Hello, Northeast Ohio Counties!

Mud season is here again this week! We will have above average temps again this week, and with the rain and melting snow we will have soggy ground for the foreseeable future. Long range weather projections show that mud season will probably stick around longer this year as higher than average rain is expected for most of March, April, and May.

Enjoy the warm weather, stay safe and we hope to see you tomorrow at the Agronomy School!
Generation Rx: Safe Medication Practices for Life - Drug Abuse Prevention Training to be held on March 7 in Jefferson

To help bring awareness to dangers of misusing prescription medications, OSU Extension is sponsoring two “Generation Rx: Safe Medication Practices for Life - Drug Abuse Prevention” trainings on Wednesday, March 7, 2018. The first session will be held from 1:00 to 3:30 p.m. at the Ashtabula County Health Department located at 12 West Jefferson St. Jefferson, Ohio 44047. A second session will be held that evening from 6:30 to 8:00 p.m. at the Ashtabula County OSU Extension located at 39 Wall Street Jefferson, OH 44047.

The mission of Generation Rx is to educate people of all ages about the potential dangers of misusing prescription medications. In doing so, we strive to enhance medication safety among our youth, college students, other adults in our communities, and seniors. Prescription medications can help us live longer and healthier lives, but any medication has the potential to do harm – especially when misused.

During this training you will learn how to utilize the FREE educational tools on the Generation RX website to help you teach about safe medication practices. The tool kit offers materials community partners, teachers, volunteers, and professionals who are interested in learning how to use the Generation Rx Curriculum can use with children, teens, college students, adults, seniors, patients, and the workplace. This program is funded through a mini-grant provided by Ohio State University College of Pharmacy and Cardinal Health.

Pre-registration is required for this training and can be made by calling the Ashtabula County Extension office at 440-576-9008. Seats are limited, so register today! This program is sponsored by OSU Extension, the Ashtabula County Health Department, Cardinal Health and the OSU College of Pharmacy.

Rose Bill Introduced to Exempt Agriculture from CERCLA Air Emissions Reporting

A bipartisan group of eight U.S. senators have introduced a bill to exempt agricultural producers from reporting requirements under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). We’ve reported previously on the new mandate that would require livestock operations to report air emissions, the result of a U.S. Court of Appeals decision last year that struck down the EPA’s rule that exempted agriculture from the reporting requirements. The U.S. EPA has repeatedly requested the court for a delay of the new reporting mandate, now delayed until after May 1, 2018. The proposed legislation would establish a new exemption that would protect farmers from the upcoming reporting mandate.

Senator Deb Fischer (R-Neb.), a primary sponsor of the legislation, stated that “[t]hese reporting requirements were designed to apply to industrial pollution and toxic chemicals, not animal
waste on a farm or ranch.” Co-sponsor Joe Donnelly (D-Ind.) assured farmers that requiring them to “spend their time and money on reports that will go unused by EPA would be burdensome and needless.”

The text of the senators’ proposed Fair Agricultural Reporting Method (FARM) Act, S. 2421, is available at: https://www.fischer.senate.gov/public/_cache/files/400ea859-eb96-4846-89a8-e42836eefaee/edw18106.pdf

The proposal includes:

- A statement that CERCLA reporting does not apply to air emissions from animal waste, including decomposing animal waste, at a farm.
- A definition for “animal waste,” which means feces, urine, or other excrement, digestive emission, urea, or similar substances emitted by animals (including any form of livestock, poultry or fish), and including animal waste that is mixed or commingled with bedding, compost, feed, soil, or any other material typically found with such waste.
- A definition of “farm,” which means a site or area (including associated structures) that is used for the production of a crop or the raising or selling of animals (including any form of livestock, poultry, or fish) and under normal conditions, produces during a farm year any agricultural products with a total value equal to not less than $1,000.
- A statement that maintains the current exemption from CERCLA reporting for applications, storage and handling of registered pesticide products.

Senator Fischer introduced S.2421 on February 13 and the Senate has referred the bill to the Committee on Environment and Public Works.

68th Annual Ashtabula County Dairy Banquet to be held on Saturday, March 24

OSU Extension and the Ashtabula County Dairy Service Unit are pleased to announce the 68th Annual Dairy banquet will be held on Saturday, March 24, 2018 at the Jefferson Community Center located at 111 East Jefferson, Street in Jefferson, Ohio beginning promptly at 7 p.m.

The banquet program will consist of the crowning of the 2018 Dairy Princess; the presentation of production and 4-H awards; and the election of two members to the Dairy Service Unit Board. Tickets are $15 per person and can be purchased from Dairy Service Unit Board members, Tom Coltman of Wayne, Joel Baldwin of Sheffield; Jason Brinker of Rock Creek; Lindsey Gray of New Lyme, Lisa Kalas of Jefferson; and from David Marrison at the Ashtabula County Extension office at 39 Wall Street in Jefferson. Pre-sale tickets are required by March 18, 2018. For more information about this program contact the Ashtabula County Extension office at 440-576-9008.

Northeast Ohio Agriculture  
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In an age of persistently low commodity prices, growers and their CCAs are walking a tightrope in trying to find the agronomic and economic balance in fertility programs.

Antonio Mallarino, professor of nutrient management research and extension at Iowa State University, says that while nitrogen (N) fertilizer prices have declined substantially, phosphorus (P) and potassium (K) fertilizer prices have been more resilient, complicating decisions on fertility rates.

The more stubborn nature of P and K prices, he says, has tempted growers to cut application rates to save on production costs.

“There is no rational reason to maintain higher-than-optimum soil test levels,” says Mallarino, adding that when deciding to build-and-maintain or achieve sufficiency of soil fertility tests, growers and their CCAs must not only consider crop and fertilizer prices, but also soil tests and crop yield potential.

Brian Arnall, associate professor of soil and food crop nutrition at Oklahoma State University and author of the blog “Down and Dirty with NPK,” agrees that finding the balance between yield and economic returns is more difficult during periods of low grain prices.

While crop production practices can vary greatly across regions, Arnall stresses that the goal for producers and their CCAs is the same—to maximize economic returns from their P and K fertilizer investments. That may or may not include the goal of maximizing yields.

Arnall explains that while crop production gains may be achieved with nutrient replacement, the current market climate may not warrant replacement rates. Striking the balance, he stresses, requires growers and their CCAs to first identify the goal of either achieving sufficiency or building and maintaining soil nutrients.

**Sufficiency vs. build-and-maintain**

Unlike N that moves with water and generally must be replaced each growing season, nutrients like P and K are not water soluble and can build up in the soil over time. This gives growers the option of building up nutrient levels and using the fertilizer stored in the soil for future crops, thereby mitigating the risk of potential yield loss.

Building up P and K levels faster than economic optimum rates do at current crop prices, though, would likely not make economic sense in the current market environment, particularly for low-performing soils, Mallarino says.
“I don’t recommend a buildup of P or K rates with low or normal prices for low-testing soils,” Mallarino says. “With higher [crop] prices, it wouldn’t be bad to apply rates to maximize yield. But with low prices, you should try to get the optimum economic yield.”

Rather than building and maintaining P and K levels, Mallarino argues that growers and their CCAs should instead follow the sufficiency approach to maximize the economic return of each unit of P or K applied. Arnall agrees, adding that while fertilizing beyond sufficiency levels generally is not economically feasible, there are unique situations where building and maintaining P and K levels makes sense.

“The reason behind the build-and-maintain philosophy is that you build your soil test value to a level above critical so that if either (a) fertilizer prices were really high or (b) crop prices were low, or a combination of the two, you could reduce the amount of fertility that you paid for that season. There’s been very little data that shows that fertilizing beyond that level gains anything, even in high value,” he says. “But there are special circumstances. In irrigated corn, or even high-yielding irrigated wheat, potassium acts like a mobile nutrient on a sandy soil. In that case, you have to treat it differently. There are caveats for all of these. Nothing’s black and white. But unless prices go up, I don’t recommend anybody to add fertility where they’re already at a high level.”

Arnall notes that soil fertility levels in some areas of the country have been greatly depleted from record or near-record crop yields. In these instances as well, growers and their CCAs must decide to either build and maintain fertility rates or achieve sufficiency.

“The build-and-maintain approach is for the soil, not for the crop,” Arnall explains. “You’re fertilizing well beyond the crop’s needs. With sufficiency, you only apply enough nutrients to maximize yield to the crop. That won’t keep up with crop removal at high-yielding levels. There’s a breaking point for producers to go from a sufficiency to replacement depending on yields. If you’re doing sufficiency in a wheat crop, you actually can grow a 40-bushel [per acre] wheat crop, do the sufficiency, and still replace what’s being removed. But an 80-bushel wheat crop is removing more than the sufficiency recommendation. So there’s this tipping point.”

In situations where farmers have low-yielding crops and are struggling with low prices, some growers have stopped replacing fertilizer altogether, Arnall notes.

Economic returns of lower-yielding crops like wheat grown on marginal soils when crop prices are low, he explains, may not cover even basic fertility rates. Only in high-yielding environments can growers expect a return on sufficiency, he adds.
“Most producers in a low-yielding environment won’t fertilize because there’s only a 5% chance of return,” he says. “If it’s a low-value crop with low yield, they won’t do it. But for high-value, high-yield crops, that’s where you start to see people fertilizing for sufficiency. If we’re in a 70-bushel corn crop, they may pass on something that is 90% sufficient. But on the upper end of yields, I’ve not seen much change on fertility rates. For fields that get 250-bushel corn, 60-bushel beans, there’s not much change.”

Fields in the mid-range of yield potential are the gray area where the math on economic returns of sufficiency versus replacement becomes more difficult, Arnall points out.

“I’m seeing in that realm of 125- to 150-bushel corn, 30- to 40-bushel beans, 60-bushel wheat is where the consultants or producers may be shifting out of replacement for a year and may be just doing sufficiency,” he says.

*The tipping point*
Choosing between sufficient versus build-and-maintain for a fertility program is made isn’t as complicated as some growers and CCAs may expect. A sufficiency chart that outlines various crop yield and price scenarios helps define where the tipping point lies between choosing to replace P and K or mining the existing nutrients already in the soil.

The critical threshold in Oklahoma for replacing phosphorus is 30 ppm to 32 ppm in a Mehlich 3 soil test, Arnall notes, while the threshold for potassium is 125 ppm.

“In tight [profit] margins, look closely at the level you’re at on the sufficiency chart,” he says. “Is your soil at a point where you can be in drawdown? Then take advantage of drawdown. But if you’re below critical, then apply. No question whatsoever.”

Growers and CCAs should also not be overly concerned with the short term, Arnall says. Rather, fertility programs should be managed for the long term with the expectation that prices and/or yields will change in the future.

“One year of not replacing isn’t likely to see a soil test just tank. It takes longer,” Arnall explains. “On phosphorus, it takes us anywhere between 6 to 10 lb of P₂O₅, depending on the soil type, to
change the soil test by 1 ppm. That’s 30 bushels of corn. So if you don’t apply on those higher levels, you won’t see it just fall off the board in a year. But if you do this continuously, then you’re going to start seeing your soil test levels going down.”

In Iowa, Mallarino says the optimum P soil tests for corn and soybean producers is 16 to 20 ppm for the Bray-1 and colorimetric Melhich-3 test methods, 26 to 35 ppm for the Mehlich-ICP method, and 10 to 13 ppm for the Olsen method. The optimum interpretation category for K by both the ammonium-acetate and Mehlich-3 methods is 161 to 200 ppm.

Arnall encourages growers and CCAs to look at not just one season, but instead plan for a three- or four-year cycle and to look at soil tests over time. Some soils, he points out, can supply large amounts of P despite the crop removing more than what you applied. Other soils, however, can be quickly drawn down. Only through regular soil testing can the removal rate be accurately estimated.

**Soil testing**
To strike the economic balance of P and K fertility rates, Mallarino points out that it’s important to map the variability of soil nutrient levels and adjust rates accordingly. This important information can only be obtained through regular soil testing.
Mallarino cautions growers and CCAs against reducing P and K fertility rates across all field conditions.

“That’s not a sound management decision,” he says, adding that growers and CCAs should not reduce P and K rates in low-testing soils where yield increases and profits from fertilization are most likely, even with unfavorable prices. Rather, Mallarino recommends not fertilizing high-testing soils.
Furthermore, yield increases from P and K fertilization are much larger in low-testing soils versus high-testing soils, he adds. As soil test values increase, the size and likelihood of yield response falls, and yield increase becomes less likely. To identify low- versus high-testing soils, a good soil-sampling method like grid sampling or zone sampling will give the grower a more accurate view of the field compared with classic soil testing, he says. Combined with variable-rate technology, the grower can apply the right P and K levels within fields and target the most deficient field areas to get the highest possible return. Mallarino also recommends using yield maps from the previous two to four years, rather than relying on just the prior year’s yield map, in conjunction with soil tests to help define P and K application rates.

When applying, Mallarino cautions that banding P and K fertilizer is rarely more efficient than broadcasting in large areas of the U.S. Cutting fertilizer rates for low-testing soils when banding, he adds, will raise the risk of yield loss and future fertilization requirements.

**Other considerations**

Growers and their CCAs shouldn’t rely only on soil tests and yield maps when considering the economic realities of P and K applications. They must also balance other complicated issues like land ownership and risk to water quality.

For farmers renting farmland, the risk that comes with uncertain land tenure causes some producers to be more cautious when applying P and K. Should the grower have a buildup of P and K in the soil, Mallarino points out they could lose the investment they’ve made in their soil fertility if the land changes hands to another renter. To help lower that risk, Mallarino suggests applying rates that optimize yield in low-testing soils and temporarily lowering maintenance application rates to soils testing optimum, perhaps even to starter rates. Water quality and fertilizer sources with more variable P rates should also be considered, Mallarino adds.

“For P, you should also consider water quality impacts and remember that with fertilizer management, fertilizing high-testing soils or maintaining higher-than-needed soil test levels may impair water quality,” he notes. “With manure, use the P index to be sure that if excess P is applied, it doesn’t result in much P loss from fields and water quality impairment.” The bottom line, Mallarino stresses, is that deciding P and K fertility rates should be a rational decision. With crop prices at multi-year lows, Mallarino says taking the measured and planned approach to fertility and focusing efforts on low-testing soils lowers both the economic and environment risks.

Arnall adds that fertilizing beyond sufficiency in most cases only raises the risks to the grower. “With commodity prices the way they are, there’s very little data that shows that fertilizing beyond that level gains anything, even in high value,” he says.
Ashtabula County Master Gardeners’ Spring Gardening Program at Local Libraries in March

Even though it is still winter, it is not too early to think about spring. The Ashtabula County Master Gardeners would like to invite you to join them at libraries across Ashtabula County during March. During their gardening talks, the Master Gardeners will be sharing information on Fertilizers, Climate Change & Your Ohio Garden, and New Plants of Interest. Plenty of time will also be given for you to ask your gardening questions. The program locations and times are:

**Saturday, March 3, 2018**
Andover Public Library
10:00 to 12:00 noon
142 West Main Street
Andover, Ohio 44003
440-293-6792

**Thursday, March 15, 2018**
Henderson Memorial Library
6:00 to 8:00 p.m.
54 East Jefferson Street
Jefferson, Ohio 44047
440-576-3761

**Saturday, March 17, 2018**
Rock Creek Public Library
11:00 a.m. to 1:00 p.m.
2988 High Street
Rock Creek, Ohio 44084
440-563-3340

**Saturday, March 24, 2018**
Grand Valley Library
10:00 to 12:00 noon
1 North School Street
Orwell, Ohio 44076
440-437-6545

**Conneaut Public Library**
10:00 a.m. to 12:00 noon
304 Buffalo Street
Conneaut, Ohio 44030
440-593-1608

**Harbor-Topky Memorial Library**
11:30 a.m. to 1:30 p.m.
1633 Walnut Blvd
Ashtabula, Ohio 44004
440-964-9645

**Wednesday, March 28, 2018**
Kingsville Public Library
6:00 to 8:00 p.m.
6006 Academy Avenue
Kingsville, Ohio 44048
440-224-0239

These programs are free however space is limited. Please call your local library to reserve your spot! A program flyer can be accessed at: [http://ashtabula.osu.edu/program-areas/master-](http://ashtabula.osu.edu/program-areas/master-)
gardener-volunteers/upcoming-educational-programs. This flyer includes the phone numbers for the libraries. More information can also be received by calling the Ashtabula County Extension office at: 440-576-9008 for more details.

**Backyard Chicken Basics Program in Trumbull County on March 14 from 6-8pm**

It’s that time of year for those cute little fluff balls of chicks to arrive in many farm stores and you may be tempted to bring one or a dozen home. If you want to learn more about raising chickens at home before you make the jump, OSU Extension in Trumbull County will be offering a Backyard Chicken Basics program on March 14 from 6:00pm-8:00pm at our office in Cortland. Tim McDermott DVM and Lee Beers will be discussing how to choose chicken breeds, nutrition, zoning issues, and many other topics that will help you raise a healthy flock. Cost for this program is $15 per person and will include light refreshments and many handouts. To register for this program call our office at 330-638-6783.

**“Perils of Farming – Managing for the Unexpected” workshop to be held on Monday, February 26 in Williamsfield, Ohio**

To help farmers plan for unexpected, the Ashtabula County Extension office will be co-hosting a “Perils of Farming – Managing for the Unexpected” workshop on Monday, February 26, 2018 from 10:00 a.m. to 12:00 noon at the Williamsfield Community Center located at 5920 State Route 322 in Williamsfield, Ohio. This program is free and open to any farmer in northeast Ohio. Registration will begin at 9:37 a.m. Featured speakers will include: David Marrison from OSU Extension, Dennis Lenhart from HartLen Insurance and Frank Piper from ARMtech Insurance Services.

David Marrison, OSU Extension Educator will help identify the various perils which farm families need to be on the look-out for in 2018. Learn more about protecting your family business through business structure, insurance, and sound planning. Learn more about the new tax legislation, business structure, farm succession planning and how to identify the greatest risks to your operation. Volatile commodity prices, barn and combine fires, drought, excessive rain,
tornados, bear damage of crops, drug addiction, divorce, disability, taxes, lawsuits and disability were just a few of the unexpected issues which arose on local farms last year. Learn how to proactively plan for the “Oh-Crap” moments.

Dennis Lenhart from HartLen Insurance and Frank Piper, Ohio Claims Supervisor for ARMtech Insurance Services will teach the basics of reducing crop production risk through various crop insurance platforms. Learn the basics of crop insurance and how to determine what insurance is best for your operation. Learn more about the changes to prevented plant insurance and learn how to protect your bottom line from losses due to hail, vandalism, fire, lightning, or from damage during transportation. Special emphasis will also be given on insuring hay and forage crops. Hay producers will not want to miss this session!

At the conclusion of the meeting, producers will be treated to a delicious lunch catered by Bobbie Lahti Catering. This lunch is being sponsored by HartLen Insurance. There is no fee to attend this program. However, for planning purposes, we are asking that courtesy reservations be made by Thursday, February 22 by calling the Ashtabula County Extension office at 440-576-9008. This meeting does not constitute an endorsement by OSU Extension for any particular crop insurance product.

**Pesticide Container Recycling Available on February 21**
If you have a pile of empty pesticide containers, you will have an opportunity to recycle them for free on February 21, 2018 from 8am to 9:30am at the Williamsfield Community Center. GSP Ag Recycling will be there to collect your empty, triple-rinsed containers before the start of the NE Ohio Agronomy School. Only small containers will be accepted, so leave your empty IBC totes at home. For more information call Lee Beers at 330-638-6783.

**Ashtabula County Beekeepers Association to Hold Meeting on February 24**
The next meeting of the Ashtabula County Bee Keepers Association will be Saturday February 24, 2018 at the Ashtabula County Extension Office located at 39 Wall Street in Jefferson, Ohio. The meeting will begin with a Pot Luck Dinner at noon. Please bring a dish/dessert to share. The meeting will begin at 1:00 p.m. with State Representative John Patterson speaking on House Bill 392 and the Ohio Sensitive Crop Registry. A beginning bee keeper class is also being planned for March 10, 2018. Contact Sharon Riccio at srriccio@yahoo.com or call 440-576-8818 to register or for more information.
**Chili Cook-Off & Family Fun Night to be held on February 23 in Jefferson**

The Ashtabula County 4-H Camp Counselors will be holding their 4th Annual Chili Cook Off and Family Fun Night on Friday, February 23 at the Ashtabula County Fairgrounds in the 4-H Expo building. The event will be held from 5:30 to 7:30 p.m. and your $5 ticket includes chili, cornbread, dessert and beverage and a vote for your favorite chili. The evening will be full of fun activities for the whole family. There will also be a basket palooza. Pre-sale tickets can be purchase from any Camp Counselor or at the O.S.U Extension Office. Enjoy a variety of chili while helping a group of hard working youth.

**Northeast Ohio Winter Grape School Slated for March 1, 2018**

OSU Extension and the OARDC Ashtabula Agricultural Research Station are pleased to be hosting the Northeast Ohio Winter Grape School on Thursday, March 1, 2018 from 9:00 until 12:00 noon at St. Joseph Vineyards located at 7882 Warner Rd. Madison, Ohio 44057.

The featured speakers for this event include Dr. Melanie Lewis-Ivey, Fruit Pathologist, OSU-OARDC, Department of Plant Pathology; Andrew Kirk, Research Specialist for Ohio State University, OARDC Ashtabula Agricultural Research Station; and Thomas deHaas - OSU Extension Educator for Lake County. Session topics include Integrated Pest Management Update for Ohio Vineyards, Core Pesticide Safety, Personal Protective Equipment, Sanitation, and Sensors in the Vineyard.

The registration fee for this program is $15.00/per person. Pre-registration is required by Thursday, February 22 with a late registration of an additional $10. Registration includes refreshments, speaker travel expenses, pesticide education credit and program handouts.

Participants can register on-line at: [http://www.cvent.com/d/6tqv5l](http://www.cvent.com/d/6tqv5l). For those unable to register online: Make checks payable to OSU Lake County Extension, and mail to Lake County Extension office, 99 East Erie Street, Painesville, Ohio 44077. Contact the Lake County Extension office at 440-350-2269 for more information.

**2018 4-H Carnival to be held March 1st**

The annual 4-H Carnival will be held on Thursday, March 1st prior to Ashtabula County 4-H Week at the Expo Building at the County Fairgrounds in Jefferson from 6-8 p.m. This event is open to all to encourage families who are interested in 4-H to come and learn about the programs 4-H has to offer.

The 4-H Carnival will be filled with activities and games for youth to participate in with their family and friends. Fun carnival food, like hot dogs, popcorn, and snow cones will be available by donation for children of all ages. Exciting and interactive activities and games will be offered representing each 4-H program area at the event where questions on projects can be answered by an advisor or species chair that has knowledge in the project area.
If you can’t make it to the 4-H Carnival, stop by a local 4-H Community Encounter. Learn more about 4-H, pet an animal and talk to a 4-H member at one of the local events.

**Saturday, March 3** · 9:30 a.m.-1:00 p.m. at Ashtabula Tractor Supply
**Monday, March 5** · 6:00-8:00 p.m. at Ashtabula Library
**Tuesday, March 6** · 5:00-6:30 p.m. at Andover Library and 6:00-8:00 p.m. at Henderson Library (Jefferson)
**Wednesday, March 7** · 5:00-7:00 p.m. at Conneaut Library and 6:30-8:00 p.m. at Geneva Library
**Thursday, March 8** · 5:00 – 8:00 p.m. at Rome Fire Hall

Ohio 4-H and Ashtabula County 4-H Club information will be available at all events.

For more information on 4-H programs in Ashtabula County, please contact Jenna Hoyt at 440-576-9008 or via email at hoyt.88@osu.edu or visit our website at www.ashtabula.osu.edu and visit the 4-H Youth Development page.

**Northeast Ohio Calving Workshop to be held on February 22, 2018 in Jefferson, Ohio**

OSU Extension, the Ashtabula County Cattlemen’s Association and the Ashtabula County Dairy Service Unit would like to invite Northeast Ohio Beef & Dairy producers to the “**Northeast Ohio Calving Workshop**” on Thursday, February 22, 2018 from 6:30 to 8:30 p.m. at the Ashtabula County Fairgrounds located at 127 North Elm Street in Jefferson, Ohio.

Calving issues cause stress and economic loss for many northeast Ohio dairy and beef operations each year. To help producers increase their calving management skills, we have invited Dr. Gustavo Schuenemann (OSU Extension Dairy Veterinarian) to share his calving expertise. This intensive clinic will offer dairy and beef producers calving management knowledge in a face-to-face and hands-on environment. Topics will include: what is normal and what is abnormal in calving, techniques for assisting delivery, trouble shooting delivery problems, factors causing calving difficulties, post-delivery problems, when to call for professional help, and the post-calving management & health.

The clinic includes about 1 hour of classroom instruction followed by 1 hour of hands-on demonstration. Participants will practice delivery techniques and newborn care management practices using a calving simulator developed by Dr. Schuenemann. This hands-on course is free and open to all dairy and beef producers in Northeast Ohio. 4-H and FFA youth will also gain valuable experience from this workshop.

No registration is required for this event and light refreshments will be served. A program flyer can be found at: [http://go.osu.edu/ne-events](http://go.osu.edu/ne-events) More information can be received by calling the
Ashtabula County Extension office at 440-576-9008. Do not miss this chance to increase your ability to handle the problem calving situations which challenge us during calving season.

2018-2019 Ashtabula County Beef Scholarships
Applications Available
OSU Extension and the Ashtabula County Cattlemen’s Association are pleased to announce they will be awarding two youth beef scholarships for the 2018-2019 school year. One $1,000 scholarship will be awarded to a deserving 2018 High School Senior who will be attending an accredited full four year college or an accredited two year technical institute in 2018-2019. In addition, one $500 scholarship will be awarded to a current College Student who is currently attending an accredited full four year college or an accredited two year technical institute.

Applicants must be resident of Ashtabula County. The first preference by the Ashtabula County Cattlemen’s Association is the scholarships be awarded to deserving students who have been involved in the beef industry as a youth. Examples of this could include: working on a family beef operation; involved with a beef project through 4-H or FFA; or works on a local beef farm. The second preference for the scholarship recipients would be awarded to students who are currently or will be studying a beef related field in accredited full four year college or an accredited two year technical institute. Previous winners of the $1,000 High School Senior Scholarship are eligible to apply for the $500 College Scholarship. However, the $500 college scholarship can only be received once by a student during their college career.

Applications must be received by the Ashtabula County Cattlemen’s Association by Monday, April 16, 2018 by 4:30 p.m. for consideration for the scholarship. No late applications will be considered. The application can be obtained at: http://go.osu.edu/ne-events. Additional information can be obtained by calling the Ashtabula County Extension office at 440-576-9008.

Hydrangea School to be Held on April 26, 2018
The Ashtabula County Extension office is pleased to be offering a Hydrangea School on Thursday, April 26, 2018 at the Ashtabula County Extension Office located at 39 Wall Street in Jefferson, Ohio from 6:30 to 8:30 p.m. Join OSU Extension Educator Eric Barrett to discover the world of hydrangeas. Learn about types, care, pruning and bloom times. You’ll receive a quick reference chart to take to the garden center and a hydrangea plant to take home. The registration fee for this workshop is $30 per person. Please make checks payable to OSU Extension. Registration includes handouts, light refreshments and a hydrangea plant to take home for your landscape. Please mail completed registration form to OSU Extension, 39 Wall Street, Jefferson, Ohio 44047. Due to space limitations, this program will be limited to the first 50 registrants. First come, first served basis. For questions, please call 440-576-9008. A registration flyer can also be obtained at: flyer can be found at: http://go.osu.edu/ne-events.

Lee’s Monthly News Column
Hello Trumbull County! The warm weather forecasted for this week has made me realize that I need to get moving on some equipment repairs because haying season will be here before I

Northeast Ohio Agriculture

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know it. As I think about this upcoming growing season, I find myself reflecting on last season and what I could have done better or more efficiently. I am going to make a few changes this year to not only improve the productivity of our land with soil amendments, but I am also going to make myself more productive by handling the hay fewer times—my shoulder will thank me for these changes.

As you head into this growing season, I hope you are also thinking about what you can do to improve your productivity and efficiency. Given the tough market situations, those improvements may mean cutting some unnecessary expenses to become more profitable. Discussions about the success of a farm is most often expressed in bushels per acre, hundred weight of milk, or tons per acre. There is a sense of competitiveness that comes with trying to beat your neighbors in yield, but the focus should be on maximizing profit for your farm. It would be nice to get 250 bushel corn, but what would your fertilizer bill look like to achieve it?

You will hear us in Extension talk about soil testing over and over again for good reason—without recent soil tests you could very well be spreading money on your fields that is not needed. Fertilizer calculators are available to help you determine how much nitrogen to apply to maximize your profits. Ohio State University and other Midwestern states provide data to the Iowa State calculator found here: http://cnrc.agron.iastate.edu. This calculator uses the price you expect to be paid for your corn and the price you are paying for nitrogen to calculate the best amount of nitrogen to apply to maximize your profit, without going overboard and wasting time or money with excessive nitrogen application.

Fertilizer is just one way that you may be able to cut back on expenses, but seed, seed treatments, and pest programs should all be given a second look. If you are trying to kill marestail with glyphosate for the third year in a row without success, you may want to alter your weed control program. And the same can be said for many seed treatments. If you have questions about how or where to cut back, give me a call and I can help you with those decisions. Here’s to a profitable 2018 growing season!

It’s not too late to register for our annual Northeast Ohio Agronomy School on February 21, 2018 at the Williamsfield Community Center from 9:00am-3:30pm. We have a great lineup of speakers covering a variety of topics including weed control strategies, precision planting, soil compaction, soil health, finances, and other information that may help you succeed in 2018. Pesticide applicator credits will be available for PA and OH pesticide license holders who attend. Fertilizer applicator credits and Certified Crop Advisor credits will also be available. Cost for this all-day event is $15 per person and includes a lunch provided by WI Miller and Sons. To register call the Ashtabula County Extension office at 440-576-9008, or visit our website for more information.

If you are thinking about taking the Ohio Department of Agriculture’s exam to get your pesticide applicators license we will be offering a New Applicator Training session on Tuesday, March 13, 2018 from 1:00pm-4:30pm that will help you prepare for the test. We will cover everything you need to know for the CORE exam and will touch upon a few categories as well. Cost for this
program is $35 per person and includes all study materials needed to prepare for the CORE exams.

Pretty soon you will start to see those cute little fluff balls of chicks arrive in many farm stores and you may be tempted to bring one or a dozen home. If you want to learn more about raising chickens at home before you make the jump OSU Extension in Trumbull County will be offering a Backyard Chicken Basics program on March 14 from 6:00pm-8:00pm at our office in Cortland. Tim McDermott DVM and I will be discussing how to choose chicken breeds, nutrition, zoning issues, and many other topics that will help you raise a healthy flock. Cost for this program is $15 per person and will include light refreshments and many handouts. To register for this program call our office at 330-638-6783.

For more information about gardening, the Master Gardener program, or any other program, call the OSU Trumbull County Extension Office at 330-638-6783 or visit trumbull.osu.edu. Don’t forget to check out and “Like" OSU Extension Trumbull County’s Facebook page for current programs and up to date information.

**David’s Weekly News Column**

For Publication in the Jefferson Gazette on February 21 & Ashtabula County Star Beacon on February 25

Hello Ashtabula County! It is no secret that farming is a very risky business - full of unexpected events which can impact the viability of your farm business. Proactively identifying the risks and then taking steps to reduce their impact can be the difference between a business thriving versus surviving.

To help farmers plan for unexpected, the Ashtabula County Extension office will be co-hosting a “**Perils of Farming – Managing for the Unexpected**” workshop on Monday, February 26, 2018 from 10:00 a.m. to 12:00 noon at the Williamsfield Community Center located at 5920 State Route 322 in Williamsfield, Ohio. This program is free and open to any farmer in northeast Ohio. Registration will begin at 9:37 a.m.

David Marrison, OSU Extension Educator will help identify the various perils which farm families need to be on the watch-out for in 2018. Learn more about protecting your family business through business structure, insurance and sound planning. Learn more about the new tax legislation, business structure, farm succession planning and how to identify the greatest risks to your operation. Extreme weather conditions, volatile commodity prices, barn and combine fires, drought, excessive rain, bear damage of crops, drug addiction, divorce, disability, tax law changes, lawsuits and disability are just a few of the unexpected issues which could arise. Learn how to plan for the “Oh-Crap” moments.

Dennis Lenhart from HartLen Insurance and Frank Piper, Ohio Claims Supervisor for ARMtech Insurance Services will teach the basics of reducing crop production risk through the various crop insurance platforms. Learn the basics of crop insurance and how determine what
insurance is best for your operation. Learn about the changes to prevented plant insurance and learn how to protect your bottom line from losses due to hail, vandalism, fire, lightning, and or damage during transportation. Special emphasis will be given on explaining how farmers can insure their hay crops better than the past.

At the conclusion of the meeting, producers will be treated to a delicious lunch catered by Bobbie Lahti Catering. This lunch is being sponsored by HartLen Insurance. There is no fee to attend this program. However, for planning purposes, we are asking that courtesy reservations be made by Thursday, February 22 by calling the Ashtabula County Extension office at 440-576-9008. This meeting does not constitute an endorsement by OSU Extension for any particular crop insurance product.

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Speaking of oh-crap moments. I would classify the explosion of prescription drug abuse as a huge oh-crap moment for our society. To help bring awareness to this issue OSU Extension is pleased to be sponsoring the “Generation Rx: Safe Medication Practices for Life - Drug Abuse Prevention” training on Wednesday, March 7, 2018. This training will be held two times on this day.

The first session will be held from 1:00 to 3:30 p.m. at the Ashtabula County Health Department located at 12 West Jefferson St. Jefferson, Ohio 44047. A second session will be held that evening from 6:30 to 8:00 p.m. at the Ashtabula County OSU Extension located at 39 Wall Street Jefferson, OH 44047.

The mission of Generation Rx is to educate people of all ages about the potential dangers of misusing prescription medications. In doing so, we strive to enhance medication safety among our youth, college students, other adults in our communities, and seniors. Prescription medications can help us live longer and healthier lives, but any medication has the potential to do harm – especially when misused.

During this training you will learn how to utilize the FREE educational tools on the Generation RX website to help you teach about safe medication practices. The tool kit offers materials community partners, teachers, volunteers, and professionals who are interested in learning how to use the Generation Rx Curriculum can use with children, teens, college students, adults, seniors, patients, and the workplace. This program is funded through a mini-grant provided by Ohio State University College of Pharmacy and Cardinal Health.

Pre-registration is required for this training and can be made by calling the Ashtabula County Extension office at 440-576-9008. Seats are limited, so register today! This program is sponsored by OSU Extension, the Ashtabula County Health Department, Cardinal Health and the OSU College of Pharmacy.

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To close I would like to share a quote from Jamais Cascio who stated, “Resilience is all about being able to overcome the unexpected. Sustainability is about survival. The goal of resilience is to thrive.” 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

Women in Agriculture Programs
March 17, 2018

Private Pesticide Applicator & Fertilizer Re-certification Sessions
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 Winter Beef School (Calving School)
Thursday, February 22, 2018

Perils of Farming – Managing for the Unexpected
Monday, February 26, 2018 from 10-12 noon

Winter Grape School
March 1, 2018 at St Joseph’s Vineyard

New Pesticide Applicator Training
Trumbull County Extension Office 1-4:30pm
Tuesday March 13, 2018

Backyard Chickens
Trumbull County Extension Office 6-8pm
Wednesday, March 14, 2018

Shiitake Mushroom Program (SOLD OUT)
Ashtabula County Extension Office 6:00 – 7:30 p.m.
Thursday, March 15, 2018

2018 Ashtabula County Dairy Banquet
Saturday, March 24, 2018

21st Annual Joe Bodnar Memorial Northern Classic Steer & Heifer Show
Saturday, April 21, 2018

Hydrangea Workshop
Thursday, April 26, 2018

Northeast Ohio Agriculture  
OHIO STATE UNIVERSITY EXTENSION  
Ashtabula and Trumbull Counties
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<th><strong>David Marrison</strong></th>
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<td>Trumbull County Extension Office</td>
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<tr>
<td>39 Wall Street</td>
<td>520 West Main Street</td>
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<tr>
<td>Jefferson, OH 44047</td>
<td>Cortland, OH 44410</td>
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<tr>
<td>440-576-9008</td>
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“Perils of Farming – Managing for the Unexpected” Workshop

Monday, February 26, 2018
10:00 a.m. to 12:00 noon
Lunch to follow

Williamsfield Community Center
5920 State Route 322
Williamsfield, Ohio 44093

It is no secret that farming is a very risky business - full of unexpected events which can impact the viability of your farm business. Being proactive to identify these risks can be the difference between a farm business thriving versus just surviving. This program will help farmers plan for unexpected.

Oh-Crap Planning for 2018 - David Marrison, OSU Extension Educator will help identify the various perils which farm families need to be on the look-out for in 2018. Learn more about protecting your family business through business structure, insurance, and sound planning. Learn more about the new tax legislation, business structure, farm succession planning and how to identify the greatest risks to your operation. Volatile commodity prices, barn and combine fires, drought, excessive rain, tornados, bear damage of crops, drug addiction, divorce, disability, taxes, lawsuits and disability were just a few of the unexpected issues which arose on local farms last year. Learn how to proactively plan for the “Oh-Crap” moments.

2018 Crop Insurance Update - Dennis Lenhart from HartLen Insurance and Frank Piper, Ohio Claims Supervisor for ARMtech Insurance Services will teach the basics of reducing crop production risk through the various crop insurance platforms. Learn the basics of crop insurance and how to determine what insurance is best for your operation. Learn more about the changes to prevented plant insurance and learn how to protect your bottom line from losses due to hail, vandalism, fire, lightning, or from damage during transportation. Special emphasis will also be given on insuring hay and forage crops. Hay producers will not want to miss this session!

This program is free and open to any farmer in northeast Ohio. Registration will begin at 9:37 a.m.

There is no charge to attend this meeting. However, for planning purposes, we are asking that courtesy reservations be made by Thursday, February 22. Please call the Ashtabula County Extension office at 440-576-9008 to RSVP. This meeting is not just for corn and soybean growers but also for grape, apple, nursery, and forage crop producers! At the conclusion of the meeting, producers will be treated to a delicious lunch catered by Bobbie Lahti Catering. This lunch and workshop costs are generously sponsored by HartLen Insurance.
Calving issues cause stress and economic loss for many northeast Ohio dairy and beef operations each year. To help producers increase their calving management skills, we have invited Dr. Gustavo Schuenemann (OSU Extension Dairy Veterinarian) to share his calving expertise. This intensive clinic will offer dairy and beef producers calving management knowledge in a face-to-face and hands-on environment. Topics will include: what is normal and what is abnormal in calving, techniques for assisting delivery, trouble shooting delivery problems, factors causing calving difficulties, post-delivery problems, when to call for professional help, and the post-calving management & health.

The clinic includes about 1 hour of classroom instruction followed by 1 hour of hands-on demonstration. Participants will practice delivery techniques and newborn care management practices using a calving simulator developed by Dr. Schuenemann. This hands-on course is free and open to all dairy and beef producers in Northeast Ohio. 4-H and FFA youth will also gain valuable experience from this workshop.

No registration is required. More information about this program can be obtained by calling the Ashtabula County Extension office at 440-576-9008. Do not miss this chance to increase your ability to handle the problem calving situations which challenge us during calving season.
Join OSU Extension on March 14, 2018 for an evening to learn about how to get started with chickens in your backyard. OSU Extension Educators Tim McDermott DVM, and Lee Beers will discuss breed selection, safe egg handling, chicken health, zoning requirements, housing, nutrition and other topics that will help you successfully raise chickens. Cost for this program is $15/person and includes many handouts and light refreshments. To register for this event, please complete the registration form on the back and mail with payment to OSU Extension, Trumbull County, 520 West Main St., Cortland, OH 44410. Please make checks payable to OSU Extension. Pre-registration is requested by March 7, 2018. Questions? Call OSU Extension at 330-638-6783.
Backyard Chicken Basics
March 14, 2018

Name ____________________________________________

Address ____________________________________________

City __________________  State_____  Zip_________________

Phone ____________________Email ______________________

Number of People Attending: __________ X $15/person __________

_____________________________________________________

Please mail this completed form with payment to the below address before March 7, 2018. Make checks payable to OSU Extension.

OSU Extension Trumbull County, 520 West Main Street, Cortland, OH 44410

For questions, contact Lee Beers at 330-638-6783 or by email at beers.66@osu.edu
Fertilizer Applicator Certification Training

Do you apply fertilizer to 50 acres or more for crops that are primarily for sale? If so, you are required by Ohio law to attend a training session or take a test to become certified. OSU Extension offices in Ashtabula and Trumbull Counties are offering training sessions (no test) that will meet all certification requirements. Pre-Registration is required a week in advance. Cost for this training session is $35/person and includes training materials, and handouts. To register, complete the back portion of this flyer and mail with check to the location you plan to attend. Please make checks payable to OSU Extension.

Wednesday, February 14, 2018
6 – 9 p.m.
Pre-register by February 7
Trumbull County Ag Center
520 West Main St
Cortland, OH 44410

Monday, March 12, 2018
6– 9 p.m.
Pre-register by March 5
OSU Extension Ashtabula County
39 Wall Street
Jefferson, OH 44047

$35/Person
2018 Fertilizer Applicator Training
Ashtabula and Trumbull Counties

Name ______________________________________________

Address _____________________________________________

City __________________  State_____  Zip_________________

Phone ____________________Email  ____________________

Number of People Attending: __________ X $35/person __________

Please make checks payable to: OSU Extension

Please mail to the location you plan to attend.

OSU Extension Trumbull County, 520 West Main Street, Cortland, OH 44410

OSU Extension Ashtabula County, 39 Wall Street, Jefferson, OH 44047

For questions, contact Lee Beers at 330-638-6783 or by email at beers.66@osu.edu