Hello Northeast Ohio Counties!

Happy Thanksgiving!

With harvest just about finished up throughout the region, hopefully you will be able to have a relaxing holiday with family and friends. I know you dairy farmers don’t get a day off but take an extra slice of pie to the barn to enjoy. Just a reminder that our offices are closed on Friday.

Stay safe!

Lee Beers
Trumbull County Extension Educator

Andrew Holden
Ashtabula County Extension Educator
How Reliable will this Year's Test Plot Data Be?

Ohio's corn and soybean crops experienced exceptional growing conditions in 2019, including record rainfall in May and June followed by drier than normal August and September conditions in many areas. As a result of the early season saturated soils, corn and soybean planting was delayed across most of the state. For soybean, planting date is the most important cultural practice that influences grain yield. Planting date is also a major factor affecting crop performance and profitability in corn. The persistent rains and saturated soils caused localized ponding and flooding. These conditions resulted in root damage and N loss that led to uneven crop growth and development between and within fields. Agronomists often question the value of test plot data when adverse growing conditions severely limit yield potential.

With corn, is data from test plots planted in June of questionable value since corn is typically planted by mid-May for optimal crop performance? According to USDA-NASS estimates, 50% of Ohio’s corn acreage was planted after June 9, 2019. When selecting corn hybrids to plant in 2020, using May planting dates is preferable especially when comparing hybrids of similar relative maturity (and GDD requirements). Nevertheless, if hybrids have performed well in June as well as in May, they demonstrate resiliency that should be considered in hybrid selection. Major planting delays and replanting due to erratic weather conditions (excessive spring rainfall) occur about every three to four years in Ohio (https://agcrops.osu.edu/newsletter/corn-newsletter/2019-12/delayed-planting-effects-corn-yield-%E2%80%9Chistorical%E2%80%9D-perspective), so hybrids that perform well when planted on both normal and late planting dates should not be overlooked.

The validity of test plot results depends primarily on whether effects of the varied stress conditions are uniform across test plots. If not, test plot data may be questionable. To be certain that effects of stress were fairly uniform, it would be necessary to monitor test plots on a regular basis to determine crop response to
the various stresses as they occurred; however, such monitoring was probably unlikely in many test plot fields.

Another problem with test plot results is that the various yield limiting factors may accentuate the natural "variability" already existing in the field, and may thereby further "mask" the true treatment effects that are being compared. Stress conditions like the ponding and saturated soils this year coupled with slight differences in soil organic matter, drainage, weed control, etc. across a field may magnify differences in crop performance. If test plot results include a coefficient of variance (CV) value, the CV can be used to help understand the variability among test plots. CV is an indicator of data uniformity. Larger CVs indicate that the data were less uniform possibly due to environmental variability. Lower CVs indicate that the data were more uniform.

If one assumes that the varied stress conditions affected test plots uniformly within a field, then interpretation of test plot data becomes an issue. This issue can be especially relevant when evaluating results of hybrid and cultivar performance trials affected by excessive soil moisture. Did a hybrid or cultivar yield well under saturated soils because it genuinely possessed some flooding tolerance or because it was planted in better drained areas of the field? This year we had more than 30 bu/A differences in plot yield between hybrid entries planted at different locations within a field that are related to soil drainage and N loss. Usually there are striking visual differences between such plots associated with plant height and overall plant health but differences are not always pronounced.

Test plot information this year can still be very useful but take precautions. Results from single on-farm strip tests should not be used to make a decision on adoption of a treatment or variety. Even replicated data from a single test site should be avoided, especially if the site was characterized by abnormal growing conditions. Use test plot data from multiple sites (and preferably from at least 2 years of testing) and inquire about the weather patterns and conditions associated with the results. Look for consistency in a product or cultivar's performance across a range of environmental conditions.

Reference:
Potassium availability: synchronizing nutrient supply and plant demand through 4R nutrient stewardship
By John D. Jones
Source: https://dl.sciencesocieties.org/publications/cns/articles/0/0/cs2019.52.0602

Plant-available potassium (K) in the soil only represents a small fraction of total soil K. Efforts to better predict crop response to K fertilization highlight the dynamic nature of processes regulating the supply of K from the soil to growing crops. The 4R nutrient stewardship principles of the right K source applied at the right rate at the right time and in the right place interact with inherent soil properties to optimize K availability. Discussing K availability for crops may be opening a can of worms, but … let’s go fishing! Potassium is a fascinating chemical constituent of soil that has integral roles in plant physiology that influence crop yield and quality. Predicting the availability of soil K and the yield response of crops to K fertilization is a complex subject that requires sufficient background. This article will address (1) the importance of K for crop growth and development, (2) the factors affecting soil K availability demonstrated in research, and (3) how 4R Nutrient Stewardship strategies can influence K management.

Potassium in crops and soils
Unlike nitrogen (N) and phosphorus (P), K does not occur in soil and plants in an organic form but as a K⁺ ion instead. In soils, the common practice is to identify K as either being in the soil solution (solution K), located on cation exchange sites of minerals or organic matter (exchangeable K), located between the interlayers of phyllosilicate soil clays (interlayer K), or as a structural component of potassium-bearing minerals.

Potassium-deficient corn (left) and wheat (right) with older leaf margins showing chlorosis and necrotic, dead tissue. Source: IPNI.
minerals (structural K). The sum of these components reflects the total soil K content. Potassium does occur within soil microbes; however, this fraction is relatively small compared with others.

Potassium’s occurrence in ionic form means that it is crucial for physiological processes that require a balance of electric charge between anions and cations in both plants and animals. Potassium ion concentrations in the plant regulate osmotic potential and water influx, protein synthesis, enzyme activation, cell integrity, disease tolerance, and stomatal opening. As such, crop deficiency of K can inhibit photosynthetic activity, reduce water use efficiency, and ultimately reduce yield and harvested crop quality (Pettigrew, 2008). As a function of the high mobility of K in plant tissue, deficiency symptoms can vary by crop and time of year. Cereals, such as corn or wheat, will show chlorosis on older leaf margins. Soybean can show similar signs; however late-season deficiency symptoms can be seen in the upper canopy when early-season root growth was inhibited. Fruit tree crops will show smaller yellow leaves and reduced fruit size, shelf life, and overall quality (Drahorad, 1999; Zekri and Obreza, 2013). Cell integrity and photosynthesis rely on adequate K concentrations, and chlorosis or necrosis of vegetative tissue and impairment of reproductive organs across many crops will be telltale signs of K inadequacies.

Potassium contends with N for sheer amount taken up by the plant. Grain crops like corn, soybean, and wheat can uptake 1.4, 2.3, and 2.0 lb K₂O/bu harvested, respectively. In general, when greater amounts of biomass are harvested, more K is removed from a field and leads to a decline in soil-test K. Forage crops, such as alfalfa, have been recently reported to remove from 149 lb K/ac/year to 239 lb K/ac/year across multiple locations (Jungers et al., 2019). Russet potatoes have been shown to remove 240 lb K₂O/ac (Stark et al., 2004) and can take up 5 to 14 lb K₂O/ac/day through approximately 80 days. Corn silage at 65% moisture can remove 9 lb K₂O/ton of silage while corn and soybean grain at 15% moisture can remove 0.22 and 1.2 lb of K₂O/ac, respectively (Mallarino et al., 2013). If crop residues remain in the field, tillage operations and type of crop may influence the rate of K release back to the soil (Oltmans and Mallarino, 2015).

Potassium uptake and residue management contribute to potential availability of soil K for the following crop. However, soil properties such as clay content (soil texture), mineralogy (soil parent material), porosity (soil structure), cation exchange capacity (CEC), and organic matter content define the quantity and intensity of K availability. These properties determine the amount of aeration in the root zone, water-holding capacity, negative exchange sites available for cations, and ultimately, the soil-test K. As K travels to crop roots primarily by diffusion, any soil property that facilitates soil solution movement will affect K diffusion. Potassium diffusion requires optimum moisture, temperature, and a gradient wherein the K moves from areas of high concentration to low concentrations, generally found near active roots (Sparks, 1987).
Soil management that influences any of these properties can limit K availability and inhibit optimum use of soil K, and vigilant monitoring for K deficiencies when crops are drought stressed is worthwhile.

Making potassium recommendations
Similar to other immobile crop-essential nutrients in soil, K application recommendations are built upon the correlation of extractable soil K to crop yield or nutrient uptake as well as the calibration of K applications to crop yield response at varying levels of soil K concentration. These processes define the critical concentration of K, typically a range of soil-test K below which a yield response to K fertilization is likely and above which a yield response is not likely. This system may only take into account extracted K concentration to determine rates.

Soil properties that are not represented in a routine soil extraction can limit K availability and pose a challenge for the accuracy of predicting a crop response to soil-test K. Mineralogy is a great example. Soil phyllosilicate minerals (phyllo is the Greek word for “sheets” with silicon as a central atom in the repeating structures) have repeating sheets with surfaces that have enough charge to attract K⁺ ions. These are aligned in layers with spaces between them where water and nutrients can reside and specifically where K is attracted to negative charges produced within the structure of the minerals. In North Dakota, Breker et al. (2019) identified the ratio of an expansible mineral, smectite, to another 2:1 phyllosilicate, illite, as an additional factor to soil-test K for identifying different critical levels in soil. They reported a critical level of 200 ppm K when smectite/illite ratios were above 3.5, whereas below that ratio, the critical level was 130 ppm K. Greater amounts of smectite, the mineral that retains K in the interlayer spaces when dehydrated, resulted in a need for higher soil-test K for optimum crop yield. Soil CEC has been considered in K recommendations for years in the eastern Corn Belt (Vitosh et al., 1995) where K rates are determined by soil-test K, crop-specific yield and removal, and CEC.

Intersection of 4Rs and potassium availability factors

Source
While the diversity of K sources available for crops is less than N or P, the importance of utilizing the right source for each individual cropping system is no less important. The majority of K fertilizer used in North America is potassium chloride (KCl), which is mined as the mineral sylvinitite and then processed with a final analysis of 0-0-60 to 62. It is important to distinguish between discussing soil K and the K₂O content of fertilizer (K × 1.2 = K₂O). Other sources of K are potassium sulfate (50 to 52% K₂O), potassium nitrate (44% K₂O), potassium thiosulfate (25% K₂O), potassium carbonate (<68% K₂O), and Langbeinite (21 to 22% K₂O). Fertilizer product properties that should be considered are K content, solubility, companion anions, particle size, and companion nutrients, which may be companion anions or cations such as Mg²⁺. After K fertilizers
are applied to the soil, the granule dissolved releases $K^+$ and the companion ion. While the K supplied to the soil by multiple sources is equivalent on a mass basis, companion anions such as $Cl^-$ or $NO_3^-$ may damage seedlings or growing crops that are susceptible to high salt concentrations. In Minnesota, Kaiser and Rubin (2013) assessed salt tolerance of young corn plants in contrasting soils and demonstrated that coarse-textured soils are of more concern than fine, higher-CEC soils when considering potential salt damage.

Rate
Agronomic and economic optimum K rates are a function of the soil-test correlation and calibration processes and reflect fertility programs that use the “sufficiency” or “maintain” approach. Potassium rate recommendations for specific crops in specific soils reflect the factors that influence the capacity for soil to supply and the crop to take up K. Different physiographic regions use varying factors when determining rate recommendations. Identifying if soil-test recommendations in your region consider factors beyond K levels is important. Assessing your fields for soil properties that may influence K availability will be critical to determining application rate. It is always valuable to contact the agronomists who conducted the experiments to understand how influential properties like CEC or mineralogy impact crop response to K applications tested.

Time
Potassium availability is not uniform throughout the year. Fluctuations in water content, temperature, and active roots influence soil-test K measurements and availability. Consistent collection of soil samples at the same time of the year and with similar field conditions is critical. Additionally, K uptake will vary by crop. Bender et al. (2015) identified peak K uptake periods in soybean that occurred between stages R1 and R4, depending on site variation. Gaspar et al. (2017) studied P and K uptake in soybean in Minnesota and Wisconsin and identified similar growth stages for maximum P uptake with between 9.4 and 36.8% of K accumulating in the seed after R5. More research in Illinois showed that corn peak nutrient and dry matter uptake occurred between V10 and V14 with a $K_2O$ accumulation of about 5.2 lb $K_2O/\text{ac/day}$ (Bender et al., 2013). Although it is common in crop rotations such as corn–soybean to apply K fertilizer every other year, each crop is enacting very different K movement into the crop and then recycling back to the soil. Finally, consideration should be given to applications for multiple nutrients. Fertilizer blends that include multiple nutrients that are required in large quantities should be applied to fit the best synchronization for everything in the blend if possible.

Place
Due to the nature of soil K uptake by crop roots, the proximity of active roots to the supply of soil K is very important. The ability for crops to scavenge for K in the soil is a function of K concentration distribution, K movement via diffusion, rooting pattern, and
efficiency of roots at absorbing K. Practical management options for ensuring a K application is used effectively should include consideration of the K retention capacity of the soil (CEC, mineralogy, and soil organic matter) and whether crop response to a specific placement method has been demonstrated. In soils that do not retain K well (low CEC), banded applications that provide a concentrated zone of K supply show merit. However, in soybean, for example, numerous studies have indicated that no yield difference occurs between subsurface-banding and broadcast applications of K in Midwestern soils with moderate CEC (Borges and Mallarino, 2000; Yin and Vyn, 2002).

Key takeaways
Potassium availability in agricultural soils is a complex interaction between soil properties and management. It is important to consider both when determining your K nutrition strategy. Selecting the right source of K requires reflection on crop demands and sensitivities, cost, and availability. Consulting research that represents your specific soils and crops is an excellent framework for identifying the right rate of K to apply. Knowing when to sample your soil and apply K ensures that you assess the soil supply and meet the crop demands at the right time. Optimize the ability of crop roots to utilize K by applying it at the right place that is agronomically and economically logical.

**Coated seeds may enable agriculture on marginal lands**
By Massachusetts Institute of Technology

Providing seeds with a protective coating that also supplies essential nutrients to the germinating plant could make it possible to grow crops in otherwise unproductive soils, according to new research at MIT.

A team of engineers has coated seeds with silk that has been treated with a kind of bacteria that naturally produce a nitrogen fertilizer, to help the germinating plants develop. Tests have shown that these seeds can grow successfully in soils that are too salty to allow untreated seeds to develop normally. The researchers hope this process, which can be applied inexpensively and without the need for specialized equipment, could open up areas of land to farming that are now considered unsuitable for agriculture.

The findings are being published this week in the journal *PNAS*, in a paper by graduate students Augustine Zvinavashe ’16 and Hui Sun, postdoc Eugen Lim, and professor of civil and environmental engineering Benedetto Marelli. The work grew out of Marelli’s previous research on using silk coatings as a way to extend the shelf life of seeds used as food crops. "When I was doing some research on that, I stumbled on biofertilizers that can be used to increase the amount of nutrients in the soil," he says. These fertilizers use microbes that live symbiotically with certain
plants and convert nitrogen from the air into a form that can be readily taken up by the plants.
Not only does this provide a natural fertilizer to the plant crops, but it avoids problems associated with other fertilizing approaches, he says: "One of the big problems with nitrogen fertilizers is they have a big environmental impact, because they are very energetically demanding to produce." These artificial fertilizers may also have a negative impact on soil quality, according to Marelli.

Although these nitrogen-fixing bacteria occur naturally in soils around the world, with different local varieties found in different regions, they are very hard to preserve outside of their natural soil environment. But silk can preserve biological material, so Marelli and his team decided to try it out on these nitrogen-fixing bacteria, known as rhizobacteria.

"We came up with the idea to use them in our seed coating, and once the seed was in the soil, they would resuscitate," he says. Preliminary tests did not turn out well, however; the bacteria weren't preserved as well as expected.

That's when Zvinavashe came up with the idea of adding a particular nutrient to the mix, a kind of sugar known as trehalose, which some organisms use to survive under low-water conditions. The silk, bacteria, and trehalose were all suspended in water, and the researchers simply soaked the seeds in the solution for a few seconds to produce an even coating. Then the seeds were tested at both MIT and a research facility operated by the Mohammed VI Polytechnic University in Ben Guerir, Morocco. "It showed the technique works very well," Zvinavashe says.
The resulting plants, helped by ongoing fertilizer production by the bacteria, developed in better health than those from untreated seeds and grew successfully in soil from fields that are presently not productive for agriculture, Marelli says.

In practice, such coatings could be applied to the seeds by either dipping or spray coating, the researchers say. Either process can be done at ordinary ambient temperature and pressure. "The process is fast, easy, and it might be scalable" to allow for larger farms and unskilled growers to make use of it, Zvinavashe says. "The seeds can be simply dip-coated for a few seconds," producing a coating that is just a few micrometers thick.

The ordinary silk they use "is water soluble, so as soon as it's exposed to the soil, the bacteria are released," Marelli says. But the coating nevertheless provides enough protection and nutrients to allow the seeds to germinate in soil with a salinity level that would ordinarily prevent their normal growth. "We do see plants that grow in soil where otherwise nothing grows," he says.

These rhizobacteria normally provide fertilizer to legume crops such as common beans and chickpeas, and those have been the focus of the research so far, but it may be possible to adapt them to work with other kinds of crops as well, and that is part of the team's ongoing research. "There is a big push to extend the use of rhizobacteria to nonlegume crops," he says. One way to accomplish that might be to modify the DNA of the bacteria, plants, or both, he says, but that may not be necessary.

"Our approach is almost agnostic to the kind of plant and bacteria," he says, and it may be feasible "to stabilize, encapsulate and deliver [the bacteria] to the soil, so it becomes more benign for germination" of other kinds of plants as well.

Even if limited to legume crops, the method could still make a significant difference to regions with large areas of saline soil. "Based on the excitement we saw with our collaboration in Morocco," Marelli says, "this could be very impactful."

As a next step, the researchers are working on developing new coatings that could not only protect seeds from saline soil, but also make them more resistant to drought, using coatings that absorb water from the soil. Meanwhile, next year they will begin test plantings out in open experimental fields in Morocco; their previous plantings have been done indoors under more controlled conditions.
Trumbull County Farmer Lunch Series Returns for 2020

OSU Extension, Trumbull SWCD, and USDA-NRCS have teamed up again to offer a series of educational luncheons in 2020. We’ll kick off the series on January 15th with a discussion on the agronomic and legal requirements for growing industrial hemp. On February 19th we’ll be talking about how to implement grass waterways to prevent erosion which is highly relevant with our recent bouts of heavy rains creating washouts throughout the region. We will be taking a break in March and hope you attend our NE Ohio Agronomy School on March 11th, but we’ll be back on April 15th with a farmer discussion on cover crops and what works in our region, and what does not. Each of these events is $5/person and this includes lunch. Lunch is again sponsored by the Trumbull County Holstein Club to keep costs down. The programs start at 11:30A.M. and will conclude by 1:00P.M. If you would like to register or have further questions, please call 330-638-6783 or email beers.66@osu.edu.

Ohio State Report Evaluates Options for Reducing Lake Erie’s Harmful Algal Blooms

By Chip Tuson

Several research teams, led by The Ohio State University, have concluded a three-year study evaluating the ability of agricultural management practices to reduce phosphorus-caused harmful algal blooms in Lake Erie. In 2012, the United States and Canada set the goal of reducing phosphorus entering the lake by 40%. Now, researchers have a better understanding of what management practices need to be implemented, and what research still needs to be done to meet these goals by 2025.
The majority of phosphorus entering Lake Erie originates from the Maumee River watershed. More than 85% of the phosphorus entering the lake comes from agricultural sources such as fertilizer runoff. To address this, researchers are evaluating what agricultural management practices have potential to reduce this phosphorus, while supporting farmers to maintain profitability.

“There’s a lot of edge-of-field work going on that identifies successful practices in single fields. But when we scale up and ask how many of those practices need to be adopted over a wide area like the Maumee River watershed, that’s where we turn to our models,” said Jay Martin, project coleader for the recent study and professor in Ohio State’s Department of Food, Agricultural and Biological Engineering (FABE).

The study, which was funded by the Ohio Department of Higher Education’s Harmful Algal Bloom Research Initiative, used five watershed models to help researchers determine the most effective approaches to combat algal blooms. Just as your local news uses models to forecast the weather, researchers use watershed models to project how different management techniques impact phosphorus entering Lake Erie. By layering five separate models over these practices, researchers are able to narrow in on the best solutions.

Solutions are aimed at meeting reduction targets for two forms of phosphorus: total phosphorus and dissolved reactive phosphorus. Each spring, levels of total phosphorus and dissolved reactive phosphorus affect the magnitude of harmful algal growth. Year-round levels of total phosphorus, which includes dissolved reactive phosphorus, lower oxygen levels in the lake and result in the annual dead zone in the central basin of Lake Erie.

Researchers worked with a team of stakeholders to determine what management practices to analyze with the models. The stakeholder group had wide representation from agricultural groups, government agencies, non-governmental organizations, and environmental groups. Together with researchers, these stakeholders helped determine what management practices and adoption rates were most likely to be feasible solutions to model.

“In this study, we wanted to be able to show policy makers a range of expectations if we implement certain conservation strategies,” said Margaret Kalcic, project coleader and assistant professor in FABE. “Multiple models help us address uncertainty and gain confidence in our practices.”
Results from the study showed progress in reducing phosphorus that is required to decrease harmful algal growth. However, none of the modeled scenarios met the reduction goals for dissolved reactive phosphorus. These results point to the need to further increase adoption of existing practices and research alternative management practices, which is where researchers expect to focus their efforts next.

“With the types of practices available to the farming community, we can make stronger strides reducing total phosphorus than with dissolved reactive phosphorus,” said Martin. “In the future, we need to develop management processes that are more effective at managing dissolved reactive phosphorus—processes that hold back or filter water.”

The most promising scenarios called for a mix of in-field management like cover crops and subsurface fertilizer placement, and the use of buffer strips to help filter field runoff. One mix of these practices met the reduction goal for total phosphorus. The study also highlighted the importance of identifying sites where specific practices will have a higher potential of reducing phosphorus runoff. While this approach will result in accelerated gains in water quality and more efficient use of resources, it will require field level assessments and consultation with producers. It is also hoped that these results convey confidence to the public and farmers that properly combined management practices can make progress towards phosphorous reduction targets. Doing so should lead to an increase in adoption rates of effective practices and improve the ongoing harmful algal bloom problem in Lake Erie.

Ohio’s Harmful Algal Bloom Research Initiative (HABRI) is a statewide response to the harmful algal blooms issue. Funded by the Ohio Department of Higher Education since 2015 and managed by Ohio Sea Grant, the initiative funds research across the state and is led by The Ohio State University and The University of Toledo. For more information about the program, visit go.osu.edu/HABRI. Additional translational products can be found by visiting http://kx.osu.edu/project/environment/habri-multi-model.

Assessing the 2019 Production Year Survey - Second Call
By: Greg LaBarge, CPAg/CCA, Dee Jepsen, Ben Brown, Anne Dorrance
The 2019 production year has presented many challenges. Regardless of where you are in the state, we hope you respond to a brief survey to identify both short- and long-term outreach and research needs based on the 2019 year. The survey is located at https://go.osu.edu/ag2019 If you have already responded, thank you for taking the time to share. The survey will close at midnight on November 27, 2019.

The survey is for Ohio crop and livestock/forage producers. Questions relate to crop production, prevented plant, livestock forage needs, emergency forage success, economic and human stress concerns. Since challenges and concerns varied across the state, this survey is designed to assess needs on a county, regional and statewide basis. Results will be used to determine Extension programming and future research needs.

**Change Your Employee Recruitment and Interview Mindset**

By: Rory Lewandowski, Extension Educator Wayne County

Source: https://u.osu.edu/ohioagmanager/2019/11/18/change-your-employee-recruitment-and-interview-mindset/

Originally written for Dairy Excel column for the 10-31-19 Farm and Dairy

Labor is an important component of any farm operation. Beyond just checking the box that a certain task has been completed, farm profitability often turns on how well a task was completed, the attention to detail and protocol. Improving employee recruiting and interviewing skills increases the chance of hiring the right employee for your farm situation. For many farms, employee recruitment, interviewing and hiring requires a mindset adjustment.

How do you attract dependable farm employees? What is your goal and objective when you hire a farm employee? I once heard Bernie Erven, professor emeritus of The Ohio State University, and human resource management specialist, say that too many farms do not manage the employee recruitment and interview process. Desperate for labor, the only job requirement seemed to be that the person could walk and breathe. Interview questions consisted of “Have you worked on a farm before? and Do you want the job?” A management mindset involves developing a recruitment strategy and a process to find employees that are the right fit for your farm. Donald Cooper, an international management consultant, says that businesses become what they hire. If your goal is high performance and excellence, you need to recruit and hire above average, high quality persons.

Employee recruitment starts before there is a job vacancy. Effective recruitment has both an outward and an inward focus. An outward focus is about developing
relationships with persons, organizations and institutions that could provide a contact or recommend a potential employee to the farm. Some examples include FFA chapters/advisors, career centers, and farm service persons such as veterinarians, feed and equipment dealers, technicians and ag lenders. In Wayne and surrounding counties, OSU-ATI is an obvious source of potential farm employees. If you run into someone with the potential to be a good employee, even if you currently don’t have a vacancy, at least collect contact information. Some farms may even create a temporary position for the person. Inward recruitment focus is about building a reputation as a great place to work. If someone were to drive around the county and ask the question, who is the best farm to work for, would the questioner hear the name of you or your farm?

The next important piece in recruitment and interviewing is the job description. Job descriptions guide the interviewing and hiring process. Specific information included in a job description includes a job title, a short summary of the major job responsibilities, the qualifications for the job including knowledge, education and/or experience necessary, the specific job duties/tasks along with the frequency with which each needs to be performed, who supervises the job and/or supervisory requirements of the job and finally, something about the expectations for hours and weekly or monthly work schedule.

The job description, when well written, helps to provide a prepared list of questions for the employee candidate interview. Questions should provide the candidate with the opportunity to talk about their skills, knowledge, experience, and personal attributes that match the job description. According to Bob Milligan of Dairy Strategies, the interview should be designed to determine the qualifications of the candidate, their fit for not only the job requirements but also their fit within the culture of your farm. The interview should be structured so that the farm owner or manager is promoting the farm and the position in a positive light so that the candidate is likely to accept the job if it is offered to them.

Ask questions that provide you with information about the candidate’s knowledge, ability and attitudes. Examples of these type of questions are; what are two practices in the milking parlor that can improve milk quality? Describe an equipment related problem you have solved in the past year. How did you go about solving it? I read an article by the founder of a company called Ag Hires entitled “Top 3 Interview Questions Every Farm Should Ask”. They are: 1. In your past jobs, of the various tasks, roles and projects, what have you enjoyed doing the most and what have you enjoyed the least? 2. What is your superpower; what is it that you are naturally good at and bring to the table wherever you work? 3. If we spoke to your co-workers and managers and asked them what’s it like to work with you, how would they describe you?
These questions are designed to learn what the candidate is passionate about, what they enjoy, what they have a natural tendency toward, and how they interact with others. Quoting that article, “farm managers have a tendency to place too much emphasis on someone’s work history and not enough emphasis on whether the person is the right fit for the farm. Smart people with the right attitude, motivation and natural tendencies that align with the farm culture will get up to speed quickly.”

Every farm hire is an important hire. Farm managers with employee recruitment and interviewing skills increase the rate of successful hires.
Upcoming Events

November 18, 2019 1:00pm or 6:00pm
ARC/PLC Public Meeting – Trumbull Co.

November 19, 2019 1:00pm or 6:00pm
ARC/PLC Public Meeting – Portage Co.

December 9, 2019 1:00pm
ARC/PLC Public Meeting – Ashtabula Co. Extension Office

January 15, 2020 11:30AM
Trumbull Farmer Lunch Series – Hemp: What You Need to Know

February 12, 2020 11:30AM
Trumbull Farmer Lunch Series – Grass Waterways for Erosion Control

March 11, 2020 9AM to 3PM
Northeast Ohio Agronomy School – Bristolville, OH
Geauga County Farm Bill Update: Agricultural Risk Coverage (ARC)/Price Loss Coverage (PLC)

THURSDAY, DECEMBER 12TH, 1:00 P.M.

The 2018 Farm Bill allows the choice to enroll in ARC or PLC for 2019-2023. Enrollment for 2019 is currently open with the deadline set as March 15, 2020. Join OSU Extension and the Farm Service Agency for an informational meeting to learn about changes to the ARC/PLC, important dates and deadlines, crop insurance – supplemental coverage option, and using decision tools to evaluate program choices to make informed program decisions.

Location: Geauga County Extension Office, 14269 Claridon-Troy Road; P.O. Box 387 Burton, OH 44021

Cost: Free

Contact information: Call Les Ober at 440-834-4656 to RSVP

This material is based upon work supported by the USDA-NIFA under Award Number 2018-70027-28586
Ashtabula County Farm Bill Update: Agricultural Risk Coverage (ARC)/Price Loss Coverage (PLC)

MONDAY, DECEMBER 9TH, 1:00 P.M.

The 2018 Farm Bill allows the choice to enroll in ARC or PLC for 2019-2023. Enrollment for 2019 is currently open with the deadline set as March 15, 2020. Join OSU Extension and the Farm Service Agency for an informational meeting to learn about changes to the ARC/PLC, important dates and deadlines, crop insurance – supplemental coverage option, and using decision tools to evaluate program choices to make informed program decisions.

Location: Ashtabula Extension Office; 39 Wall Street, Jefferson, OH 44047

Cost: Free    Date/Time: Dec. 9th, 2019 - 1:00 PM

Contact: Call Andrew Holden at 440-576-9008 to RSVP

This material is based upon work supported by the USDA-NIFA under Award Number 2018-70027-28586
TRUMBULL COUNTY
FARMER LUNCH SERIES

JANUARY 15, 2020  11:30A.M. – HEMP: WHAT YOU NEED TO KNOW
FEBRUARY 19, 2020 11:30A.M. – GRASS WATERWAYS FOR EROSION CONTROL
APRIL 15, 2020  11:30A.M. – COVER CROPS: A FARMER DISCUSSION

The Trumbull County Farmer Lunch Series returns for 2020! This series of education events is brought to you by OSU Extension Trumbull County, Trumbull County SWCD, and the USDA NRCS. Sponsoring lunch again this year is the Trumbull County Holstein club. We request reservations one week in advance for an accurate count for lunch. To register call OSU Extension at 330-638-6783.

Location: Trumbull County Ag and Family Education Center, 520 West Main St, Cortland, OH 44410

Cost: $5/person

Contact information: 330-638-6783 or beers.66@osu.edu

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