Hello, Northeast Ohio Counties!

It looks like our nice weather will continue. A lot of 2nd and 3rd cutting hay is being made across the region. Corn silage harvest is also underway across the region.

We are the Farm Science Review this week, so be sure to say "hi" if you see us! There will be a lot of informative displays throughout the Review!

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Ohio Grape & Wine Industry Contributes $1.3 Billion to State’s Economy

On September 12 the Ohio Grape Industries Committee today released its 2016 Economic Impact report, which finds that Ohio’s grape and wine industry has a significant impact of $1.3 billion on the state’s economy and provides 8,067 full-time jobs, with more than 2,700 additional jobs created since 2012.

“This report further demonstrates the growing strength of food and agriculture as Ohio’s number one industry,” said Ohio Department of Agriculture Director David T. Daniels. “Ohio grape growers and wine makers are creating quality, award-winning products that rival those produced in historic wine producing areas like California and Europe. This new study is proof of their success and their impact on Ohio’s economy.”

Highlights of the report include the following:

- 2016’s full economic impact of Ohio wine and grapes is $1.3 billion.
- The number of wineries in the state of Ohio grew from 175 in 2012 to 265 in 2016, an increase of 51%.
- The industry provides 8,067 full-time jobs, with more than 2,700 additional jobs created since 2012, with a payroll of roughly $264 million.
- Ohio is the 6th largest wine producer in the country, producing 1.23 million gallons or more than a half-million cases of wine. The Buckeye State was ranked 7th in 2012.
- Ohio is the 9th largest grape producer with 1,500 acres.
- 1.38 million people visited Ohio wineries in 2016, up 16% from approximately 1.19 million winery visitors in 2012.
- Ohio’s wine, wine grape and allied industries generated $75 million in federal taxes and $72 million in state and local taxes in 2016, including more than $6 million in total excise taxes.

The Economic Impact report was commissioned and funded by the Ohio Grape Industries Committee. A copy of the complete report can be found at: http://www.findohiowines.com/wp-content/uploads/2017/09/Ohio-2016-Economic-Impact-Report-FINAL.pdf The committee was created in 1982 and operates in-part through the Ohio Department of Agriculture, providing marketing and research opportunities to Ohio’s wineries and vineyards. The committee helps increase consumer awareness of Ohio’s modern, high-quality wine industry.
Addition by Subtraction
By: John F. Grimes, OSU Extension Beef Coordinator
Source: http://u.osu.edu/beef/2017/09/13/addition-by-subtraction/

Weaning time is an excellent time to evaluate your cow herd and decide which cows get to remain in your herd as productive females. If they are not being productive for you, they need to be replaced by heifer calves retained from within the herd or by purchased bred females.

Cows and heifers leave operations for a variety of reasons. Ask a room full of cow-calf producers for the key reasons to cull a female from the herd. I would feel confident that the reasons would include any or all of the following factors: 1. Age or bad teeth; 2. Pregnancy status (open or aborted); 3. Temperament; 4. Other reproductive problems; 5. Economics (drought, herd reduction, market conditions); 6. Producing poor calves; 7. Physical unsoundness; 8. Udder problem; and 8. Bad eyes. While all of these factors are valid reasons for culling, I suspect that the first three factors listed who be the top reasons for culling in any given year.

Beef producers are often disappointed when an animal has to be culled from the herd. While marketing these cull animals is commonly viewed as a loss, keep in mind that it is also a significant source of income for a herd. Surveys have shown that cull animals can contribute up to 20-25% of a herd’s gross income. Slaughter cow prices tend to be the highest and relatively steady from February to August with the lows coming in October through December. Recognize that a timely opportunity to market cull animals may be rapidly coming to a close. If you have adequate feed resources, marketing cull animals in early 2018 may be the best option.

I encourage you to view a moderate level of annual level of culling as a potential positive for the herd. Besides a supplemental source of income for the herd, a few strategic subtractions from the herd can add to its overall quality.
Does 'Sustainability' Help The Environment Or Just Agriculture's Public Image?

By Dan Charles


Brent Deppe is taking me on a tour of the farm supply business, called Key Cooperative, that he helps to manage in Grinnell, Iowa. We step though the back door of one warehouse, and our view of the sky is blocked by a gigantic round storage tank, painted white.

"This is the liquid nitrogen tank," Deppe explains. "It's a million-and-a-half gallon tank."

Nitrogen is the essential ingredient for growing corn and most other crops. Farmers around here spread it on their fields by the truckload.

"How much nitrogen goes out of here in a year?" I ask.

Deppe pauses, reluctant to share trade secrets. "Not enough," he eventually says with a smile. "Because I'm in sales."

For the environment, though, the answer is: Way too much.

The problems with nitrogen fertilizer start at its creation, which involves burning lots of fossil fuels. Then, when farmers spread it on their fields, it tends not to stay where it belongs. Rainfall washes some of it into streams and lakes, and bacteria in the soil feed on what's left, releasing a powerful greenhouse gas called nitrous oxide.

There have been lots of attempts to control renegade nitrogen. Most have focused on threats to water and wildlife. Maryland, Virginia and Pennsylvania, for instance, have spent billions of dollars keeping nitrogen (and other forms of fertilizer runoff) out of the Chesapeake Bay. Reducing nitrogen's contribution to global warming, though, is even more difficult. Philip Robertson, a researcher at Michigan State University who's studied those greenhouse emissions, says that "ultimately, the best predictor of the amount of nitrous oxide emitted to the

Wade Dooley, in Albion, Iowa, uses less fertilizer than most farmers because he grows rye and alfalfa, along with corn and soybeans. "This field [of rye] has not been fertilized at all," he says. "Because I'm in sales."

Dan Charles/NPR
atmosphere is the rate at which we apply nitrogen." Essentially, the only proven way to cut heat-trapping emissions from nitrogen fertilizer is to use less of it. Most farmers haven't been willing to do this, because it could cut into their profits.

Enter the SUSTAIN program, which some food companies, including Walmart, are touting as a step toward the breaking this stalemate, allowing farmers to reduce their greenhouse gas emissions without reducing their profits. Land O'Lakes, one of the largest agricultural businesses in the country, runs SUSTAIN. It has made a pledge to Walmart to enrolls 20 million acres of farmland in the program, as part of Walmart's plan to reduce greenhouse gas emissions. "Land O'Lakes is a company that goes from farmer to consumer," says Matt Carstens, the executive in charge of it. "We have an obligation and an opportunity to do what's right."

I came to Key Cooperative to see what SUSTAIN looks like in practice. I met Ben Lauden, a farmer who enrolled his acres of corn and soybeans in the program. Since signing up, Lauden has been doing a few things differently. He's applying nitrogen fertilizer several times during the growing season, instead of all at once. That's so the fertilizer arrives when the growing corn plants need it, and less is wasted. He buys "stabilizers" — chemicals that are mixed with nitrogen and keep it from washing away so quickly. Also, data on his fertilizer use goes into a computer program that monitors the weather and predicts how much nitrogen will remain in the soil.

It's all intended to let him use nitrogen more efficiently. But is he actually using less of it? Lauden pauses. "I think you would use less, but I don't — I can't quantify it, I guess," he says. That's more or less what Michigan State researcher Philip Robertson has observed. The technologies that Key Cooperative is selling to Lauden, "if used properly, should allow the farmer to use less nitrogen fertilizer," Robertson says. But he adds, "whether that actually happens is the $64,000 question, because there are lots of cases where farmers have been sold stabilizers without necessarily recommending a reduction in the rate of fertilizer application."

Even Matt Carstens, who created SUSTAIN and promoted it to food companies and environmental groups, isn't promising that it will reduce the amount of nitrogen released into the environment. He does believe that it will help farmers use it more efficiently, allowing them to grow more corn without using more fertilizer. "There's definitely a trend in the direction of using [nitrogen] more wisely," he says. "But to say that every year we can count on a reduction, that's just not possible."

In fact, there's even some confusion about what SUSTAIN is supposed to accomplish. Brent Deppe, the manager at Key Cooperative, says that the program was introduced to him and to farmers as a way to tell consumers about the steps farmers are taking to protect the environment. "The message wasn't being told," Deppe says. "We're doing a lot of the right things. We just aren't advertising it."
SUSTAIN does not advise farmers to do anything as dramatic as growing different crops. And according to some environmentalists, that's exactly the problem. Careful management of fertilizer "is a good thing to do, but it's not enough," says Matt Liebman, a professor at Iowa State University.

Sarah Carlson, who works for an environmentally minded group called Practical Farmers of Iowa, has confronted Walmart executives about SUSTAIN and its limited goals. "I was like, 'Why are you only focused on nitrogen fertilizer management?' Carlson says. "That makes such little impact on water quality, and such little impact on greenhouse gas reduction."

Carlson has a counter-proposal. It sounds simple: Companies could give farmers a financial incentive to move away from simply growing corn and soybeans, instead adding "small grains" like oats (or rye) to their mix of crops.

That simple move could cut greenhouse gas emissions by a third, much more than anything SUSTAIN is doing, she says. Oats, unlike corn or soybeans, can easily be grown together with a "cover crop" of clover. That clover has an important benefit: It adds nitrogen to the soil the organic way, replacing the need for synthetic nitrogen that's manufactured in energy-intensive factories. (Nitrogen from clover still gets converted into nitrous oxide by soil bacteria, however.) In addition, cover crops add carbon to the soil, which also helps fight climate change.

Many farmers would be happy to do this, Carlson says. They understand the environmental benefits. But right now, those farmers don't have a market for those oats.

"You know, Walmart, you should suggest to your commodity buyers that they buy more small grains [like oats] for feed rations" for animals like pigs," Carlson says. "We have all these pigs in the state; 5 percent of their diet could be oats. We can just sprinkle it in there. It wouldn't be that hard."

There is, however, one crucial obstacle: Relying on oats for your bacon would cost a little more money, and somebody would have to pick up that tab. It could be Walmart — and, in turn, American consumers.

**Greatest Improvements in Ag in past 100 years?**

By Tom Bechman

Source: [http://www.indianaprairiefarmer.com/technology/greatest-improvements-ag-past-100-years](http://www.indianaprairiefarmer.com/technology/greatest-improvements-ag-past-100-years)

There are no right or wrong answers to this question — it’s just a matter of perspective.

An agricultural engineering professor recently told his students to ask someone in the ag industry what he or she considered the top two advancements in agriculture in the past 100 years. Then the student had to agree or disagree with each, and defend that stance.
Listing 50 accomplishments that helped lead to modern agriculture sounds a whole lot easier than picking two. Here’s our list of 10. You probably have your own list. In Thursday’s blog, we’ll take a shot at defending two of these choices as the students did.

For now, here’s our top 10 agricultural advancements from the past 100 years.

1. **The tractor.** The Waterloo Boy, which led to the first John Deere tractor, is often credited as the first tractor.

2. **Electricity for rural areas.** An old slogan said: “Who brought lights to the country?” The answer is the REMC, or Rural Electricity Membership Cooperative. Until farmers banded together to foot the cost of installing poles and stringing lines, it was dark in the country.

3. **Hybrid seed corn.** In the late 1920s, a corn yield of 20 bushels per acre might have been acceptable. Varieties were open pollinated. Corn yields didn’t take off until innovative farmers, working with far-sighted Extension leaders, discovered how to raise hybrid seed corn.

4. **The modern combine.** It took combines — machines that could cut the crop on the front end, keep the grain in a hopper and send residue out the back — to revolutionize harvest. Some early models were crude by today’s standards, such as the John Deere 12 A, the International 64 or the Allis-Chalmers All-Crop 66, but they set the stage for future developments.

5. **Shelled corn and self-propelled combines.** Many loads out of the first self-propelled combines like the John Deere 45 were stored as shelled corn in cribs sided with tin. Soon farmers put up grain bins. Grain dryers followed.

6. **A modern generation of tractors.** Whether you drive green tractors or not, it’s hard to argue with the opinion that John Deere elevated tractors to a higher level when it introduced the New Generation tractors in 1960. The John Deere 4020 would soon become a standard of the industry.

7. **Nitrogen fertilizer, herbicides and insecticides.** Corn yields took off when Extension agents helped farmers realize corn needed nitrogen, and the ag industry helped figure out how to provide it. Some early insecticides and herbicides would prove to have environmental risks, although some, like atrazine and 2,4-D, are still players today. Row banders to get weeds in the row were a big deal before broadcast sprayers came along.

8. **The Vermeer baler.** Gary Vermeer, Pella, Iowa, ushered in a whole new era for livestock producers when he demonstrated his big round baler in the late 1970s.

9. **Biotechnology and GMO crops.** The discovery that you could move a helpful trait from one organism to another was the first salvo in what has led to discovering whole genomes of crops and animals. GMOs may be controversial, but there is no debate that they changed agriculture forever.
10. Precision agriculture. You could break this one into many facets, from yield monitors to autosteering to RTK guidance. It’s the backbone that allows farmers to treat different areas of fields more precisely.

**Vermeer Unveils First-of-its-Kind Self-Propelled Baler Prototype**

By: Tyler Harris 1 |

Back in the early 1970s, Gary Vermeer designed his first round baler — then called the "One Man Hay System" — to help meet the needs of farmers struggling to find adequate labor. That challenge isn't going away anytime soon.

At Husker Harvest Days, Vermeer unveiled a first-of-its-kind, self-propelled round baler prototype. The prototype, called the ZR5, was borne from discussions surrounding a lack of available labor in the ag world, and the demand for a baling setup that could maneuver in tight corners and adapt to varying crop conditions, notes Mark Core, executive vice president and CMO at Vermeer.

"Several years ago we put together a team of engineers entirely focused on bringing innovations to the market that don't exist today," says Core. "As we think about identifying a problem, these things came up and we said, 'Let's do something about it.'"

**Built for comfort, flexibility**

Since this prototype is the first of its kind, one question producers may be asking is: What does a self-propelled baler look like? In August, hay producers from different parts of the U.S. got an early look at the machine. The current prototype is the third since Vermeer first began designing the ZR5 a couple years ago, and some features may change moving forward.

Designed for unimpeded visibility, the cab is mounted toward the front of the machine in front of the baling unit. The cab is also mounted on top of the suspension for a smoother ride to help reduce operator fatigue.

To further minimize fatigue, a camera is mounted on the undercarriage to watch hay as it enters the pickup. A second camera mounted on the back of the cab monitors the bale leaving the
tailgate. This way, operators can comfortably watch hay as it enters and leaves the baler on a display in front of them.

"By doing that, the operator spends his time looking ahead, no longer turning his body around and no longer getting the fatigue he would in a baler-tractor setup," says Josh Vrieze, product manager of forage solutions at Vermeer.

What if you want to replace the baling unit? Because the machine itself will likely outlive the baling unit, the ZR5 is designed so that operator can detach the baler by unhooking a series of quick connect hoses and an electric wiring harness — similar to detaching a corn header or draper header — and push a button in the cab. The process typically takes a few minutes.

If the caster-style front wheels on this machine look familiar, it's because they were inspired by zero-turn lawn mowers. Although it's controlled using a steering wheel, rather than two joysticks, one of the key features that went into the ZR5's design is its zero-degree turn capabilities.

"The front wheels are casters and rear wheels are hydraulically driven independently, and that's actually what does the steering," explains Kent Thompson, research and development manager of forage solutions at Vermeer. "It allows you to do a lot of things maneuverability-wise, much like a zero-turn lawnmower."

The ZR5 makes full use of its zero-degree handling with its quarter-turn function. Using this feature, the baler stops automatically once the chamber is full and rotates to a pre-set angle to drop the bale. The operator can adjust settings on the cab's monitor to change the angle so it lines up with other bales in the field, or adjust the angle based on the slope of the hill so the bale doesn't roll away. The angle can also be adjusted on the fly. Once the tailgate closes, the baler turns parallel to the windrow once again. All operators have to do is hit the green "go" button on cab's joystick control, and they're off and running again.

"You can rotate the baler 90 degrees so your bales are in-line, so when you go to pick up those bales on the next pass, it's a significant savings — up to 30% to 35% savings in time," says Thompson.

A challenge with casters is they can be difficult to maneuver at higher speeds. The ZR5 can be switched between "transport mode" and "field steer" with the flick of a switch in the cab. In field steer mode, the operator can maneuver with ease in zero-turn, using the steering wheel to control the rear wheels. In transportation mode, the front casters lock in place with a tie rod; the operator now controls the front wheels and can confidently drive down the road at speeds up to 30 mph.

The prototype is powered by a 173-hp Cummins engine, and both the base unit and baling unit use a hydrostatic transmission, allowing continuously variable shifting. This makes it easier to adjust rpm, pickup speed and ground speed independently, and adapt to varying field conditions on the fly.
Next stages of development

Of course, the current prototype may change between now and its official launch. Vermeer plans to work with customers on finalizing the ZR5 over the course of 2018, and hopes to have the baler commercially available sometime in 2019.

While the machine is suited to anyone looking to reduce operating time, Jessica Reis, brand marketing manager at Vermeer, says it will be particularly useful for forage producers in the Great Plains and Midwest, who produce 5,000 or more bales a year. "If you're putting up 5,000-plus bales a year, you're likely running at least two balers," says Reis. "We feel the Midwest and the Great Plains specifically have a lot of opportunities for this type of machine."

"We think not only can we bring a self-propelled baler that's zero-turn to the marketplace, but we can put some magic inside of that machine to take a big step forward for all the hay harvesters out there that are doing all they can to be productive and profitable and to be able to help feed the world," says Core.

Researchers find cereal rye is effective at reducing Amaranthus spp. density in soybean crops

Source: https://www.eurekalert.org/pub_releases/2017-09/cup-rfc091517.php

Fall-planted cover crops are often used as part of an integrated weed control program in herbicide-resistant soybean crops. But researchers writing in the journal Weed Technology say not all cover crops are equally effective against Palmer amaranth, waterhemp and other Amaranthus spp. weeds.

Their conclusions follow a two-year, multistate study to compare the impact of cereal rye, spring oat, forage radish and annual ryegrass on weed control and crop yields. The study was conducted in areas with known infestations of Amaranthus spp. weeds.

Two herbicide programs were used. The first involved a preemergence residual herbicide, followed by a postemergence application of a foliar and residual herbicide. The second program added a second postemergence application of residual herbicide.
Researchers found there were no variations in weed control or in crop yields among the various cover crops used as part of an integrated control program with herbicides. Cereal rye, though, consistently reduced the density of *Amaranthus spp.* weeds, even in the absence of herbicides.

"Cereal rye has the most potential to contribute to *Amaranthus spp.* control by reducing weed population density within the first month or so following soybean planting," said research team member Mark Loux of Ohio State University. "As a result, there is a better opportunity to reduce selection for weeds resistant to herbicides used in postemergence treatments. Cereal rye is also a great choice when weed density is high or when environmental conditions reduce herbicide effectiveness."


**No Asian Hornets in Ohio**

By Eric Barrett, Mahoning County Extension  

Editor's Note: We have received a lot of calls in the Ashtabula and Trumbull County offices about GIANT HORNETS. Our colleague in Mahoning County wrote a recent Q&A article on this for these hornets. Most of what we have been seeing is the European Hornet.

**Q. I found an Asian hornet. You should be warning people about these! They are terrible. It is all over the internet that they can dissolve skin!**

Anonymous from Youngstown & Salem

A. The Asian hornet is not in Ohio. This story is all over Facebook and social media. There is even a group page about it. The stories are often started by someone who does not know insect identification and does not know that we do have some large insects here in the Mahoning Valley.

We even have an extension.org question where the person insisted this insect does exist here in the US. But the truth is that there have been no confirmed sightings of the giant Asian hornet (*Vespa mandarinia*) in North America. Nor are there reasons to believe this insect is in the Mahoning Valley.

The issue? False reports of the giant Asian hornet in the area plus the lack of understanding of insects that look somewhat like it. The people reporting this on social media are not entomologists and do not have the skills to correctly identify the insect at hand. The giant Asian hornet grows to nearly 2 inches in length, is black/brown with a bright yellow head and has a
wingspan of nearly 3 inches. Thus, we need to understand the fake reports on social media and the two look-alikes we have in our area.

**The look-alikes**

Cicada killer wasp (Sphecius speciosus) – This native insect is about 1.5 inches long and is actually not a hornet. It emerges in July, coinciding with the annual dog-day cicadas that it eats. It has three bands with light-yellow to white markings on the abdomen, closest to the thorax. The end of the abdomen (what you might call the tail) is all black. The antenna are nearly all black.  
http://go.osu.edu/cicadakiller

European hornet (Vespa crabro) – This insect is a close relative and gets to about 1.5 inches long. They are brown with yellow striping on their abdomen, most notably on the end away from the thorax. They are quite hairy, but not as hairy as a honeybee. They eat insects and make girdle twigs, especially on lilacs.  
http://go.osu.edu/europeanhornet

Both are common in the Mahoning Valley. But if the giant Asian hornet were here, beekeepers would most likely be the first to report it because they will kill honey bees and have a tremendous impact on pollination of plants and crops.

A terrific blog post about them with photos of all of these species is at:  
http://go.osu.edu/asianhornet

**David’s Weekly News Column**

Hello, Ashtabula County! The Ashtabula County Master Gardeners held their annual recognition banquet on Monday, September 11, 2017 at Briquette’s Smokehouse in the Ashtabula Harbor. The banquet is held each year to celebrate the successes of the Ashtabula
County Master Gardeners. It was a fabulous event to celebrate the work of these great volunteers.

The Master Gardener program was started in 1998 to help us at OSU Extension answer home horticulture questions. Our first training class had 4 members and over the past two decades we have grown to 43 active Master Gardeners. The outreach they provide to our community is tremendous. Whether it is speaking for community groups, conducting the floral show at the fair, or by hosting a Victory Garden Display at DDay, the Master Gardeners are helping home gardeners become better at what they do.

We were very pleased that Bill Hendricks, President of Klyn Nursery in Madison, Ohio was the featured speaker for the recognition banquet. Bill knows more about plants across the world than anyone I know. He gave a very in-depth program on the plants and historical sites of Scotland. It was like we were actually there!

Five new members were recognized for completing the Master Gardener training program this summer. We conducted this training in conjunction with Lake County over 12 weeks. Congratulations to Patricia Cleveland, Jean Freeman, Kerry Gerken, Leah Nye and Donna Wilhelm for all completing their training. Patricia Cleveland received special recognition for being the top scholar for the training program. She scored an amazing 98.03% on her course work!

Eight of our members were recognized for achieving volunteerism milestones. Mary Belding, Rose Mary Burns, and Joyce Kren were recognized for volunteering 250 hours while Mike Tullai and Alice Vervais received certificates for completing 500 hours. I was also very honored to recognize Bobbi Dalton for volunteering 750 hours, Meghan Davis for 1,500 hours and Carol Blake for 1,750 hours. Wow! Each year, as a group, the Master Gardeners provide over 2,500 hours of volunteerism back to our county. Their love and support of Ashtabula County is tremendous!

The 2017 Project of the Year Award was presented to the team which has been working on the Gateway Butterfly & Pollinator Garden in Conneaut, Ohio. Over the past year, they developed a pollinator/ butterfly garden as the third phase for the Outdoor Learning Center for the Conneaut City Public Schools. Over the past year, a lot of energy was devoted to installing the Butterfly and Pollinator Garden. This garden is 40’ x 60’ with raised beds, a bench for visitors and rock borders to define the paths that divide the garden into 6 smaller beds. It is an incredibly beautiful garden. This project has won the State Excellence Award from our State Master Gardener program. Our group will receive this award at the State Master Gardener Conference on Saturday September 30.

Gary Blake of Kingsville, Ohio was presented with the inaugural “Friend of the Ashtabula County Master Gardeners Award.” Gary has been assisting the Master Gardeners behind the scenes since his wife Carol became a Master Gardener in 2000. The Master Gardeners appreciate all the time and energy which he has provided behind the scenes.
And finally, Mike Tullai of Andover, Ohio was recognized as the 2017 Ashtabula County Master Gardener of the Year. This award is presented annually to a Master Gardener who has gone above and beyond and embodies the spirit of giving back to our community through horticulture outreach. Mike became a Master Gardener in 2015 and has already become a cornerstone of the group. In fact, Mike has already accumulated over 500 hours of service in the past two years. This is remarkable!

To close, I would like to share a quote from Mary Sarton who stated, “Everything that slows us down and forces patience, everything that sets us back into the slow circles of nature, is a help. Gardening is an instrument of grace.” 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](http://ashtabula.osu.edu/program-areas/agriculture-and-natural-resources/upcoming-educational-programs-deadlines)

2017 Ashtabula County Beef Banquet  
Saturday, November 11, 2017

Private Pesticide Applicator & Fertilizer Re-certification Sessions  
November 16, 2017 from 1:00 to 5:00 p.m. in Lake County  
January 12, 2018 from 8:00 to 12:00 noon in Ashtabula County  
February 2, 2018 from 8:00 to 12:00 noon in Geauga County  
February 9, 2018 from 10:00 to 3:00 p.m. in Portage County  
March 9, 2018 from 1:00 to 5:00 p.m. in Trumbull County

2018 Northeast Ohio Winter Agronomy School  
Wednesday February 21, 2018

2018 Ashtabula County Dairy Banquet  
Saturday, March 24, 2018

21st Annual Joe Bodnar Memorial Northern Classic Steer & Heifer Show  
Saturday, April 21, 2018
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Donate Crops To Support Charity

A tax strategy that helps local charities.

Donating crops, instead of money, can have significant advantages:

• The value of donated crops is not included on Schedule F, but the expenses are deductible on the form.
• There are no federal or state income taxes paid on the value of donated crops.
• There is no self employment tax paid on the value of donated crops.
• Yield records are not affected by the donation.
• Savings exist whether you itemize or take the standard deduction.

Keep The Money In Our Community

The primary mission of the Northern Trumbull County Community Foundation is to help in keeping our community strong not only for its current residents, but also for future generations. All donations are invested back into the community with this purpose in mind.

The Northern Trumbull County Community Foundation is an affiliate of the

COMMUNITY FOUNDATION
OF WESTERN PA & EASTERN OH

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