebewaing
Gerald R. Pathic (20)	Croswell
Richard R. List (15)	Corporate Office
Paul Pfenninger (30)	Corporate Office

Purchasing

Robert D. Braem (30)	Corporate Office

New Sales System Promises to be RAPID

by James Ruhlman, Vice President, Administration

With the purchase of Michigan Sugar Company by the growers in February of 2002, came a long-term marketing agreement, whereby Imperial Sugar Company would provide back office services for functions associated with taking sales orders from customers, arranging for transportation to a customer destination, shipping product from our warehouses, invoicing the customer, and receiving cash. With the anticipation of this agreement expiring in September of 2011, Michigan Sugar Company employees have worked diligently in the background preparing and developing a new system to handle these business functions.

While the Imperial system has served us well for many years, it was a system written in the 1980s on a platform, and with development tools, that are far less intuitive and flexible than platforms and tools available to us today. When I look at the customized features of our new system, and couple that with a state of the art infrastructure and a modern web-based interface, I see the makings of something very special that will serve us well for many years to come. Both our external customers and our internal users will reap huge benefits.

One of the most rewarding aspects of our new system is the fact that it is being developed by our very own employees. IT Director, Christine Dunham, serves the role of project manager; Jon Alexander writes the majority of the code; Lee Ringel fills the role of systems analyst; Brenda Perkins represents the Sales Department as a functional leader; Dawn Premo serves as the functional leader for the Accounting Department; and Tanya Richard provides technical testing and documentation writing. These folks have done a fabulous job in crafting a system that meets the detailed requirements of our customers while providing the necessary functionality for our internal customers in accounting, sales, quality and warehousing to perform their jobs more efficiently and more effectively. Efficiencies will be realized by utilizing a completely integrated system where information is entered one time at the source, then made available for all modules.

To help you put into perspective the magnitude of this project: It will take 20,000 man hours to design and develop the system, and it will require almost 1,000 programs and 700,000 lines of code to manipulate five million records of data. Programs and data will be thoroughly tested before our go-live date of September 1, 2011.

The name of our new system RAPID, is actually an acronym from the last names of those who developed the system. It is also a fitting adjective for the response times and the ability for us to input and retrieve data from our new system. RAPID is also an appropriate term for describing the time in which it took to build this system from start to finish. In 18 short months, this system was designed, coded, and tested by our own people, with virtually no outside services. This is a true compliment and a remarkable accomplishment by our entire team.

The benefits to Michigan Sugar Company as a result of the rollout of the new system will be enormous! From a monetary standpoint, the system will save us almost $2 million annually compared to the services/system in place today. Additionally, we will have in-house people to make future customizations that will allow us to adapt quickly to customer demands. The foundation is solid, the features are rich, the connectivity is endless, and the service that it provides will be one of the best in the industry!

Sales, Accounting and IT Departments worked together to craft the new sales system. Back, left to right, Brenda Perkins and Dawn Premo; Front, left to right: Chris Dunham, Tanya Richard, Jon Alexander and Lee Ringel.

Jim Ruhlman, *Vice President of Administration, is responsible for Packaging & Warehousing Operations, in addition to overseeing the Safety, Human Resources and IS Departments, and has been with Michigan Sugar Company for 28 years.*

Spotlight on Youth & Education

Jacquelyn Albosta

Scott Grekowicz

Albert Flegenheimer Memorial Scholarship

Jacquelyn Albosta of Saginaw, Michigan, is this year's recipient of the Albert Flegenheimer Memorial Scholarship. She is the daughter of proud parents, Bruce and Lori Albosta. Jackie is a very outstanding student and individual, both with her educational accomplishments and her social activities. She has participated in the Sugarbeet Project for seven years and earned the Premier Award in 2004, 2007, and 2009.

Jackie graduated from Chesaning High School with a 4.07 GPA. While in high school, she was very active in many activities. She participated in 4-H and FFA, winning many awards along the way. She held several chapter positions in FFA, including secretary and vice president. Jackie has held the office of class vice president, was on the student council, the National Honor Society and in the band. She has traveled to Spain and Costa Rica and gone on Mission trips to Puerto Rico and New York where she helped paint houses for the disadvantaged. She is very involved in activities in the community as well, and her family has hosted several Rotary Exchange students. Jackie also competed in soccer and cross country in high school. She has shown sheep at the Saginaw County Fair for the past eight years and sold them to help finance her education.

Jackie will be attending the University of Michigan this fall pursuing a degree in medicine and Spanish. She states that education is a top priority and she wants the best education possible. She hopes to work with the Physicians Without Borders at some point after college and use both her medical training and Spanish to help others. Jackie is a very confident and committed student, and it is evident that she will have a bright future!

Guy Beals Memorial Scholarship

This year's recipient of the Guy Beals Memorial Scholarship is **Scott Grekowicz**, son of Chris and Michelle of Harbor Beach. Scott has been involved in the Youth Sugarbeet Program for the past ten years. He is the youngest of four children and very busy with school activities and working for the family farming operation.

During his time in the Youth Program, he has received the Premier Grower Award in years 2005, 2006, 2007, 2008, and 2009. He earned top honors by receiving the Prestige Award in both 2010 and 2011.

Scott graduated from Harbor Beach High School in June 2011. He was involved in many school activities such as playing basketball, baseball, and soccer. He received several awards, while participating in soccer, for leadership, performance, and high grades while in the sport. Scott was a member of the National Honor Society (president this past year) and a member of the Student Council (class treasurer for four years). Besides being very active in many 4-H activities outside of school, he also was a Eucharistic Minister at his family's church, participated in the local food pantry, and was a camp counselor at the Harbor Beach Basketball Camp.

Scott plans to attend the University of Toledo in the fall majoring in chemical engineering and pursuing a minor in biology.

Off the Hook!

The Guy Fieri Food Tour — which was co-sponsored by Pioneer Sugar — was sold out at the Midland Center for the Arts. The show rocked with cooking demonstrations, fun stories, audience interaction and music

Sponsoring Guy Fieri Traveling Cooking Show a Rocking Opportunity!

One of Michigan Sugar Company's core beliefs is that we should give back to the communities where we do business. We often sponsor little league baseball teams, offer cotton candy machines to various fundraisers and donate sugar to numerous food pantry programs. The annual Sugar Festival in Sebewaing, Pumpkin Festival in Caro, the Swinging Bridge Festival in Croswell and several activities in Bay City have been events that we have supported for many, many years.

We also like to support regional cooking contests, especially ones that involve lots of sugar, like the Annual Apple Pie and Squashtoberfest contests in Frankenmuth or the Chili Cook-off sponsored by 790AM WSGW radio station. This year, we had the unique opportunity to be part of a sponsorship group that brought Food Network mega star, Guy Fieri, to the Great Lakes Bay Region in late May.

Fieri, with his famous spiked, bleached blonde hair, put on a fabulous show that seemed to be part rock concert and part cooking demonstration. One thing that he reiterated throughout the show was how important it is to enjoy food with your family, especially your children.

The standing room only crowd at the Midland Center for the Arts was treated to one of the most entertaining shows this area has seen in a long time. Fieri's celebration of food, life, and fun will be one that is remembered for a long time — if you have never seen him in action check out his Diners, Drive-Ins and Dives show on the Food Network.

Guy Fieri's entire show celebrated food, family, life and fun. Note the Pioneer Sugar bag prominently displayed behind Guy in his stage "pantry."

Ray's Ramblings

by Ray VanDriessche, Director of Community and Government Relations

Is it OK to Take a Bite Out of the Hand That Feeds You?

As a matter of fact, please do — it means more consumption!

I believe most of us who are involved in Michigan's agricultural industry realize just how blessed we are to live in one of the most diverse and fertile growing regions in the world. Michigan is second only to California in our agricultural diversity producing over 200 commodities on a commercial basis, offering Michigan farmers a buffet of cropping, orchard, and livestock options of which most agricultural regions in the United States do not have the luxury. The combination of rich soils and ample moisture, provided by the surrounding Great Lakes, creates an environment that enables such a cornucopia of farming operations in Michigan to flourish. One of the leading commodities in Michigan's agricultural wealth is the sugarbeet industry, with Michigan Sugar Company ranked as the third largest sugarbeet producer and processor in the nation.

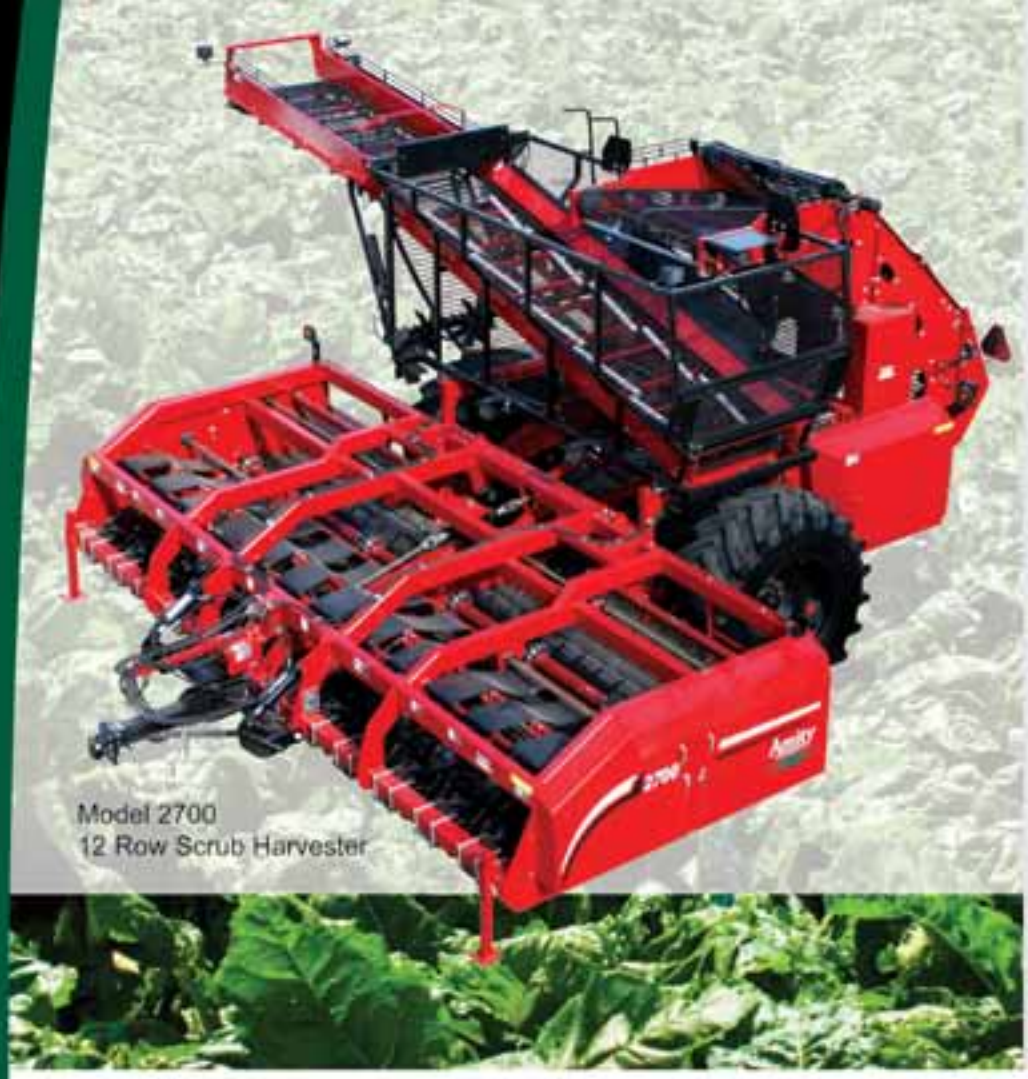
With so many commodity options to choose from, what has made sugarbeets the "Crop of Choice," also known as the "mortgage lifter," within the Saginaw Valley and the Thumb Region for over 100 years? Unlike most other crops, sugarbeets have the ability to increase yield, or tons per acre, and sugar content until the day they are harvested. As a result, they are not as susceptible to significant yield decreases due to the excess or lack of moisture during the summer months compared to crops that have a shorter timeline for flowering, yield determination and days to maturity. Although crops such as corn, wheat, soybeans, dry beans or pickles do not have this ability, they do play a major role in the long-term health of the soil. When planted in rotation with sugarbeets on the off years, they help to reduce compaction and the buildup up of soil diseases, insects and parasites such as nematodes. Having the option to plant these other commodities in our rotation is just another example of why Michigan's agricultural diversity is such a blessing.

Here is a quick snapshot of agriculture in Michigan provided by NASS - the USDA National Agricultural Statistics Service.

- The impact of Michigan agriculture on our state's economy is $71.3 billion and growing. When $1 is spent locally, that $1 impacts three to seven different local businesses.
- In 1930, one farmer produced enough food to feed primarily just the family, or about 10 people. Today, one farm supports 130 people.
- Michigan has about 10 million acres of farmland and is home to 52,800 farms averaging 189 acres each.
- Production agriculture, food processing, and related businesses employ more than one million Michigan residents — one out of every four jobs.
- **Michigan's national ranking:** 1st in blueberries, tart cherries, cucumbers for pickling, Niagra grapes, and squash; 2nd in dry beans, celery, and fresh market carrots; 3rd in sugarbeets, apples, asparagus, snap beans and the horticulture industry; 4th in Christmas trees, sweet cherries, plums and grapes; 5th in maple syrup, nursery and perennial production.

We in agriculture have a keen awareness of Michigan's treasure chest of bountiful commodities. Now, let's get out there and promote it to the rest of the population in our great state. As a matter of fact, ask them to "Take a Bite out of the Hand that Feeds Them."

"Michigan is second only to California in agricultural diversity — producing over 200 commodities on a commercial basis."



Model 2700
12 Row Scrub Harvester

Model 2700 - 12 Row Wheel Harvester with industry-leading 42-inch-wide wheel.

A large, 4.5-ton holding tank increases field efficiency.

Wands mounted to the harvester send readings to the hydraulic system attached to the rear struts.

The World Leader

In Size. Amity Technology 12 row wheel and scrub harvesters have the uncompromised design and engineering that are trademarks of Amity Technology. Developed through grower requests and feedback, these harvesters give producers machine balance, superior cleaning, and greater capacity. Amity Technology is the industry leader in 12 row sugar beet harvesters. Amity Technology's 12 row scrub harvester features a 64-inch-wide scrub tower for effective cleaning, while the 12 row wheel harvester's industry-leading 42-inch-wide wheel provides the capacity to efficiently harvest your crop. Plus, a 4.5-ton holding tank decreases field wait time, saving you time and money.

In Technology. Active Depth Control delivers more than a best guess when it comes to digging depth. Field conditions and harvester weight dynamics are constantly changing. Active Depth Control continuously monitors the digging depth of the harvester. Like other systems, Active Depth Control uses the hitch cylinders to change digging depth, but only Active Depth Control from Amity Technology controls the rear cylinders to match digging depth across the machine. This on-the-go adjustment prevents hundreds of tons of extra dirt from being introduced to the harvester.

For a cleaner, more efficient sugar beet harvest, choose Amity Technology 12 Row Sugar Beet Harvesters with Active Depth Control. Amity Technology sugar beet harvesting equipment is the smart choice today for tomorrow!

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PIONEER • BIG CHIEF
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THE NEWSBEET
Summer 2011

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