2020
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<td>JAN 5</td>
<td>Lessons Learned from 2020 Tar Spot Management Trials</td>
<td>Dr. Martin Chilvers - MSU</td>
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<td>JAN 12</td>
<td>Grain Marketing and Report Impacts</td>
<td>Lou DeGrant - Cooperative Elevator Co.</td>
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<td>JAN 19</td>
<td>Hot Topics in Trade</td>
<td>Melissa Kessler - U.S. Grains Council, Lesly McNitt - National Corn Growers</td>
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<td>JAN 26</td>
<td>MCGA Annual Meeting &amp; State and National Political Climate Update</td>
<td>Tara Smith - MCGA Lobbyist, Maureen Watson-Bolger - MCGA Lobbyist</td>
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<td>FEB 2</td>
<td>Meat Exports and their Value to the Corn Industry</td>
<td>John Hinners - U.S. Meat Export Federation</td>
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<td>Eric Snodgrass - Nutrien Ag Solutions</td>
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<td>FEB 16</td>
<td>Mapping Greener Future Farms</td>
<td>Dr. Bruno Basso - MSU</td>
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<td>What does the future hold for ethanol?</td>
<td>Kathy Bergren - National Corn Growers, Jim Zook - CMPM</td>
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<td>Soil Health Partnership Regional Results &amp; CMPM Soil Health Research</td>
<td>Kristin Poley - CMPM &amp; SHP</td>
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</tbody>
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*Sessions with RUP Credits (pending)
CPEU Credits available on select sessions - indicated above
In a typical year, August and September are filled with our Between the Rows Tour stops across the state - but this year threw us a curve ball. We were still able to complete the tour virtually by hosting three different online meetings. The tour allows us to showcase what we have been working on throughout the year and give yield projections based on our crop tour. The staff, volunteers and a few FFA chapters spent the month of August out in the fields completing yield checks. We want to thank the Cedar Springs FFA Chapter, Ithaca FFA Chapter and Springport FFA Chapter for assisting us this year!

We completed more than 340 checks in over 30 counties. The average yield that we found for the state was 180 bu/acre. If you reference the chart, you can see that this is the highest yield we have seen in our tour. We know that this number is high as we completed all our checks before the dry spell in the end of August, which is estimated to have caused a yield loss of up to 10% in some areas across the state. Comparing actual harvest outcomes to the predictions made during our “Between the Rows” is difficult at this time as harvest results have been variable across the state. If you are interested in seeing the county-by-county averages from the tour, visit our website at www.micorn.org.

Now that the crop tour has been completed and harvest has been trending ahead of the five year average for completion, we are shifting our focus to planning for 2021. We plan to have our in-person tour stops across the state and look forward to seeing you all in person again. We are hoping that everyone had a great crop year in 2020 and that 2021 gets off to a great start.

### August USDA Average Yield

<table>
<thead>
<tr>
<th>Year</th>
<th>Between the Rows Average</th>
<th>USDA Final Average</th>
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<tbody>
<tr>
<td>2020</td>
<td>180·</td>
<td>168*</td>
</tr>
<tr>
<td>2019</td>
<td>152.6·</td>
<td>149</td>
</tr>
<tr>
<td>2018</td>
<td>169.4·</td>
<td>153</td>
</tr>
<tr>
<td>2017</td>
<td>177.5</td>
<td>159</td>
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<td>2016</td>
<td>156.0</td>
<td>157</td>
</tr>
<tr>
<td>2015</td>
<td>170</td>
<td>162</td>
</tr>
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*August USDA Average Yield*
The Michigan Corn Growers Association will be celebrating its 50th anniversary in 2022. To prepare, we’re collecting old photographs, memories, news clips and anything else you’d like to share about our history! These items will be highlighted over the course of 2022 as we look back on our history.

To share your items, please contact Penni Sweeney at psweeney@micorn.org or at (517) 668-2676.

MICHIGAN CORN Growers Association

Eligibility
• Members of MCGA or their children (student associate members included)
• Ages 17-25
• Enrolled in post-secondary education for Fall 2021

Due Date
• Friday, February 5, 2021
• Must be received by the Michigan Corn Office via US mail or email no later than 4:30 pm
• Visit micorn.org for more information and to receive the application

Requirements
• Completed Application (includes career plans and an essay)
• Two letters of recommendation
• Resume
• Copy of most recent transcript

Additional Info
• Receive application/more details through micorn.org
• Send application to corninfo@micorn.org
• Mail to: 13750 S. Sedona Pkwy., Suite 5, Lansing, MI 48906
• Questions: 517-668-2676
A fungicide study was conducted to determine treatment timings that maximize disease control and to provide data for development of a tar spot disease model (Tarspotter). The chart below illustrates the amount of disease recorded on the ear leaf at two time points during the season. Tar spot was first detected in this irrigated field on July 16 at very low levels, with rapid increase in disease severity during August and September. On August 27 (blue bars) it was apparent that fungicide applications on July 24 (R2), July 31 (R3) and August 11 (R4) resulted in lower levels of disease, while those applied earlier and later did not differ from the untreated check. On September 9 (orange bars), almost two weeks later, the amount of disease on the ear leaf had increased substantially, the only treatments significantly different from the untreated check were those applied on August 11 (R4) and 21 (R5), indicating that the residual fungicide from earlier timings was no longer effective. No significant differences were found in yield between the treatments, however July 17 (R1) application had the highest numerical yield. Although there is still much to learn about optimizing fungicide timing it appears as though most vegetative applications are too early, given that the disease typically escalates during mid to late reproductive stages. A fungicide efficacy trial conducted in the same field demonstrated that all products significantly reduced tar spot development when applied on July 17 (R1). Although yield differences were not detected at this location these two trials are part of a larger multistate effort that will help in understanding fungicide timing, efficacy and ROI of tar spot management.
MICHIGAN CORN | WINTER 2020

M C G A t o E P A:
Remove Barriers to Increase Ethanol Demand

The Michigan Corn Growers Association (MCGA), along with the National Corn Growers Association and 13 other state affiliate associations, urged the Environmental Protect Agency (EPA) to provide more certainty and use forward-looking data analysis to update policy that will lead to greater flex fuel vehicle (FFV) production and increased demand for higher blends of ethanol.

The associations submitted comments in response to EPA’s request for input on data sources and analytical approaches on which to base an updated weighting factor (F-factor) for E85 FFVs for model year 2021 and later. “As the producers of the primary feedstock for ethanol, corn farmers support a forward-looking, consistent, long-term F-factor that provides automakers with greater certainty in compliance crediting for planning vehicle production,” the associations wrote.

"Corn farmers have responded to the demand for clean, renewable fuel with increased productivity. Corn production has improved on all measures of resource efficiency, including higher crop yields per acre, resulting in greater corn production using less land and fewer inputs, further fortifying ethanol as a sustainable, low-carbon renewable fuel," they added.

Visit micorn.org to read submitted comments.

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Visit micorn.org to read submitted comments.
MCGA Year in Pictures

MCGA awarded Representative Julie Alexander with the Friend of Corn Award in recognition of her support of Michigan's Agriculture industry. Jacob Faist, MCGA Board Member, presented her with the award on behalf of MCGA.

MCGA held two successful golf outings this summer, including a new partnership with the Michigan FFA Foundation.

Just before the pandemic, MCGA board members traveled to Washington, D.C. to meet with legislators and regulator agencies to talk about agricultural policy issues.

MCGA board members and young leaders visited the Michigan Capitol in March to meet with legislators as part of Ag Day at the Capitol.

Leading up to the election, MCGA held events and meetings with various candidates for state office, including this meeting with Representative Elect Lisa McClain.
CMPM sponsored the WJR Ag Tour this year, which included interviews and advertising aimed at educating the public about the ways that farmers protect Michigan’s environment and soil health.

CMPM welcomed the 2020 class of the MICENT program, which is a program for young leaders in the corn industry.

Through the Michigan Ag Council, CMPM participated in a series of farm markets across the state, where they talked with consumers about food and farming.

Executive Director Jim Zook traveled to India with the U.S. Grains Council to meet with companies and local officials about the potential to use ethanol to improve air quality in India.

CMPM launched a new research plot in partnership with Mid Michigan Agronomy to study cover crops and soil health.

CMPM conducted its annual yield checks across the state this year as a part of the Between the Rows tour.

CMPM-funded research continued despite COVID restrictions. This photo shows Jason Piwarski, research assistant for Dr. Ehsan Ghane at MSU, who is conducting water quality and nutrient management research.
This is the third article in a series of excerpts from The Essential Guide to U.S. Trade, a backgrounder that was written by Andrea Durkin for the U.S. Grains Council and National Corn Growers Association. To read the whole backgrounder, visit our website at www.micorn.org/trade-101.

How Trade Promotion Authority Works

The bargain between the executive branch and Congress under Trade Promotion Authority (TPA) is that if the executive follows procedures, Congress will not amend the trade deal and will use an expedited voting process for approval. Congress does not delegate lightly and getting TPA legislation renewed has been a fight in and of itself. The agricultural business community has been historically supportive and an important voice in securing TPA.
TPA Includes Congress’ Views On Negotiating Objectives

Because Congress agrees not to amend the deal, its views about what U.S. trade agreements should achieve are expressed in advance in the form of “negotiating objectives” described in the TPA legislation. Some objectives are broad and directional, but most are specific and written to encourage negotiators to include the bill’s language in the trade agreement itself. TPA has been an opportunity for Congress to signal its desire to tackle new issues in trade agreements, such as currency manipulation, competition from state owned enterprises and expansion of digital trade in goods and services.

TPA requires consultation with Congress. TPA stipulates a series of ongoing consultations with the administration throughout a trade negotiation. For example, TPA requires the administration to notify milestones in the negotiations; consult with congressional committees on special issues such as sensitive agricultural products, fishing, textiles and apparel; and to report on a variety of issues important to Members of Congress. Some requirements are very specific: the president must report any proposals that could change U.S. trade remedy law, conduct an environmental review, prepare an employment impact report, examine the labor rights in the trading partner, and submit a plan for how the agreement will be implemented and enforced.

If Congress perceives the executive failed to follow TPA’s prescribed procedures during the negotiating process, Congress can decide not to apply TPA to a vote on the trade deal before it. Still, it wouldn’t be realistic to hold the executive to meeting every negotiating objective in the way Congress expresses in TPA. It’s a negotiation, and every trading partner has a different economy, different trading and investment relationships with American businesses, differing levels of development, and different political and security considerations. Trade agreements may not address every negotiating objective in TPA in the same way.

Who else is involved in trade negotiations? Within the administration, the Office of the U.S. Trade Representative is the locus of trade policy making. It’s a small agency housed with the Executive Office of the President that has broad responsibility for developing and coordinating U.S. trade policy and leading negotiations.

Many agencies have an interest and role in trade policy. The ones that play the largest role are the economic agencies such as Commerce, Agriculture and Treasury. The State Department, Labor Department, Environmental Protection Agency, the Justice Department and others also have analysts, specialists and senior officials who bring important perspectives to the trade policymaking process.

It is USTR’s responsibility to ensure the consideration of all these perspectives and to reconcile differences into a unified U.S. strategy and specific negotiating positions.

Outside the U.S. government, USTR seeks views from a broad range of stakeholders, including from Congressionally-mandated advisory committees, Congress, and the public at large.

Keep reading at: www.micorn.org/trade-101
New MCGA Member Benefit!

The Michigan Corn Growers Association is excited to announce a new benefit for those that sign up for a 3-year MCGA membership. Upon receipt of payment for a 3-year membership, MCGA will provide a voucher redeemable for a free bag of seed from one of our participating seed companies.

Tell MCGA What You Think and Win a Carhart Jacket!

The Michigan Corn Growers Association wants to know what’s important to you and how we can serve you better. You should have received a survey by mail this December. Please take a few moments to give us your feedback and return the survey. If you do, you’ll be entered into a drawing for a Carhart jacket!
Surveys will be arriving in mailbox in the beginning of December.
Surveys must be returned by January 25th to be eligible to win.

MCGA 2021 ANNUAL MEETING
JOIN US VIRTUALLY!
January 26 | 8 - 9 a.m.

Register at: www.micorn.org or 517-668-2676

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In part 1 of our series on corn and carbon, we examined the role of corn production in the carbon cycle and concluded that, while the carbon cycle is complex, it is possible for corn production to be carbon neutral. In part 2 of this series, we will go a step further down the production line and consider the role of biofuels in the carbon cycle.

Transportation accounts for approximately 27% of human-caused CO2 emissions (U.S. EPA). Available fuel options, such as those derived from fossil fuels, like gasoline, and renewable biofuels, like corn-based ethanol, have been extensively studied to understand their respective carbon impact both during production and use.

The carbon footprint of gasoline is larger than that of ethanol when comparing the total metric tons of CO2e (carbon dioxide equivalent) released annually per vehicle: nearly 6 tons of CO2e released for one vehicle each year using gas and 4 tons CO2e annually attributed to one vehicle using ethanol (UCSUSA.org). Put another way, ethanol produces 37% less carbon per mile than gasoline (U.S. DOE).

Biofuels like corn ethanol can reduce total greenhouse gas emissions between 19-48% compared to gasoline, depending on how efficiently the ethanol is produced (Chillrud, EESI). Factors such as grain transport to the ethanol plant and the efficiency of the plant during the production process will impact the net carbon ratio.

For ethanol to be carbon neutral, corn production practices must also be considered. Critics of corn ethanol argue that increasing the demand for ethanol would require more land converted to agriculture and more intensive farming practices to maintain the production required to supply fuel needs. These arguments of “indirect emissions” (such as from land use change) do not consider factors such as higher corn yields and better farming technology. According to USDA, by 2022 the greenhouse gasses associated with corn ethanol are expected to be 50% lower than that of gasoline. This reduction will be due to increases in corn yields and improvements in transportation efficiency.

Corn yields in the United States have been consistently increasing over the last 75 years, with a 10% average increase in yield from 2005 to 2015 (USDA). During that same timeframe, the number of acres farmed in the United States remained steady (USDA, ERS). In addition, farming technology is improving at a remarkable rate. Variable rate fertilizer application, for example, means less inputs that are the source of harmful greenhouse gas emissions such as nitrous oxide (N20).

The above examples illustrate that corn production practices and ethanol production and use together can have less of a carbon impact than gasoline. To really understand how biofuels like ethanol can be carbon-neutral, consider the carbon cycle: the carbon that is released when ethanol is used as fuel in vehicles can be offset by the carbon that is captured by the growing corn plant.

Further, practices like no-till and the use of cover crops are increasing the capacity of the soil to store carbon. This means that CO2 is not only recycled (released by ethanol and drawn in by corn plants), but a larger amount of carbon is also being sequestered and stored in the soil. Policy makers and consumers need to consider the carbon that was stored through the corn production process before the grain arrives at the ethanol plant when calculating the carbon footprint of biofuels.

Increasing the use of renewable fuels such as ethanol will be key to reducing the amount of human-caused CO2 attributed to transportation. With the right production practices, the life cycle of corn-based ethanol can operate within the bounds of the larger carbon cycle.
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