CMPM Promotes Ethanol in India
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DOES YOUR SHOP NEED CLEANING?

Get out your broom and host a Between the Rows Tour stop in late August!

For more information contact Claire White at 517-668-2676 or cwhite@micorn.org

DON'T LET WINTER GET YOU DOWN!

Think MCGA Summer Golf Outings!

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Centennial Acres, Sunfield

THUMB – Wednesday, August 5, 2020
Ubly Heights Golf & Country Club, Ubly

Watch for registration forms in the June newsletter or visit us online at www.micorn.org
This year, our industry faced additional challenges due to weather events that delayed or prevented planting. As a result, revenues from assessments for the program were down an additional 12% from the previous year. This reduction was absorbed by reducing our program expenses.

The board of directors made decisions to limit our investments in research, education and, to a lesser degree, development and promotion. The board did decide to continue funding our export marketing programs through the U.S. Grains Council and U.S. Meat Export federation at the same levels as previous years.

CMPM owns the building where our offices are housed and receives rent income from other tenants. Because of this, housing the organization comes at a minor expense and allows us to put all of the assessment dollars back into developing markets, and educating consumers and producers.

**Revenues**

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**Expenses**

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CMPM goes to India to Promote the Benefits of Ethanol

The exhibition area at the India Auto Expo, India’s largest auto show held every two years, covers an area equal to 15 football fields. Stationed amid vehicle unveilings and booths representing 40 different vehicle manufacturers, the U.S. Grains Council (USGC) and U.S. industry partners invited attendees to learn about the economic, environmental and health benefits of increased ethanol use. Roughly 600,000 individuals - including Indian consumers, fuel industry stakeholders and government officials - attended the auto show.

The Society for the Indian Automobile Association (SIAM) invited the Council to attend the show in February. Jim Zook, executive director of the Corn Marketing Program of Michigan, and Greg Krissek, CEO of Kansas Corn, joined with USGC staff and consultants to represent the U.S. farmer and ethanol production perspectives.

“The Council’s participation in the Auto Show was very successful and allowed us to place ethanol at the highest level of importance to both Indian consumers and industry as well as government officials,” said Alejandra Danielson Castillo, USGC regional director for South Asia. “This marked the first engagement requested by an Indian stakeholder in our in-country ethanol market development effort and allowed us to show the U.S. industry members in attendance our strategy at work.”

India is currently the third largest buyer of U.S. ethanol in the 2019/2020 marketing year (September 2019-December 2019) at 48.8 million gallons (17.3 million bushels in corn equivalent). However, those imports were only for industrial uses. As a producer of ethanol, India’s national biofuels policy does not allow ethanol imports for fuel use. The Council is working with Indian industry to address the economic benefits of having a robust fuel ethanol industry policy, including the potential for imports to help the country meet its E10 mandate.

The USGC booth worked to dispel some myths about ethanol use, emphasizing how ethanol has cleaner combustion properties, reduces particulate matter emissions, reduces overall greenhouse gas emissions, does not impact food security and provides cost savings.

“I was very impressed with the booth layout, with the traffic that came through and all the questions being asked of the participants,” Zook said. “A very educational booth allowed us to answer a lot of questions for the people attending the show.”

The biggest draw to the booth, however, was a mock U.S. fuel pump that provided a clear demonstration of the price difference between ethanol and non-ethanol blended gasoline, including significant cost savings for consumers. The Indian Minister of Road Transport and Highway came to the booth to specifically look at the pump and pricing options.

“The mock gas pump stimulated conversation among event attendees,” Danielson Castillo said. “Allowing full market access to the fuel market, all Indian motorists could have access to at least E10 in their pumps, capturing all of the economic, environmental and health benefits.”

While in country, the USGC delegation also met with key stakeholders in India - including government ministers and leaders of auto industry associations – and followed up with contacts from the 2019 Global Ethanol Summit. Krissek also spoke on an alternative fuels panel during the Global Electrification Mobility Summit, which ran concurrently to the expo.

The Council will continue to build upon these partnerships in India and engage with stakeholders, like the ones involved with the Auto Expo, who can work with the Indian government as policy changes are discussed.

“The Council - in responding to the invitation to be at the auto show - was well-placed to discuss ethanol and its compatibility with Indian vehicles,” Krissek said. “It’s an exciting time to meet with stakeholders so that when trade opportunities are available, the U.S. ethanol industry will be well-positioned to further develop these partnerships.”
Ethanol: The Final Stage

By: Jim Zook, Executive Director, Corn Marketing Program of Michigan

This article is the final piece in a four-part series on ethanol and liquid fuels. The first installment covered the history of ethanol use in fuels. The second looked at the advent of leaded gasoline and the tactics used to keep it in gasoline, and the third covered the move away from leaded gasoline. This final article will cover the changes from using petroleum-based oxygenates in fuel to using ethanol. During the Carter administration, President Carter put a strategy forward to use more ethanol in our fuel system. During ADM’s construction of a beverage plant for alcohol, the President reached out to ADM’s CEO Marty Andreas to suggest that they change the plant from a beverage to a fuel-grade facility. This discussion prompted ADM to change the facility in Decatur, IL and open the first large-scale ethanol plant in the U.S.

The expansion of the ethanol industry took off when many states passed laws to ban the use of MTBE in gasoline as an oxygenate. As you may recall, MTBE is a known carcinogen and has a half life of 500 years. This helped to push ethanol being blended into our gasoline supply. The expansion was also spurred on by a federal grant that allowed for plants to receive money for increased production. The government awarded 150 million dollars for three years and then a reduced amount for the fourth year. This helped plants receive the necessary funds to complete their projects. The cap amount a plant could receive was 7.5 million dollars based on their increased production over the previous year.

The final legislative piece that aided in the expansion was the passage of the Renewable Fuel Standard. It was believed that there was little resistance to the passage from the oil industry because they felt that we would never achieve a 15-billion-gallon production level by 2015. However, when the ethanol industry hit that mark prior to 2015, resistance to the standard intensified. There were also changes from the Environmental Protection Agency in 2011 that signaled to the auto industry that they had no intentions of enforcing the standard. Part of those signals was when the auto industry lost its tax credits to build flex fuel vehicles. This severely limited consumer ability to choose to purchase such a vehicle.

Which brings us today - you may ask what we are doing now to move the industry forward. The Corn Marketing Program of Michigan is working with a coalition of stakeholders from the ag industry, ethanol industry, autos and petroleum refiners to define the next fuel that will meet the needed octane for higher efficiency use in vehicles. We have identified market barriers and are working to eliminate them and allow for higher blends of ethanol to be used.

Over the next 30 years, it will be interesting to see what our fuels will look like – will our engines be internal combustion, electric, hybrids or will it be something new?

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Michigan Corn Growers
Association Election Results

T he Michigan Corn Growers Association announced the results of its 2020 elections for the board of directors at the association’s 2020 Annual Meeting which was held at the Great Lakes Crop Summit in January.

Waylon Smolinski (Lachine) was reelected to represent district 1, which encompasses the northern lower peninsula.

Carlton Blough (Lowell) was reelected to represent district 2, which encompasses Oceana, Muskegon, Ottawa, Newaygo, Kent, Mecosta, Montcalm, Isabella, Midland and Gratiot counties.

Eric Voisinet (Laingsburg) was reelected to represent district 4, which encompasses Ionia, Clinton, Shiawassee, Barry, Eaton and Ingham counties.

Ron Parks (Allentown) was reelected to represent district 5, which encompasses Genesee, Lapeer, St. Clair, Livingston, Oakland, Macomb and Wayne counties.

Matt Cary (Alma) was reelected as an At-Large board member, representing the entire state.

Jacob Faist (Pleasant Lake) was newly elected to represent district 7, which encompasses Calhoun, Jackson, St. Joseph, Branch and Hillsdale counties.

MCGA board members serve 3-year terms. Elections were held by mail and ballots were tallied and then verified by the MCGA Election Committee. For a map of districts, visit https://micorn.org/mcga/mcga-board.

Partnership Pays!

On March 11, Patronage Day, we are pleased to mark a special day of appreciation as we return a record breaking $100 million to our members. Patronage is a result of our shared success and a reflection of your continued hard work, dedication and commitment.

Join us at your local GreenStone branch on Patronage Day!

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www.greenstonefcs.com
Each year, the Michigan Corn Growers Association awards one student with the Frank Lipinski Scholarship. This scholarship is geared towards full-time college students who don’t come from an agricultural or farm background. Participation in either the 4-H or FFA organization does not disqualify a student.

Frank was deeply passionate about reaching out to young adults with non-agricultural backgrounds. He made it a priority to assist those wanting to enter our industry and educate young people about the various opportunities available in the agricultural industry.

This year’s recipient is Kylie Sperow. Kylie is a sophomore at Michigan State University where she studies agriculture, food, and natural resources education. Ever since she was a child, she knew she wanted to “grow up” to become a teacher, she just never could figure out what subject to teach. Then, FFA came into her life. Her brother urged her to join, so she did to try and impress him. Five years later, she concluded the year as the Michigan FFA Region VI State Vice President. This experience gave her a deep passion for agriculture, which is why she is studying to become an agricultural educator. Her hope is to impact lives throughout the state of Michigan and help agriculture inspire the lives of new generations. She looks forward to doing this for the rest of her life.

For more information about the Frank Lipinski Memorial scholarship contact Michigan Corn by calling (517) 668-CORN (2676) or online at www.micorn.org
Introducing the 2020 MI CENT Class

T he third class of the Michigan Corn Education, Networking and Training program (MI CENT), the Corn Marketing Program of Michigan’s young farmer program, met for the first time this January. This program is designed to provide educational opportunities for the next generation of Michigan corn farmers. Topics include agronomy, technology, farm management, the work of the National Corn Growers Association, a trip to Washington D.C. to lobby Michigan’s Congressional delegation and the opportunity to travel internationally to learn about farms across the globe. To nominate yourself or another farmer for next year’s program, contact Claire White at (517) 668-2676.

2020 MI CENT Class

Carl Bednarski, Unionville
Carl farms alongside his younger brothers, Nate and Mike. Their operation consists of 2400 acres of corn, sugar beets, dry beans, wheat and soybeans. The three of them share all the operations responsibilities of planting, harvest and custom work. Carl is involved in his county Farm Bureau and Michigan Sugar Young Farmers. In his spare time, he likes to golf and go boating.

Andrew Braun, Ovid
Andrew grew up on his 1,000-acre family farm. After college he worked for Walthers Farm in Cass City, MI and South Carolina. This August he moved back to the family farm where he farms with his mom and dad. Andrew attended Michigan State University where he received a Bachelor of Science in Agribusiness. In his spare time, he enjoys hiking, skiing and woodworking.

Brian DeMann, Martin
Brian works alongside his dad and uncle where they milk 500 cows, finish all of their steers and grow 1350 acres of corn, soybeans, alfalfa, wheat and rye. He has been on the farm full time since 2005. He enjoys working on crop production using crop rotation and variable rate application to push yield and manage manure application and utilization on his farm. Brian and his wife, Jill have a daughter named Kinsler. He is also a volunteer firefighter with Martin Township Fire and Rescue. As a family they host tours and friends, fishing and camping.

Dannie Dryer, Portland
Dannie farms with her Dad, Dennis and younger sister, Darla. They operate a 1000-acre cash crop farm consisting of corn, soybeans, wheat and hay. They also have a custom field tile business. She went to Michigan State University for the Agricultural Industries Program. When she is not busy on the farm or tiling fields, she enjoys snowmobiling, kayaking, camping and spending time with her nieces and nephews.

Cody Ferry, Otisville
Cody has been employed with Szikszay Farms since 2013, where he is the Farm Manager. They grow corn, soybeans and wheat. Cody is also a Beck’s Hybrids seed dealers. He attended Michigan State University for the Agricultural Industry Program. He is also a graduate of the Michigan Farm Bureau Profile Program. In his spare time, he enjoys going up north with family and friends, fishing and working alongside his seed customers.

Katelyn Frostic, Applegate
Katelyn grew up on her family farm consisting of cash crops and a feedlot. They grow corn, soybeans, dry beans and sugar beets on roughly 1,000 acres. She farms with her parents, Matt and Traci, her twin sister, Gabrielle and younger sister, Reagan. This fall she started a seed sales job with Pioneer. Katelyn will be graduating from Michigan State University in May with a major in Crop and Soil science with a minor in Agribusiness Management. Katelyn’s spare time is consumed by her involvement in helping 4-H youth, coaching freshman basketball at East Lansing High School and managing her small herd of cattle. Her cattle are sold to the 4-H kids and she has been using that money to pay for college.

Brett Roberts, Charlotte
Brett owns and operates a cash crop operation of corn, soybeans and wheat. He works together with his dad, Dave, where they share equipment and labor. Together they farm approximately 1000 acres with plans to expand. Brett and his wife, Megan have two kids, Devin and Ion. Brett is a former State Representative, owns the local Dairy Queen and sells seed for Ag Armor Seeds.

Nate Schoen, Cedar Springs
Nate is a spray operator at Main Farms where they farm potatoes, corn, soybeans, wheat, green beans and peas on 16,000 acres. On top of being a spray operator, Nate is involved in making decisions on chemical recommendations and field data with the owners, Dan and Paul Main and agronomist, Joseph Prichard. Nate is in his last semester at Michigan State University in the IAT program. In his spare time he enjoys working on cars, fishing and camping.

Cody Stowell, Freeport
Cody has been full time on the farm for the past 16 years, where he farms with his stepfather. They have a 1,800 acre cash crop farm growing corn and soybeans. Cody is also on his second season of selling seed for Renk Seed. He is interested in improving the operation with tillage practices and variable rate nitrogen and fertilizer. When Cody is not on the farm or selling seed, he enjoys spending time with family and friends, fishing and camping.
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Congratulations to our MCGA Survey Winner!

Congratulations to Steve Briolat of Ubly on winning an embroidered Carhartt jacket. We appreciate everyone who took the time to fill out and return the annual MCGA survey. Your feedback ensures we can continue to improve the ways we serve you!
More than 1,000 people gathered at Soaring Eagle Casino & Resort to attend the 2020 Great Lakes Crop Summit this year – meeting for two days of networking and educational sessions.

The event is a joint effort of the Corn Marketing Program of Michigan, the Michigan Soybean Promotion Committee and the Michigan Wheat Program.

The Great Lakes Crop Summit was made possible by the generous support of more than 60 sponsors and exhibitors. A list of sponsors, the full speaker list and information about past years are available at www.GreatLakesCropSummit.com

More than 1,000 people attended this year’s event. FFA members assisted in checking attendees in for the conference.

Attendees visited more than 60 booths to visit with sponsors during the trade show.

The Michigan Corn Growers Association held its annual meeting during the event.
FY2019 Research Project Highlights

**Controlled Drainage: A Conservation Drainage Practice To Reduce Phosphorus Loss From Subsurface-Drained Fields**  
*Researcher: Dr. Ehsan Ghane*

**Why it’s important:**
Although subsurface drainage is essential for increased crop production, it also transports nutrients to surface water. Phosphorus (P) is one of the important nutrients that is transported from subsurface drainage on farmland to water bodies, like Lake Erie. Controlled drainage is a conservation drainage practice that has potential to reduce P loss from subsurface drainage water. The primary goal of this on-farm project is to investigate the effectiveness of conservation drainage practices in reducing P loss from subsurface-drained farms. Two field sites have been fully instrumented to collect water flow and nutrient concentration data. The first year of testing has been completed, which comprises the baseline calibration period. Flow rate and nutrient concentration collected during this period were used to calculate nutrient load in drainage water and subsequent testing will be compared to this baseline.

**Next steps:**
Preliminary data shows that Phosphorus movement in the soil is highly dependent on the subsurface drainage volume. Generally, higher flow volumes were associated with higher dissolved reactive P and total P concentrations. Therefore, conservation drainage practices should be designed to target high flows if we are to have the greatest impact on P transport. With continued support from CMPM, this project will continue with the treatment period in 2020, in which producers will begin to implement controlled drainage on their test fields.

*Continued on p.12*
**Epidemiology And Management Of Tar Spot**

**Researchers:** Drs. Marty Chilvers, Addie Thompson, Manni Singh

**Why it’s important:**

Tar Spot is caused by the fungal pathogen Phyllachora maydis and has been detected in much of the lower peninsula of Michigan since 2016. 2019 saw a much slower start to tar spot disease development as compared to previous years, but disease continued spreading across the US into western Iowa and east to the thumb region of Michigan. If conditions are favorable for disease in the coming years, we expect a substantial impact to US corn production. In 2019 multiple field trials were conducted as part of this project in an effort to improve tar spot management.

**Results:**

- In a population trial established in Allegan and Montcalm counties, the low population plots of 28 and 34k plants/A developed a higher level of tar spot infestation than the higher plant population plots of 40 and 46k plant/A. This may be explained by differences in leaf moisture or greater spore dispersal due to a more open canopy. Until we know more, recommended planting populations should be used.
- In a nitrogen rate study, no differences were observed between side dress treatments of 80, 160 and 240 lb. of N/A, possibly indicating that N-rates do not impact tar spot development.
- Data from fungicide timing trials demonstrated that fungicide applications at vegetative growth stages were too early for disease control with far better responses coming from fungicides applied at reproductive growth stages resulting in more optimal disease control and yield protection.

**Next Steps:**

With continued support from CMPM, this project will continue monitoring tar spot development and determining effective tar spot control methods, including the screening of varieties for tolerance/partial resistance, disease modelling and fungicide timing and efficacy trials.

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**Evaluation of Nematode Damage in Corn**

**Researcher:** Dr. Marisol Quintanilla

**Why it’s important:**

The primary objective of this research was to assess the host status of important plant-parasitic nematodes in corn and to better characterize the above- and below-ground damage of these pests. Nematode damage in field crops is often misdiagnosed as nutrient deficiencies so it’s important to understand nematode thresholds and visual symptoms in a management program. Based on previously funded work through CMPM in 2018, stunt nematode was the initial focus of this research as it was the most abundant plant-parasitic nematode detected in corn fields throughout the state. A greenhouse assay was performed over six weeks to compare corn grown in field-infested soil and clean greenhouse soil and this work is still ongoing. Some management strategies to consider in corn are to include rotations with other crops (i.e. not continuous corn), and our results from other trials indicate that composts and manures can reduce some nematode numbers in field crops.

**Results:**

- Above-ground visual symptoms including plant stunting and chlorosis were observed in plants grown in field-infested soil, however chlorosis was also observed in plants growing on clean, greenhouse soil. More research is needed to understand the differences between nematode induced plant discoloration.
- Below-ground visual symptoms included root masses that were less voluminous than those of non-infested plants.

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**Development Of A Decision Support Model For The Management Of Fungal Ear Rot And Associated Mycotoxin Contamination In Corn Grain**

**Researcher:** Dr. Amor Ines

**Why it’s important:**

In Michigan, ear rot disease in corn is an annual issue with one of the main concerns being the production mycotoxins, such as deoxynivalenol (DON). Corn ears are generally infected during early silking stage, approximately 6-8 days after silk emergence. Weather is an
important driver of disease development, but there is debate among researchers regarding the conditions most favorable to disease spread. The overall goal of this study is to predict phenology of corn using seasonal climate forecast which informs the risk analysis model development for ear rot disease management in corn.

**Results:**
- A decision support model called CAMDT Corn DON was developed for predicting phenology, ear rot disease risk analysis, ear rot incidence, and DON predictions using seasonal climate forecasts. This tool is available for farmers to use.
- Temperature and relative humidity are the best indicators for risk analysis.
- DON data in 2017 and 2018 showed that suitable environmental conditions during silking are important drivers of mycotoxin development, but they are not the only drivers.

**Comparing Methods From Industry, University To Forecast Yield And Nitrogen Fertilizer Management In Corn**

**Researcher:** Dr. Bruno Basso

**Why it’s important:**
The purpose of this research was to examine the strengths, limitations, and variation in methodology of the following methods used to manage Nitrogen (N) and predict yield: the Nitrogen management tool from Climate Corporation®, the Airscout® Prescription tool, and the Basso Lab method. Two field trials were established to make these comparisons. The Climate© tool utilizes and integrates data from equipment into the FieldviewTM software and allows growers to view their fields along with rainfall data, growing degree units, and field health imagery. Airscout® utilizes images taken of fields at different points in the season and allows for the creation of a customizable prescription following inputs by the producer. The Basso lab methods integrates remotely sensed imagery, crop simulation model results from SALUS (Systems Approach for Land Use Sustainability), and yield stability map to create a N prescription.

**Continued on p.14**

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<th>Prescription Service</th>
<th>Strengths</th>
<th>Limitations</th>
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| N management tool from Climate© | • FieldviewTM already widely adopted by Michigan farmers  
• Data from machines and implements integrates into their cloud system easily | • Requires user-defined yield goal  
• Spatial component to N recommendations must be defined by user |
| Airscout® prescription tool | ADVITM prescription maps | • Does not define rates  
• Different images lead to different N prescription maps |
| Basso Lab method | • N fertilizer rates based on validated dynamic crop model  
• Spatial variability is accounted by integrating yield stability, imagery, topography, soil, and management information | Not commercially available |
Michigan genomes to fields: A collaboration with the NCGA Genomes2Fields GxE Project

Researcher: Dr. Addie Thompson

Why it’s important:
The Genomes2Fields project is a large-scale effort to understand the function of corn genes for the benefit of producers. This branch of the project is examining genotype-by-environment (GxE) interactions through a field experiment on MSU’s campus consisting of 500 corn plots. Data collection on stand counts, flowering time, and leaf initiation rates, as well as harvest data and imagery will be utilized to produce new high-throughput traits that can be used in predictive models to make better predictions of new varieties in unobserved environments, understand the interactions between genotype and environment on a physiological level, and to inform precision management tools and practices in a crop modeling framework.

Results:
- Key traits that can be used to identify genotypes have been identified

Dynamic Soil Phosphorus Sorption Index

Researcher: Dr. Steven Safferman

Why it’s important:
The migration of soluble phosphorus into tile drains and ground water hydraulically collected to surface water is particularly challenging to manage, but very important as almost 100% of soluble orthophosphate is available to cyanobacteria. Cyanobacteria is an important consideration for human and wildlife health. As plant-available phosphorus is largely determined by the soil’s holding capacity resulting from chemical and physical sorption, the objective of this research is to develop an index to qualitatively predict the sorption capacity of soluble phosphorus for site-specific conditions.

Project Progress:
- We have identified common soil/corn scenarios in MI to enable the development of qualitative phosphorous fate and transport estimates for each.
- We have constructed columns and developed the modeling approach to determine the phosphorous that remains in the root zone so that it is available for beneficial crop growth.
Michigan Corn Growers Association Presents Awards

The Michigan Corn Growers Association (MCGA) presented two awards during the association’s Annual Meeting at the Great Lakes Crop Summit this January.

The “Friend of Corn” award honors individuals who have shown great support, leadership and dedication to the corn industry. The MCGA presented this award to Representative Julie Alexander.

Representative Alexander and her husband own and operate their family farm in Hanover Township, and farm approximately 1,500 acres. They recently sold their milking herd after three generations and 40 years of dairy production, the family remains active in their community and state, promoting Michigan’s agriculture industry.

Last June, she led a coalition of 63 lawmakers in urging the U.S. Department of Agriculture to increase flexibility under the Federal Crop Insurance rules. In addition, she pulled in Michigan’s federal ag officials for a committee hearing to ensure Michigan farmers’ voices were heard as the industry navigated a difficult time.

The Annual Distinguished Service Award is presented to people in the corn industry that have exhibited exemplary leadership and service to their industry. The MCGA presented this award to Ed Breitmeyer.

Ed has been farming since 1976 in Grand Traverse county and currently produces corn, oats, hay and beef cattle. He is a person that genuinely cares about his profession and has selflessly dedicated himself to making the corn industry better for all farmers.

He served on the MCGA board for 13 years and on the CMPM board for 6. He has also served on a US Grains Council Advisory Team for the past 11 years. Ed has been actively involved in his community serving on the Grand Travers Conservation District board for 18 years and he currently serves on his local planning commission.

Ed’s leadership and dedication has helped to promote Michigan’s corn industry and MCGA is proud to honor him with this award.

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A sponsorship opportunity for everyone

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