Northeast Ohio Agri-Culture Newsletter
Your Weekly Agriculture Update for Ashtabula, Geauga, and Trumbull Counties

In This Issue:
- CAUV Changes Pass as Governor Signs Budget Bill
- Western Bean Cutworm Trap Update for Northeast Ohio
- What is the Effect of Rain Damage on Hay?
- Master Gardener Cookbook on Sale
- First 2017 Report of Cucumber Downy Mildew in Ohio
- Danone Looks to Ride Healthy Food Revolution Wave
- Wine Grape Disease, Insect and Weed Diagnostic Workshop Slated for July 21
- EPA Announces Plan to Repeal WOTUS Rule
- Do We Have a Leadership Crisis?
- David’s Weekly News Column
- Upcoming Extension Program Dates

Hello, Northeast Ohio Counties!

It’s that time of year again that you may see our little green traps throughout Northeast Ohio as we monitor the populations of western bean cutworm (WBC). The traps contain a pheromone that attracts cutworm moths and are killed by an insecticide strip inside. We will be checking the traps weekly from now until mid August when the populations decline.

We will keep you updated each week with our trap counts as the WBC caused significant damage to some corn fields in Northwest Ohio last year. Fortunately, we did not see extensive damage in 2016 in our area but we need to keep on top of the counts in case the populations spike. Call any of the Extension offices if you have any questions or notice damage in your fields.

Stay safe and have a great week!

David Harrison
Extension Educator
Ag & Natural Resources
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CAUV Changes Pass as Governor Signs Budget Bill
Written by Chris Hogan, Law Fellow, OSU Agricultural & Resource Law Program
Source: https://farmoffice.osu.edu/blog/mon-07032017-1001am/cauv-changes-pass-governor-signs-budget-bill

Governor Kasich signed HB 49 on June 30, 2017, otherwise known as Ohio’s Operating Budget. In addition to setting the budget for various agencies, HB 49 changes how farmland is valued under Ohio’s Current Agricultural Use Value program. HB 49 changes Ohio Revised Code Sec. 5715.01. The overall effect of the changes will likely be a downward trend in property tax valuation for Ohio farmers.

The budget bill prescribes the method for determining CAUV value for land devoted to agricultural use. The law requires appraisal methods to reflect and consider the following:

- standard and modern appraisal techniques that take into consideration the productivity of the soil under normal management practices;
- typical cropping and land use patterns;
- the average price patterns of the crops and products produced;
- typical production costs to determine the net income potential to be capitalized; and
- other pertinent factors.

Under HB 49, the Tax Commissioner must annually determine and announce the capitalization rate used to compute CAUV values. The bill directs the Tax Commissioner to use standard and modern appraisal techniques in determining the land capitalization rate to be applied to the net income potential from agricultural use. In determining this yearly rate, the Commissioner must use an equity yield rate equal to the greater of the average of the total rates of return on farm equity for the last 25 years (as published by USDA), or the loan interest rate the Commissioner uses for that year to calculate the capitalization rate. The Tax Commissioner is required to assume that the holding period for agricultural land is twenty-five years for computing buildup of equity or appreciation with respect to that land.

HB 49 requires that land used in conservation programs be valued at the lowest soil productivity type. However, if land devoted to a conservation program ceases to be used for conservation purposes within three years of certification, the land will be valued at its actual soil type for all preceding years.

The Tax Commissioner must publish an annual report of CAUV values that can be sorted by county and by school district. The changes to CAUV begin in 2017, starting with counties undergoing reappraisal for the 2017 tax year. The budget bill, as signed by the Governor, can be found at: https://www.legislature.ohio.gov/legislation/legislation-documents?id=GA132-HB-49
See page 2145 of that document for the changes to CAUV.
Western Bean Cutworm Trap Update for Northeast Ohio

The first trap counts were collected this past week and you will find that information in the table below. We will be updating you weekly on the trap counts we are finding in our corn fields here in the newsletter.

<table>
<thead>
<tr>
<th>Location</th>
<th>Corn Stage</th>
<th>Weekly Count</th>
<th>Season Total</th>
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<tr>
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<td>V6</td>
<td>15</td>
<td>15</td>
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<tr>
<td>Kingsville, OH</td>
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<td>16</td>
<td>16</td>
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<tr>
<td>Saybrook, OH</td>
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<td>59</td>
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<td>New Lyme, OH</td>
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<td>1</td>
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<td>Burton</td>
<td>V7</td>
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<td>1</td>
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<tr>
<td>Huntsburg</td>
<td>V9</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Montville</td>
<td>V7</td>
<td>7</td>
<td>7</td>
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<tr>
<td>Mesopotamia</td>
<td>V11</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Gustavus</td>
<td>V7</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Fowler</td>
<td>V9</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Kinsman</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
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</table>

What is the Effect of Rain Damage on Hay?

By Brian Pugh, Oklahoma State Extension Area Agronomy Specialist
Source: [http://u.osu.edu/beef/2017/06/28/what-is-the-effect-of-rain-damage-on-hay/](http://u.osu.edu/beef/2017/06/28/what-is-the-effect-of-rain-damage-on-hay/)

Hay that has been cut and then rained on can lose quality in four ways. These include: 1) leaching of soluble carbohydrates, vitamins and minerals, 2) increased and prolonged plant respiration, 3) leaf shattering, and 4) microbial breakdown of plant tissue.

Leaching of carbohydrates, vitamins and minerals is usually at its highest when the hay has dried somewhat and we then have a prolonged rain. Rainfall right after cutting usually results in less leaching of nutrients and a quick splash-and-dash shower normally doesn’t result in large losses of these nutrients on freshly cut hay.

Increased or prolonged respiration occurs when hay is not allowed to dry sufficiently to stop the plant’s metabolic processes. Hay must reach moisture content of less than 30 percent for respiration to be reduced to acceptable levels. Hay that is rained on when relatively green will
continue to respire for longer periods of time, resulting in the loss of forage nutrients and dry matter yield.

Likewise, partially dried hay that is rained on can continue to respire for longer periods resulting in lower quality and yield of hay. Increased leaf shatter is another problem associated with hay that has been rained on. Wet hay usually means more mechanical handling of the hay in order to dry it. Since leaves tend to dry quicker than stems, any increased raking or tedding tends to shatter leaves from stems. Since more of the soluble nutrients are in the leaf tissue, the loss of leaf blades while raking and bailing can reduce hay quality substantially. Loss of leaf blades can also result in reduction of dry matter yields.

Microbial breakdown of plant tissue occurs when fungi, molds and other microorganisms begin to feed on the downed hay. These organisms develop rapidly in warm-moist conditions and feed on the dead plant material. Hay that is lying on the ground and remains wet for long time periods becomes a perfect environment for these organisms to live and breed. They can quickly consume plant nutrients and destroy plant cell structure resulting in loss of dry matter yield, nutrient content and given time, will completely rot the hay.

What are the consequences of hay being rained on? Research conducted at the University of Kentucky by Michael Collins indicated that we can lose up to 5 percent of the dry matter per inch of rain on cut hay. Digestibility can be reduced by 10 percent or more due to leaching of nutrients and leaf shatter. A similar study done at Iowa State University reported protein loses of 3 percent and total digestible nutrient reduction of 4.6 percent.

One fact seems to hold true, you still cannot tell what the actual quality of the hay is until you have it tested. Testing it is your best strategy for determining the nutrient quality you will get from the hay. Sampling rained-on hay will give you the information you need to design a supplementation program that will keep your animals in good shape during the winter feeding period. Your local county Extension Educator can help you with sampling techniques, hay probes, and testing. For a small investment of time and money, testing will pay off big in the health and nutrition of your herd.

**Master Gardener Cookbook on Sale**

Looking for some new recipes? If so, stop by the Ashtabula County Extension office to purchase one of the few remaining copies of the Ashtabula County Master Gardener’s “What’s Cooking 3” Cookbook for a SALE price of $3 per cookbook. This cookbook has over 50 pages of the Master Gardener favorite appetizers, soups, salads, side dishes, main dishes, desserts, breads, cookie and candy recipes. This cookbook was published in 2013 and only a few copies remain. Get a bargain and help us clean out our inventory so the next edition can be published. More information can be obtained by calling the Ashtabula County Extension office at 440-576-9008.
First 2017 Report of Cucumber Downy Mildew in Ohio

Downy mildew was confirmed this afternoon in cucumbers in West Salem (Wayne County), OH. This follows a report of downy mildew on pickling cucumbers and cantaloupe in Essex County, Ontario yesterday, and is about 8 days earlier than our first Ohio report in 2016. Cucumber and melon growers throughout Ohio should intensify scouting, and these crops should be protected with effective fungicides. Cooler, wetter conditions the last week have been very favorable for downy mildew. In northern Ohio counties, the downy mildew risk is high, so the more effective downy mildew fungicides Ranman 400SC and/or Orondis Opti A & B (co-pack) should be the core of the fungicide program. Zing!, Gavel, Zampro or other fungicides (see table below) can be rotated into the program. A chlorothalonil (Bravo, Echo, Equus, Initiate) or mancozeb (Dithane, Manzate, Penncozeb) product should be tank mixed with the downy mildew fungicide. Always rotate fungicides with different modes of action and follow label instructions.

Remember that Orondis Opti A & B applications are restricted to 1/3 of the total fungicide applications. We recommend applying the first Orondis application when the risk of downy mildew is highest. Under highly conducive environmental conditions, apply fungicides on a 5-7 day schedule. When the risk is lower due to hot, dry, sunny weather, or downy mildew has not been reported in the area, the schedule may be stretched to 7-10 days. Cucumber and cantaloupe downy mildew risk is much higher in northern than in central and southern Ohio at this time.

<table>
<thead>
<tr>
<th>Product</th>
<th>PHI (days)</th>
<th>FRAC Code</th>
<th>Rel. Eff.</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>Chlorothalonil</td>
<td>0</td>
<td>M5</td>
<td>+++</td>
<td>Protectant - use higher rate w/high pressure</td>
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<tr>
<td>Mancozeb</td>
<td>5</td>
<td>M3</td>
<td>++</td>
<td>Protectant; tank mix partner</td>
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<tr>
<td>Orondis Opti</td>
<td>0</td>
<td>U15</td>
<td>+++</td>
<td>Highly effective against downy mildews</td>
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<tr>
<td>Ranman</td>
<td>0</td>
<td>21</td>
<td>+++</td>
<td>Highly effective against downy mildews</td>
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<td>Previcur Flex</td>
<td>2</td>
<td>28</td>
<td>++</td>
<td></td>
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<tr>
<td>Tanos</td>
<td>3</td>
<td>11 + 27</td>
<td>++</td>
<td>Must be tank mixed with mancozeb or related</td>
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<td>Gavel</td>
<td>5</td>
<td>22 + M3</td>
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<td>Similar to Zing! but mancozeb replaces chlorothalonil</td>
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<tr>
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<td>22 + M5</td>
<td>+++</td>
<td>Like Gavel but chlorothalonil replaces mancozeb</td>
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<tr>
<td>Curzate</td>
<td>3</td>
<td>27</td>
<td>++</td>
<td>Up to 2 days curative activity but low residual (3-5 d)</td>
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<tr>
<td>Zampro</td>
<td>0</td>
<td>40 + 45</td>
<td>+++</td>
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Danone Looks to Ride Healthy Food Revolution Wave
By Dominique Vidalon and Pascale Denis
Source: http://www.reuters.com/article/us-danone-outlook-ceo-idUSKBN19D1GA?il=0

Emmanuel Faber, CEO of Danone, wants the world's biggest yogurt maker to play a central role in the revolution sweeping the global food industry as it tries to respond to a consumer shift towards healthy eating.

As more consumers, notably the "Millennial" generation, opt for healthier diets and a more socially responsible way of life, Danone, along with rivals such as Nestle, have been seeking to adapt.

Faber unveiled a new company "signature" dubbed "One Planet. One Health" for Danone on Thursday in Berlin at the annual meeting of the Consumer Goods Forum, a gathering of the world's biggest retailers and packaged food companies.

"A revolution is cooking, what are we going to do about it?" Faber told the meeting, warning that consumers will turn their backs on big food companies if they do not do more to address issues like obesity, inequality and climate change.

"We are losing them. They are getting out of our shops, out of our brands. They are going for food without the food industry. Not only without us, but maybe against us," he said.

Danone has bought U.S. organic food producer WhiteWave in a $12.5 billion deal, bringing the company more into line with healthier eating trends.

The deal also aims to boost growth at Danone, whose shares trade at a discount to rivals. The company's depressed valuation was highlighted this week as a reason for it being touted as a potential bid target.

Faber told Reuters that Danone, which has no large controlling shareholder, was "no more and no less than usual" vulnerable to a possible takeover bid.

Danone is seeking to build on the WhiteWave deal with a campaign to promote itself as a leader in terms of healthy eating habits.
"The global industrial food system is reaching its limits," Faber told Reuters in a phone interview before his speech in Berlin. He said evidence of this included obesity and malnutrition, wasting water and food, soil depletion, and climate change.

"Everywhere people want to regain control over their food," said Faber, a rock climber and campaigner for corporate social responsibility.

BUYING INTO THE FUTURE
WhiteWave's products have outsold mainstream packaged food businesses in recent years, highlighting the consumer shift toward natural foods and healthier eating. The deal should also help Danone to cope with tougher market conditions in dairy products in Europe, and babyfood in China.

WhiteWave makes Danone the world's biggest producer of organic food and gives it a stronger foothold in North America, which is becoming its biggest market, accounting for $6 billion, or around 25 percent of group sales against 13 percent previously.

Faber said he hoped the new Danone signature would help to address a general consumer mistrust of big, corporate brands.

"Small brands communicate on their intentions, they are activists. It is key that big brands also state their intentions," he said.

Faber, the first Danone CEO from outside the founding Riboud family, is pushing on with a dual economic and social agenda, which - like that of many blue-chip companies - aims to not only boost shareholder value and profits but also meet other targets on the environment and social policies.

"The big risk is to avoid transforming ourselves and end up only cutting costs to return cash to shareholders," he said.

A pledge at the annual shareholder meeting in April for Danone to be certified as a for-profit corporation that commits to positive social and environmental goals - was in line with that strategy, he said.

BID TALK
Bid speculation around Danone pushed its shares sharply higher this week. Broker Exane said it could be an acquisition target for Kraft Heinz, also citing PepsiCo and Coca Cola as credible suitors.

Analysts at Berenberg wrote in a research note that investors would need concrete evidence of Danone's progress in its new areas.

"We believe investors will need to see further evidence of organic growth and margin momentum to agree with the CEO that Danone is 'uniquely placed to embrace the food revolution' and for its valuation discount to the sector to close fully."
Faber is confident Danone will deliver. "I am absolutely convinced our strategy creates value for the long-term but also the short-term," he said, adding he expected sales growth to improve in the third quarter.

**Wine Grape Disease, Insect and Weed Diagnostic Workshop Slated for July 21**

Northeast Ohio grape producers will want to set Friday, July 21 aside to attend a workshop which will be held at the Ashtabula Agricultural Research Station in Kingsville, Ohio. This program, “Wine Grape Disease, Insect and Weed Diagnostic Workshop,” will help grape producers learn how to scout and identify the major insect, disease and weeds found in grape vineyards. This workshop will be held from 9:30 a.m. to 2:00 p.m. at the Ashtabula Agricultural Research Station located at 2625 South Ridge East in Kingsville, Ohio.

Featured speakers for this workshop include Dr. Melanie Ivey, Dr. Doug Doohan, and Dr. Elizabeth Long from the Ohio Agricultural Research and Development Center in Wooster, Ohio. During this workshop they will teach how to scout and sample for various pests in the vineyard. Specific time will be spent on the diagnostics and management of vineyard diseases, insects and weeds. They will also demonstrate basic microscopy and imaging for pest diagnostics. Attendees will get a chance to try their hand at the station’s new digital microscope. Best of all, each participant will leave with a diagnostic tool kit to take home which will help them with their pest identification.

A special afternoon session will feature Dr. Tim Weigle from Cornell University who will demonstrate how the Network for Environmental and Weather Applications (NEWA) can be used to improve Integrated Pest Management in vineyards. The NEWA system is a weather modeling system which can help predict when outbreaks of diseases or insects will occur.

This program is limited to 25 participants and the cost is $25 per participant. Pre-registration is required by July 12. All participants will receive a diagnostic tool kit to assist them with pest identification in the vineyard! Lunch and snacks will also be provided. Registration can be completed by contacting Rachel Medina at the Ohio State University at 330-236-2865 or medina.72@osu.edu. A registration flyer can also be obtained by calling the Ashtabula County Extension office at 440-576-9008.

**EPA Announces Plan to Repeal WOTUS Rule**

Written by Ellen Essman, Law Fellow, OSU Agricultural & Resource Law Program

On June 27, 2017, the Environmental Protection Agency (EPA) and the Army Corps of Engineers (Corps) announced their plan to repeal the Obama Administration’s Waters of the United States (WOTUS) Rule. The EPA and the Corps’ proposal involves two steps. First, the agencies propose to “rescind” Obama’s WOTUS rule and “re-codify,” or re-enter, the definition
of WOTUS “that existed prior to 2015” into the federal regulations. The pre-2015 rule would serve as a placeholder until the agencies are able to carry out the second part of their plan. The second part of the plan involves developing and proposing a new definition of WOTUS. This announcement comes several months after President Trump called for either a repeal or revision of the WOTUS Rule in his February 28, 2017 Executive Order (EO). The EO was quickly followed by the EPA and other agencies filing a Notice of Intention to Review and Rescind or Revise the Clean Water Rule (Notice). The EO can be found at https://www.whitehouse.gov/the-press-office/2017/02/28/presidential-executive-order-restoring-rule-law-federalism-and-economic and the Notice at: https://www.epa.gov/sites/production/files/2017-02/documents/cwr_fr_notice_prepublication_version.pdf

What was the Obama Administration’s WOTUS Rule?

The WOTUS Rule went into effect on August 28, 2015. The Rule expanded the meaning of “waters of the United States,” or those waters protected under the Clean Water Act (CWA), to include “tributaries to interstate waters, waters adjacent to interstate waters, waters adjacent to tributaries of interstate waters, and other waters that have a significant nexus to interstate waters.” Furthermore, the Rule stated that tributaries are WOTUS when they flow into navigable waters, even if their flow was not constant. The rule also elaborated on the meaning of “adjacent waters.” For more information about the WOTUS Rule, see our blog post from earlier this year at: https://farmoffice.osu.edu/blog/thu-03022017-233pm/worrisome-week-wotus The Rule as it was released in the summer of 2015 can be found at: https://www.federalregister.gov/documents/2015/06/29/2015-13435/clean-water-rule-definition-of-waters-of-the-united-states

How will “Waters of the United States” be defined?

In the short term

Step one of the EPA and the Corps’ plan calls for a repeal of the Obama Administration’s definition of WOTUS, and a reimplemention of the WOTUS rule that existed prior to 2015. In order to do this, the agencies are proposing a rule. The proposed rule calls for the Code of Federal Regulations—in particular, 33 C.F.R. §328.3, to be amended to reflect the previous definition of WOTUS. Notably, this definition does not include the Obama Administration’s expanded descriptions of “tributaries” or “adjacent waters.” Furthermore, there is no mention of “significant nexus.” This interim definition of WOTUS proposed by the EPA and the Corps can be found in the proposed rule, at: https://www.epa.gov/wotus-rule/pre-publication-version-proposed-rule-definition-waters-united-states-recodification-pre

In the long term

The second step of the EPA and the Corps’ plan calls for the agencies to perform a “substantive re-evaluation” of the definition of WOTUS. Any re-evaluation of the definition will likely take Trump’s EO into account, which called for the EPA and other agencies to, in any “[f]uture
rulemaking," “consider interpreting the term ‘navigable waters’” as Justice Scalia did in *Rapanos v. U.S.*  The CWA defines “navigable waters” as “waters of the United States, including territorial seas.” Thus, “navigable waters” and “WOTUS” are one in the same. Scalia’s interpretation rejected the idea that navigable waters and WOTUS could come from channels where water flow was only occasional. Justice Scalia asserted that navigable waters/WOTUS must be, for the most part, permanent bodies of water. Given the language in Trump’s EO, it is likely that the second step of the plan will involve a proposed rule that includes a definition of WOTUS that closely resembles Scalia’s interpretation. More information on Scalia’s interpretation can be found in our earlier blog post at: https://farmoffice.osu.edu/blog/thu-03022017-233pm/worrisome-week-wotus.

It is important to keep in mind that even if the EPA and the Corps successfully repeal and replace the previous administration’s definition of WOTUS, it is still very likely that opponents will challenge any new definition. Furthermore, both the short term and long term parts of the plan have to go through the rulemaking process, including a comment and review period, before they can become effective. As a result, the debate over the meaning of WOTUS is likely far from finished.

**Do We Have a Leadership Crisis?**

David Marrison  
Reprint of Dairy Excel Column written for Publication on July 6, 2017

Hello Northeast Ohio! I hope each of you had a relaxing 4th of July holiday. I am so thankful for all of the freedoms we are able to enjoy and for our nation’s rich heritage. We are blessed to live in this country! I hope each of you had time to pause and give thanks over the long holiday weekend. Men and women from all walks of life have sacrificed to that we can enjoy abundant freedoms.

Each quarter, the Ashtabula County Extension staff holds an accountability meeting with our 25 member Ashtabula County Extension Advisory (EAC) Committee. This committee has become an excellent advisory committee for our staff. They review our activities, ask the “so-what” questions, and dialogue about current issues.

When we met in June, our committee tackled a question which Dr. Cathann Kress, our new Dean for the College of Food, Agricultural, and Environmental Sciences at Ohio State University, posed at a recent meeting of the State Extension Advisory Committee. This question was “Is there a Leadership Crisis in our State?”

During our EAC meeting, our committee addressed this question. Their conversation ranged from civility, work ethic, reliance on public assistance, generational differences, leadership, employability, mental health, mentorship, responsibility, and basic life skills.

As our committee visited it was apparent that the crisis in leadership is not a democrat versus republican issue; a liberal versus conservative issue; or rural versus urban. I think it can be summed up best in an article I came across written by Mike Myatt for Forbes Magazine. In his
article titled “A Crisis of Leadership—What is Next” Mr. Myatt stated the issue is one that extends beyond parties, philosophies and geographic boarders. The issue is simply this; we have forgotten what leadership looks like.

Mr. Myatt shared that our world is suffering greatly at the hands of people who have placed their desire to be right above the desire to achieve the right outcome. Ironically this article was written in 2013. But it could have been easily written today. For me, I believe it is simply a matter of the heart. Instead being a God-centric society we have become an ego-centric one. And technology and connectivity has helped in this shift.

So if we are in a leadership crisis, what can we do? As our committee examined the crisis in leadership some key action points arose. First, the need for more civility was cited. Second, the need for mentorship of our youth is more important than it ever has been. And third, it was advocated that we get back to the basics in teaching life skills both in schools and in the home.

Mr. Myatt wrote in his article, “It’s time to say enough is enough – it’s time for a real leadership movement. The demand for true leaders has never been greater - when society misunderstands the importance of leadership, and when the world inappropriately labels non-leaders as leaders we are all worse for the wear.”

One of our EAC committee members stated, “Don’t confuse politicians with leadership.” Bottom line, leadership begins with each of us. Colin and Alma Powell wrote an excellent article titled “A Pleas to America’s Adults” in this month’s Readers Digest talking about developing the next generation. Ask most Baby Boomers and GenXers what they think about the Millennials and you will most likely hear a lot of exasperation. Maybe it is a time to look in the mirror and simply ask—who raised them? Colin and Alma Powell suggest you do not have to be a hero to be part of the solution. In fact the most direct, personal and influential role needed in America is good mentors.

One of the concerns brought up by our EAC committee was finding quality employees. All businesses, and yes even farms, can reach out and identify talented young people and give them the training they need. The Powells’ mentioned whenever they hear complaints about the lack of skilled labor, their response is: GROW YOUR OWN. Have you thought of offering an Internship program on your farm each summer? Bring an intern in, implement a good training program, and you will be surprised how your employee pool increases.

So, do we have a crisis of leadership? Does your farm? I challenge you to have a discussion with your family and farm business about leadership. What are your challenges and what steps can you take to overcome them?

Mr. Mayak stated, “It’s time for less talk and more action. We must dialog and debate, but most of all, we must listen, learn and act.” Colin and Alma Powell stated “This cause of helping children become healthy, moral, skilled adults is the cause that will determine the future of our nation. Raising children prepared for lives of accomplishment, self-respect, and contribution is our core responsibility. We can make a difference, one caring adult and one child at a time.”
So as we relax and are thankful for our freedoms, I challenge each of us to examine how we can make America a better place, one caring adult and one child at a time. Let the discussion begin.....

**References:**
A Crisis in Leadership by Mike Myatt

A Plea to America’s Adults by Alma and Colin Powell

**David’s Weekly News Column**

Hello, Ashtabula County! I hope each of you had a relaxing 4th of July holiday. I am so thankful for all of the freedoms we are able to enjoy and for our nation’s rich heritage. We are blessed to live in this country! One of Extension’s top resources is our OSU Ag Law program. Peggy Hall and her two Law Fellows, Ellen Essman and Chris Hogan, are great at keeping us updated on legislative changes which affect farmers and landowners. Today, I would like to share three legislative bills which could impact local landowners.

Are changes in store for honey and maple syrup producers? In a recent article from our Ag Law program, Peggy and Ellen shared details on a public hearing which will be conducted by the Ohio Department of Agriculture (ODA) on July 19, 2017. During the hearing, written and oral comments will be accepted on proposed amendments to the maple syrup, sorghum, and honey rules in the Ohio Administrative Code.

Many of these changes will make the Ohio rules more in line with federal rules and standards. For honey, it is proposed the rules be amended to remove references to specific antibiotics and to instead simply state that any antibiotics, in any amount, “render the honey” or its beeswax as “adulterated.” For maple syrup, the ODA is proposing that Ohio’s grading maple syrup would follow federal standards instead of state standards. Essentially this means that all maple syrup sold would need to be officially graded to be able to be sold. An addition requirement will be added which requires food grade materials to be used for honey, maple syrup, and sorghum packaging. This would include bulk containers. A direct link to this blog post can be found at: [https://farmoffice.osu.edu/blog/thu-06222017-1241pm/ohio-department-agriculture-proposes-amendments-maple-syrup-sorghum-and](https://farmoffice.osu.edu/blog/thu-06222017-1241pm/ohio-department-agriculture-proposes-amendments-maple-syrup-sorghum-and) Accessing this blog post will allow producers to learn how they can attend the hearing or send comments.

Peggy and Chris teamed up to write a blog on a bill which is in the Ohio House of Representatives. This bill would require the Ohio Department of Natural Resources Division of Oil and Gas Resources Management (ODNR) to be more aggressive in plugging abandoned oil and gas wells. House Bill 225 would permit a landowner to report an idle or abandoned well to ODNR, who then must inspect the well and plug it if it’s deemed “distressed-high priority.”
Under the bill, ODNR would be required to inspect an idle or abandoned well within 30 days after a landowner reports the existence of such a well on their property.

No later than 60 days after the inspection, ODNR would be required to provide the landowner with a report concerning the idle or abandoned well. If a well is categorized as distressed-high priority, it must be plugged by ODNR within six months after the report. The legislation also seeks to increase the amount of funding available for landowners who choose to plug a well on their property themselves.

It was reported that there are currently over 600 known orphan wells in the state waiting to be plugged. In addition there are likely hundreds of wells that haven’t been discovered because they’ve been farmed over and covered by urban development. More information about this legislation can be found at the blog: https://farmoffice.osu.edu/blog/fri-06232017-1218pm/bill-ohio-legislature-proposes-more-funding-plugging-abandoned-oil-and-gas

Peggy and Ellen also wrote a blog on potential changes for sportsmen. A bill in Ohio’s House of Representatives proposes amending Ohio’s hunting and fishing laws to expand exemptions from hunting, fishing and trapping licenses for grandchildren of landowners. House Bill 272 proposes a change to current law, which permits grandchildren to hunt, fish or trap on their grandparent’s land without a license only up to the age of 18. The proposal seeks to revise the law to allow grandchildren “of any age” to be exempt from licensing requirements when hunting, fishing or trapping on their grandparent’s land. The bill also extends hunting and fishing privileges to veterans. It would provide a partially disabled veteran the same free hunting and fishing license privilege currently afforded to a veteran with a total disability. The complete article can be found at: https://farmoffice.osu.edu/blog/wed-06212017-1018am/proposal-extends-hunting-and-fishing-license-exemptions-grandchildren

To close, I would like to leave you with a quote from Abraham Lincoln who stated, “America will never be destroyed from the outside. If we falter and lose our freedoms, it will be because we destroyed ourselves.” Have a good and safe day!

Upcoming Extension Program Dates
The following programs have been scheduled for Northeast Ohio farmers. Complete registration flyers can be found at: http://ashtabula.osu.edu/program-areas/agriculture-and-natural-resources/upcoming-educational-programs-deadlines

Wine Grape Disease, Insect and Weed Diagnostic Workshop
July 21, 2017

Fertilizer Certification Sessions
August 17 at Trumbull County Extension Office from 6:00 to 9:00 p.m.
September 14 at Geauga County Extension Office from 1:00 to 4:00 p.m.
2017 Ashtabula County Beef Banquet
Saturday, November 11, 2017

Private Pesticide Applicator Recertification Sessions
November 16, 2017 from 1:00 to 4:00 p.m. in Lake County
January 12, 2018 from 9:00 to 12:00 noon in Ashtabula County
February 2, 2018 from 1:00 to 4:00 p.m. in Geauga County
February 9, 2018 from 9:00 to 12:00 noon in Portage County
March 9, 2018 from 9:00 to 12:00 noon in Trumbull County

2018 Northeast Ohio Winter Agronomy School
Wednesday February 21, 2018

21st Annual Joe Bodnar Memorial Northern Classic Steer & Heifer Show
Saturday, April 21, 2018
Western Bean Cutworm (Loxagrotis albicosta Smith)

Insect Fact Sheet

Historically, the western bean cutworm was only a pest in the western Corn Belt. Over the past several years, it has become established in Iowa and has moved steadily from west to east, having been discovered in southeastern Iowa in 2004. Growers in Illinois counties along the eastern border of Iowa should be aware of the potential for this corn insect pest to make its way into Illinois. The western bean cutworm is a severe pest of corn and dry beans, affecting both crop yield and quality. Unlike other cutworms, the western bean cutworm is a late-season pest of corn. It feeds primarily on corn ears, chewing and scarring kernels, predisposing the ear to fungal and mold infections.

Description

First-instar western bean cutworm are dark brown, with diamond-shaped markings on their back. As the larvae mature, they become light tan to pink in color and the markings on their back become more distinct. Western bean cutworm larvae that are third-instar and older may be distinguished from other cutworms and caterpillars by three distinct stripes right behind the head. Brown colored, moths are approximately ¾" long with a 1½" wingspan. Forewings of the moth are brown with a white/creme-colored stripe that runs across the leading edge of each wing. Just below this stripe, and about halfway across each wing is a white spot. Further away from the body, in line with the spot, is a white, crescent shaped spot. The hindwings of the adults are unmarked and light colored. Eggs of the western bean cutworm are white, with a thin, red ring on top when first laid. Within 2 days, they turn tan and by the fifth day, turn dark purple.

Life Cycle

One generation of western bean cutworm occurs each year. Moth emergence usually begins in early July. After mating, females lay eggs on available host plants such as field corn, sweet corn, popcorn, or dry beans. Females also may lay eggs on tomatoes, nightshade, and ground cherry, although these are not preferred oviposition hosts. In corn, female western bean cutworms lay eggs primarily on the upper surfaces of the leaves. Fields attractive to western bean cutworms for oviposition are fields in which corn is tasseling or near tasseling and fields that have hybrids with upright leaf characteristics. Egg masses contain an average of 50 eggs, but numbers of eggs in a mass range from 5 to 200. Eggs turn from white to tan to dark purple as they age, and larvae hatch within 5 to 7 days after the eggs are laid.

After hatching, larvae feed on the shells of the eggs for about 10 hours before moving to other protected feeding sites. Larvae pass through five instars and feed on host plants for about 31 days. After a larva finishes feeding and completes development, it drops to the ground and burrows beneath the soil, where it constructs an overwintering cell. Western bean cutworms spend the winter in the prepupal stage. In May, western bean cutworms pupeate, and they emerge as adults during the summer.

Injury

In Corn: First instars are very mobile and may infest several host plants. Newly hatched larvae move to the corn whorls where they feed on the flag leaf, tassel, and other yellow tissue. As corn tassels and silks, larvae move to and begin feeding on developing silks. Larvae feed directly on silks in post-tassel corn. Because of their dispersal behavior, larvae from one egg mass may infest other corn plants in the same and adjacent rows in an area 6 to 10 feet in diameter. As both larvae and corn develop, the larvae begin feeding on ear tips. The larvae may also chew through ear husks and damage developing kernels. An infestation of more than one larva per ear may occur because western bean cutworm larvae are not cannibalistic, unlike corn earworm larvae. One larva per ear rarely causes economic injury, but studies show on a field-wide basis, that one larva per plant can reduce yield by 3.7 bu/acre. During years with severe infestations, multiple larvae per ear may be common. Under severe feeding pressure, 50 to 60% of an ear’s kernels may be damaged.

In Dry Beans: Eggs are laid in areas of dense bean foliage on the lower surface of leaves. As in corn, western bean cutworm larvae have great ability to disperse. Larvae may disperse up to 12 feet within a row and 10 feet across rows. When larvae approach ½" in length, they begin feeding at night on young leaf material and blossoms. Larvae chew holes into pod walls and developing seeds. Most feeding occurs on cloudy days or at night. During the day, older larvae may be found in the soil seeking refuge. As beans are cut, and if western bean cutworm development is not complete, larvae may congregate under the windrow, feeding on pods and seeds until harvest. Little is known about economic injury levels and yield loss, as well as dockage.
Scouting Procedure

Scouting for western bean cutworm should begin when the first moths are noticed. Western bean cutworm moth flights usually begin in early July. The emergence date of moths can be predicted by calculating growing degree days, beginning May 1, using a base temperature of 50°F. Pheromone or black light traps can be used for detection of the moths. Monitoring should continue until after the moth population peaks.

In Corn: Examine the upper surfaces of plant leaves for egg masses and/or small larvae. Also, examine tassels for larvae before pollen shed. Check 10 consecutive plants in at least 5 random locations in the field. Since egg laying varies with plant growth stages, sample hybrids with different maturities within a field separately. Don't confuse corn earworm infestations with western bean cutworm infestations! While both will feed on ear tips and kernels, they do have distinct differences. For example, corn earworm are cannibalistic, so usually only one is found per ear. Visual differences also exist between the larvae. The corn earworm, comes in a variety of colors, ranging from brown to pink to green, it has lateral stripes along its body, and is covered by small dark spines. It also lacks the three stripes behind its head that the western bean cutworm possesses.

In Dry Beans: Scouting dry beans for egg masses and larvae is very difficult. However, using pheromone traps, estimates of possible infestations, timing of field scouting, and optimal timing of control methods can be provided. Moths tend to lay more eggs in bean fields after corn has tasseled, usually corresponding to when pheromone trap captures begin to increase. Place two pheromone traps per bean field near field edges in early July. Traps should be monitored until peak moth flight. Larvae will begin to damage pods approximately 3 weeks after peak moth flights have been reached. Moths should be counted and the total accumulated between the initiation of the flight until the peak of the flight. The risk of significant damage is considered low when the cumulative catch is less than 700 per trap. When numbers are between 700 and 1,000, the risk is moderate. Examine bean pods for larval infestation and feeding 2 to 3 weeks after the peak moth flight. If moth count totals are greater than 1,000, the risk for damage is high, although not all high risk fields develop economically damaging infestations. Examine pods to determine extent of damage.

Management

Monitoring and detection of the western bean cutworm is essential in the management of this insect pest.

In Corn: Entomologists at the University of Nebraska recommend that an insecticide treatment should be considered when 8% of the plants have egg masses and/or small larvae. Timing of an insecticide application is critical. If larvae have hatched, apply an insecticide after 95% of the tassels have emerged, but before larvae enter the silks. Control is more difficult after larvae have moved to the silks. Once larvae have moved inside the husk, insecticides are ineffective and larvae will feed until mature. If larvae have not hatched and the corn plants have tasseled, time the insecticide application to coincide with the hatch of larvae. If the eggs are purple, hatch usually occurs in about 24 hours.

Currently, of the available transgenic corn hybrids, only those that contain the Cry 1F toxin (Herculex I Insect Protection) are labeled for control of the western bean cutworm.

In Dry Beans: An insecticide treatment many be warranted (University of Nebraska) when pod feeding is significant. If an insecticide treatment is needed, application should be made 10-20 days after peak moth flight.

Few cultural controls are effective against this insect pest. Plowing or disking soil is thought to reduce overwintering larval survival, but the effectiveness of this practice on a broad scale is unknown. There are several natural enemies and predators of the western bean cutworm, Spiders also may reduce western bean cutworm densities. Larvae also are susceptible to the disease pathogen Nosema sp., but the impact of this pathogen is unknown. Predation by birds such as crows and blackbirds, especially to larger larvae, has been observed.

More Information

Western Bean Cutworm in Corn and Dry Beans, University of Nebraska-Lincoln
(http://ianpubs.unl.edu/insects/g1359.htm)

Maize Insect Pests of North America
(http://ipmworld.umn.edu/chapters/maize.htm)

Western Bean Cutworm: Characteristics and Management in Corn and Dry Beans, Colorado State University
(http://www.ext.colostate.edu/pubs/insect/05538.html)

*Many of the pictures used on this factsheet are taken by professionals from other universities, please visit their respective websites for additional information and photos on the western bean cutworm.