Hello Coshocton County! The snow is falling outside my office window. What a beautiful sight in an otherwise glooming December. Next week’s forecast is also promising for a white Christmas!

We are lining up our winter programming efforts; albeit we are still trying to figure out how to negotiate the bumpy road of the coronavirus pandemic. Thanks to all who have answered the pesticide re-certification survey. I will use your comments as we develop our winter re-certification sessions.

Many of our state Extension Teams are also planning programs as well. Today’s newsletter highlights some of the offerings our State Beef Team is pulling together. Looks like some great programs.

Enjoy the snow and have a good week and stay safe!

Sincerely,

David L. Marrison
Coshocton County OSU Extension ANR Educator
What a year 2020 has been. Are you looking to improve herd efficiency and profitability to weather the storm? Look no further than the slate of winter programming to be offered by the OSU Extension Beef Team. Programs planned for early 2021 are designed to provide valuable information for all segments of Ohio’s beef industry.

The COVID-19 pandemic has been a challenge to the beef industry to say the least, and the effects will continue to linger for some time. One thing we have learned this year is there continues to be need for gained efficiency and improved management within all segments of our beef cattle industry.

This winter’s Ohio State Extension Beef School series will focus on both of those topics. Given current university policies regarding COVID-19, this years Beef Schools will be offered as a virtual series of programs.

What was originally planned as two on-farm face-to-face Cow-Calf Management Schools has now been redesigned as a series of 6 consecutive two hour webinar programs. While perhaps being less “hands-on” this webinar format now opens the opportunity for more cattlemen throughout Ohio to participate. These presentations will occur on Monday evenings from 6 until 8 p.m. beginning on January 18, 2021. The first three evenings will be focused on producing quality forages while the final three will address reproduction and cow/calf management.

The Cow-Calf Management School series is being offered for free, and may be enrolled in as a one time package for all six programs. Find more details including registration under this registration link or https://osu.zoom.us/webinar/register/WN_N_CtcKYwQB2I60Afug10aA

1/18/2020: Getting Started
Making Hay for Beef Cattle
Reviewing Forage Fertility – Hartsuch
New Seeding Species Selection – Gelley

1/25/2020: Addressing Hay Shortfalls
Annual Forage Options – Gahler
Baleage Do’s and Don’ts – Hartschuh

2/01/2020: Hay! Now What?
Forage Analysis – Wiseman
Forage Storage 101 – Ruff

2/08/2020: Breeding Season Considerations
Managing the Breeding Season – Alvaro Guerra-Garcia
EPD Update: Breeding for Cow Longevity – John Grimes

2/15/2020: Managing Reproduction
Semen Handling – Dean Kreager
Preg Checking – Allen Gahler
Additional information will be available in the coming weeks. In addition to the Cow-Calf School series, four additional programs focused on single topics are also scheduled.

A Cow-Calf Outlook meeting via webinar has been set for 6:30 p.m. on January 26. Dr. Kenny Burdine, Livestock Marketing Extension Specialist from the University of Kentucky will be the featured speaker. Dr. Burdine will give a market outlook for 2021 and discuss how cow and calf management plays a role in determining value at the time of marketing. Registration for this free program is available here. https://osu.zoom.us/webinar/register/WN_Pl30HGxURL6kxuD-V4QaYQ

The need for increased risk management for fed cattle has been highlighted by a couple of “Black Swan” events: COVID-19 and the 2019 Tyson packing plank fire. Via webinar on Feruary 24 beginning at 6 p.m., the 2021 Cattle Feeding and Management School will feature Justin White of Hudson Insurance who will present on risk management for fed cattle, specifically the Livestock Risk Protection and Livestock Gross Margin Insurance programs. To finish up the program Jason Hartschuh, OSU Extension Crawford County will discuss feedlot ventilation needs. This program will be held via webinar, pre-registration for this free program will be required. https://osu.zoom.us/webinar/register/WN_SFRZ3sWJTJO8QbiYa6jD9Q

Rounding out our winter programs will be a webinar addressing a fairly new topic for Beef Team programming. Ohio’s dairy industry is a significant contributor to beef production across the state. On March 10 at noon Allen Gahler, Extension Educator in Sandusky County will be teaching a session entitled Beef Sire Selection for the Dairy Herd, taking a look at what EPD and genetic criteria should be considered when mating beef sires to dairy cattle. The registration for this program is linked here. https://osu.zoom.us/webinar/register/WN_Wk8Gb-GWQJipBkj96Q287Q

Find additional detail on each of these programs on the 2021 Ohio Beef School page at: https://u.osu.edu/beefteam/2021-beef-school/

Ohio cattlemen will also enjoy the virtual Pastures for Profit series that will begin in January. Details and registration information will be available soon.

Lastly, continue to stay up to date on county based Beef Quality Assurance education opportunities. Many producers here in Ohio were certified in three years ago in 2018 and will be due for recertification in 2021. Beef Quality Assurance training dates and information as well as registration for the above mentioned programs can all be found at beef.osu.edu.

Not knowing what COVID-19 has in store for this winter, we hope these virtual programs are beneficial until in-person programs can be returned sometime in 2021. We are looking forward to working with as many of you as possible in the coming year. Stay safe!

Hay Quality: Beyond Proximate Analyses
By: Jeff Lehmkuhler, PhD, PAS, Associate Extension Professor
Source: https://u.osu.edu/beef/2020/12/16/hay-quality-beyond-proximate-analyses/

My forage colleagues and I seem to get bombarded with questions on forage quality and interpreting forage test results this time of year. The timing coincides with folks starting to feed hay and looking at developing supplementation programs for the cattle receiving the forage. Getting the forage tested for nutrient content is the first step.

Proximate analysis allows for separating a forage/feed into various macronutrient categories and was initially developed by German researchers in 1860. The components measured in the Weende analysis included:
moisture, ash, crude protein, crude lipid, crude fiber and calculated nitrogen-free extracts. Crude fiber was replaced by the neutral and acid detergent fiber analyses developed by Dr. Peter VanSoest in the 1960’s to improve energy estimates of feedstuffs for ruminants as some of the cell wall is degraded by the rumen microbes. I am always in awe of the progress researchers have made in the nutrition field beginning with feed composition analyses more than 150 years ago.

The laboratory process provides us with some insight on the feed quality, but the energy estimates don’t always mimic the biological performance of a feedstuff. However, the laboratory analyses are useful in developing feeding programs. As an example, knowledge on the crude protein content of a forage can help avoid rumen nitrogen deficiencies ensuring microbial fermentation is optimized. I encourage everyone to test stored forages that will be fed this winter to help in developing supplementation strategies.

Forage test results can tell us a lot about a feedstuff. However, when we think about hay quality, we must go beyond the laboratory analyses. I see many forage test results each year, but that is where it stops. I don’t get to physically see the forage, touch it, smell it. I know what you are thinking, here he goes again off on some Ivory Tower academia discussion. Actually, I want to share two different real-world situations from this fall with you to hopefully drive home the notion that managing the hay making process is as or more important than the chemical component of the hay.

The first farm situation involves alfalfa hay, the queen of forages. Not many beef operations produce alfalfa or alfalfa/grass mix hay for beef cattle. This may be due to the cost of production, fertility, soil type or other factors. Let me set the stage. The operation weaned calves and were providing grass hay and grain supplement. The calves received grass hay the first month after weaning. A spot check of their weight taken after a month post-weaning revealed calves averaged 569 pounds with an average daily gain of 3.2 pounds. Now, these calves were eating the hay aggressively and some of the weight gain was a result of gut fill. However, the calves were doing well, eating and gaining. Exactly one week later, weights were taken again. On average, the calves weighed 548 pounds. They had lost an average of 21 pounds in 7 days! Yes, this would be an average daily gain of -3 pounds per day. Calves were coughing excessively; one calf was showing symptoms of respiratory distress five weeks post-weaning. What happened?

I did what I do in situations where weight losses like this occur. First, I checked the waterers. They were not fouled by manure and had a bit of feed/hay in them but not bad. I then looked at the hay. Bingo! This was alfalfa hay, not grass hay, that was offered the first four weeks. In September, a last cutting of alfalfa was taken and baled. However, weather conditions changed and forced the alfalfa to be baled before it was dry enough to store as dry hay. The farm ran out of the grass hay that had been fed after 4 weeks and put in this alfalfa hay which now was about six weeks since being baled. Mold was found throughout the bales and some areas were black. A general forage test wouldn’t have provided this type of information. We would have seen the moisture percentage being high giving us suspicion that it may have been moldy, but in a lot of situations it would have been overlooked. By attempting to salvage a few bales of hay, the calves lost weight, got sick and cost the operation.

The second situation involves cover crop harvested for hay. When cut at boot stage cover crop forages, generally cereal rye in this area, can have decent quality. Rye can be tricky though as it matures early and fields that are poorly drained make it a challenge to get rye harvested in early spring. The farm manager thought the hay would be decent quality in the 10-12% protein range and mid 50’s for TDN. This hay was being fed to lightweight backgrounding calves and getting calves to eat was an issue. After getting the forage test results, the hay was notably lower in quality than expected being only 7% crude protein. This category of animal is stressed from weaning, shipping, commingling and will often have low intakes the first few days after arrival. These light-weight calves are also in a lean phase of growth needing additional protein for muscle accretion. The diet was formulated assuming the hay is 11% protein, but the hay only contained 7% protein. Since the requirement for protein in these light-weight calves is 14-16%, the diet for these calves was protein deficient. This deficiency can reduce immune response and lower performance. Further, the NDF and ADF levels would suggest the hay was cut a bit mature. Lastly, upon inspection of the hay, it was also baled too wet due to weather. Some bales heated and caramelized which would lower protein and energy. Other bales were
moldy and had black areas within the bales. When you are managing stressed light weight calves, it is critical that the calves want to eat, not that they are forced to eat what is provided. Calves of this type need soft-leaved second/third cutting grass hay that is mold free. Was it just the hay? No there were other management factors that were involved as well, however, the forage test alone would not reveal the mold issues.

Forage testing for nutrient content is always recommended to help develop feeding programs. However, be certain to consider anti-quality issues such as mold that could impact animal performance. Weather is always going to be a challenge when making hay. It is important to realize the potential trade-off of wet forage at baling to get the hay up versus the risk of increased growth of fungi and molds. These molds and fungi can have detrimental impacts on intake and animal performance. As a backgrounder in Oklahoma told our group when we visited his operation, don’t force your cattle to be Hoover vacuums cleaning up everything in the bunk even if it is half rotten feed. Rather manage the feeding program to provide them something that is palatable which they want to eat to ensure optimal health and performance. Have a great holiday season and stay healthy this year.

Reducing Hay Storage & Feeding Losses
By: Jessica A. Williamson, Ph.D., Extension Forage Specialist, Penn State
Source: https://u.osu.edu/beef/2019/12/18/reducing-hay-storage-and-feeding-losses/#more-7990

On most livestock operations, the greatest operational cost is stored and harvested feed, so it only makes sense that striving to reduce storage and feeding losses of harvested feeds as much as possible can help improve forage quality, quantity, and overall profitability of an operation. Reducing waste, even by a few percent, can have a direct reflection on farm financial status almost immediately. Dry hay has the potential to meet most ruminant livestock nutrient requirements if harvested correctly and at the optimal stage of maturity to meet the class of livestock’s nutrient requirements, and if quality is maintained throughout the storage period. However, supplemental nutrition is often a necessity as a result of hay quality and quantity losses through storage and feeding.

Storage losses of uncovered hay can be upwards of 30%, including weather and respiration, resulting in one of the largest outlets for lost dollars on a livestock operation. Some factors affecting the amount of forage loss due to weather include bale density, weather and climate conditions throughout the duration of storage, and species of hay. Uncovered hay losses quality as rain washes through the bale and removes the desirable water-soluble carbohydrates of the plant cells through leaching, causing a reduction in total digestible nutrients (TDN).

Dry matter loss after harvest occurs as a result of plant respiration, even in hay with less than 20% dry matter. When harvest moisture levels are greater than 20%, the incidence of mold is much more likely, causing an even greater dry matter loss as a result of microbial activity.

The best option for reducing storage losses is to store hay under cover. A hay barn is always the best choice for reducing storage losses, but other options such as plastic tarps or net wrap can also help improve storage. If no cover option is available, it would be beneficial to keep bales off the ground, either by placing them on pallets or on a gravel lot. This will help bales from sitting in water after high precipitation. A study by the University of Tennessee shows a 5% loss in round bales under a hay barn, stacked or tarped hay on pallets had a 14% loss, while round bales that were net wrapped had a 23% loss. Even with those losses, uncovered hay had an astounding 30% loss.
There are several different methods for feeding hay, all of which have their benefits and disadvantages. Hay refusal is the biggest factor in feeding losses, which is directly related to quality. Other losses during feeding include trampling, leaf shatter, and fecal contamination, all of which are related to how the hay is fed. Feeding hay on pasture ground can have benefits and downfalls. Spreading the hay out and moving the location of where it is fed can provide benefits to the soil health and reseeding of forages within that pasture. This practice is best if the hay that is being fed is very clean and weed-free. If feeding hay in a pasture, it is recommended that only a single day’s worth of feed is offered. If animals are fed mass quantities of hay that is intended to last them several days or even weeks, a large amount of waste is often the result of sorting, trampling, bedding, and fecal contamination.

Feeding out of rings can provide a barrier between the hay and animal, reducing waste from trampling or fecal contamination. This practice could lead to loss of pasture if being fed on sod as a result of compaction and trampling, so it is recommended to feed hay out of rings in a livestock concentration area, on concrete, or on gravel. No matter the method of feeding, a well-drained site is always recommended. Reducing even a small portion of loss when storing or feeding hay will have direct and immediate impacts economically on a livestock operation, so plan carefully for methods on improved storage and feeding.

*Dairy Labor Certificate Course Sponsored by OSU Extension*

Chris Zoller, Agriculture and Natural Resources Educator, Tuscarawas County, The Ohio State University


Dairy farm labor is one of the major costs of production, and farm labor is regularly described as an area of concern by dairy farmers. Therefore, Ohio State University is providing a certificate course to assist dairy farm owners and managers with labor management on farms. This course will provide opportunities for participants to examine labor costs, define labor needs, examine hiring processes, promote relationships among farm workers, increase retention, and identify ways to promote employee well-being.

**Structure**

This five-week course will be held weekly on Tuesdays from 12:30 to 2:00 pm in January and February 2021. All attendees will be registered with ScarletCanvas, an online platform by The Ohio State University. Materials relative to each topic will be posted there for use by attendees. Because of its virtual format, you do not have to travel to participate and learn very important topics by experts in the dairy and associated industries. Presenters from Ohio State University Extension, Michigan State University Extension, Iowa State University Extension, Cornell University Extension, and private industry will teach the program. Weekly assignments will be given, and interactive discussion will be important for the success of the program. Certificates will be provided to participants completing this program.

**Dates and Topics**

- **January 12, 2021**
  - Labor Management Benchmarks
  - So, You Need to Hire Someone – Developing the job description
- **January 19, 2021**
  - Recruiting Employees
  - Immigrate Labor
- **January 26, 2021**
  - Conducting an Interview
  - You’re Hired, now what? Building Success from Day One
- **February 2, 2021**
  - Building Long-Term Relationships and Team Meetings
  - Conflict Management
- **February 9, 2021**
  - Labor Laws
  - Farm Safety
Registration Details
The cost of the program is $75 per person and is limited to the first 30 people who register. For additional information, please see https://dairy.osu.edu/ or contact Chris Zoller, OSU Extension Educator, at 330-827-0249. Registration deadline is Friday, December 18.

APHIS Changes Approach to Fight Emerald Ash Borer

On December 14, 2020, the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service (APHIS) is changing its approach to fight the emerald ash borer (EAB) infestation that has spread through much of the United States. The Agency is publishing a final rule that removes the federal domestic EAB quarantine regulations that have proved ineffective and will redirect resources to more promising methods. APHIS has been transparent about the challenges associated with controlling the emerald ash borer and that the domestic quarantine has not proven effective in stopping its spread. The Agency has worked to identify more effective and less intrusive methods and will now direct available resources toward non-regulatory options for management and containment of the pest, such as rearing and releasing biological control agents. Results have already proved effective and the actions announced today will allow the Agency to increase their use.

Removing the quarantine regulations ends APHIS’ domestic regulatory activities, which includes actions such as issuing permits, certificates and compliance agreements, making site visits, and conducting investigations of suspected violations.

The final rule and the response to the comments we received will publish in the Federal Register on December 15, 2020 and be rule will be effective on January 14, 2021. Documents may be viewed online at https://www.regulations.gov/docket?D=APHIS-2017-0056 upon publication.

APHIS is working with the National Plant Board on effective strategies to manage firewood movement, which is one of the ways the emerald ash borer spreads. APHIS’ goal is still to maintain ash in the North American landscape. We look forward to continued collaboration with our partners on this effort. Questions about the regulatory change for emerald ash borer can be directed to National Policy Manager Herb Bolton at 301-851-3594 or Herbert.Bolton@usda.gov.
**Holiday Plant Toxicity**

Dr. Leonard Perry, Horticulture Professor, University of Vermont  
(Previously published by the University of Vermont Department of Plant and Soil Science: Winter Holiday News Article)  
Source: [https://u.osu.edu/sheep/2020/12/15/holiday-plant-toxicity/](https://u.osu.edu/sheep/2020/12/15/holiday-plant-toxicity/)

Although this article directs most of its attention towards the ill effects of these plants on ourselves, fellow house guests, and pets; these toxic plants may find their way to your pasture field once the holiday season has passed. Be aware of your shared fence lines and how you or your neighbors are disposing of your holiday plants this year. And remember, just because other wildlife species can and will consume some of these plants doesn’t mean that they are suitable for your livestock counterparts. Winter is a critical time period as many small ruminant producers are gearing up for lambing and kidding this winter and spring. The last thing that we want to do is lose a pregnancy as a result of disposing some of these plants.

Several of our favorite holiday plants should be kept from children, pets and livestock, yet often they pose no serious danger in small amounts. There are many other and more toxic substances to children in homes to be mindful of, especially cosmetics, cleaning products, and personal care products.

The poinsettia (*Euphorbia pulcherrima*), the most popular flowering potted plant for indoors, has gotten a bum rap for a number of years. It’s been falsely accused of being poisonous, yet no deaths from this plant have ever been recorded. In fact, research studies at The Ohio State University have proven that poinsettias present no health hazard.

The rumors arise from a highly questionable report of a single fatality in Hawaii more than 80 years ago, a child who reportedly died after eating one leaf. However, that doesn’t mean the poinsettia doesn’t have mildly toxic properties. If ingested by pets or humans, it can irritate the mouth and stomach, sometimes resulting in diarrhea or vomiting.

The sap may cause a poison ivy-like blistering on contact with the skin on some persons unless washed off immediately. That’s why it’s important to place poinsettias, and other holiday plants, out of the reach of children and curious pets. Keep in mind that pets and people may differ in what plants are toxic, and to what degree. Kalanchoe, for instance, is not listed as toxic for people but is mildly toxic for pets.

How safe are other holiday plants to humans? Here’s the rundown on some common plants which have toxic properties.

**HOLLY (Ilex):** Branches are used during the holidays in arrangements for the shiny (but prickly) dark green leaves and berries. Eating the bright, red berries of this plant usually result in no toxicity in small quantities. Large quantities cause nausea, abdominal pain, or vomiting.

**JERUSALEM CHERRY (Solanum pseudocapsicum):** This potted plant has been more popular in decades past, but still can be found during the holidays (so also called Christmas Cherry) for the rounded red fruits against the dark green leaves on a plant about a foot high. Every part of this plant contains the toxic substance solanocapsine, especially in unripened fruits and leaves. Eating the fruit or foliage will adversely affect the heart and can cause a range of symptoms including stomach pain, vomiting, headache, drowsiness, to others more severe.
MISTLETOE (Phoradendron serotinum): This plant parasite of deciduous trees in the Southeastern states is used during the holidays for hanging above doorways, and for its white berries. While most exposures result in little or no toxicity, eating large amounts can cause acute stomach and intestinal disorders. These are caused by the chemical phoratoxin, related to ricin (the highly toxic compound from castor bean plants).

YEW (Taxus): The leaves, seeds (not the red fleshy covering), bark, and twigs of this evergreen can be toxic from the chemical taxine, causing breathing difficulties, uncontrollable trembling, and vomiting. Most reported poisonings are from the seeds, and only result in mild symptoms. Allergic reactions may occur from nibbling on leaves. Yew is another example of the toxicity difference between people and some animals. It is toxic to people, pets, and livestock, but is devoured by deer.

AZALEA (Rhododendron): This holiday plant is mainly grown as a shrub outdoors with thousands of variants. The leaves can be toxic, as is honey made from flower nectar containing grayanotoxins. Perhaps the first written account of rhododendron toxicity was from the 4th century in Greece, depicting the poisoning of ten thousand soldiers from a yellow shrub azalea. One study concluded that eating moderate amounts of azalea posed little danger to humans. Pets and children may be more seriously affected, so it should be kept from them.

CYCLAMEN (Cyclamen persicum): Since the thickened roots (rhizomes) of these are the primary toxic part, containing saponins (similar to those in English ivy), it is unlikely humans (including children) would eat such and be affected, and then only if large quantities are ingested. Skin exposure to the plant sap may cause a skin rash in some people. Pets, especially those that like to dig in pots, should be kept away from cyclamen.

AMARYLLIS (Hippeastrum): The toxic part of this plant is the bulb, which contains lycorine and similar alkaloids. These are the compounds found also in daffodils, and the reason wild animals such as deer know to leave them alone. House pets may not be so wise, so keep these away from them. Ingestion by humans is unlikely, with small amounts producing few or no symptoms.

For more details on toxic plants of all types, including common houseplants, consult the second edition of the Handbook of Poisonous and Injurious Plants by doctors Nelson, Shih, and Balick. From Springer publishing, it is one of the most authoritative, up-to-date, and affordable references for human poisoning by plants, and is used in many poison control centers.

A couple of the more extensive websites to check out plants poisonous to humans are from North Carolina State University (gardening.ces.ncsu.edu/) and the University of California at Davis (ucanr.edu/sites/poisonous_safe_plants). There are several good online resources to check on toxicity of plants to pets, one being the American Society for the Prevention of Cruelty to Animals (www.aspca.org/pet-care), which also lists plants toxic to horses. Several sites, including Cornell University (poisonousplants.ansci.cornell.edu), deal specifically with plants poisonous to livestock.

If you suspect poisoning, seek immediate professional help. Unless told to do so by a doctor, do NOT make the person throw up. Call your local poison control center, often at your local hospital. Or, you can call the national poison control center hotline, toll-free, (800-222-1222) and talk with poison control experts. This service is available anytime, and can answer any questions on poisoning, even if not from plants and even if not an emergency.

2020 Farmer’s Tax Guide
The 2020 version of the Farmer’s Tax Guide (Publication 225) has been released by the Internal Revenue Service and can be found at: https://www.irs.gov/pub/irs-pdf/p225.pdf. Copies are also available at the Coshocton County Extension office.
Farm Management Needs Pulse Survey
Source: https://u.osu.edu/ohioagmanager/2020/12/08/farm-management-needs-pulse-survey/

The Ohio State University Extension Agriculture and Natural Resources program works to improve production and maximize profitability while promoting environmental stewardship.

We are reviewing our farm management resources and ask you to rank your "top 3" areas from the following list for your farm management needs and support wanted.

1. **Agricultural Finance**: farm income, farm business analysis, financial management, budgeting, and investing, agricultural taxes, benchmarking, record keeping
2. **Agricultural Human Resources**: farm succession planning, labor law and policy, human resource management/labor management, liability
3. **Agricultural Law**: legal issues within the agriculture system and estate planning
4. **Agricultural Marketing**: marketing and price analysis, commodity trading
5. **Agricultural Policy**: Farm Bill/Agricultural Policy, environmental and resource policy agricultural trade
6. **Agricultural Production and Risk Management**: risk evaluation and management, land use, crop and livestock production, crop and livestock insurance
7. **Agricultural Supply Chain Stability and New Market Access**: stability of upstream and downstream supply chains during disruptions, identifying new markets
8. **Rural and Community Development**: infrastructure – broadband access, community resources, health care, non-agricultural small business support; rural/urban interface

Please complete the survey at [http://go.osu.edu/FarmMgmtNeeds](http://go.osu.edu/FarmMgmtNeeds) by December 18, 2020.

**2021 OSU Virtual Junior Swine Day**
OSU Extension is pleased to be offering the **OSU Virtual Junior Swine Day** on February 20, 2021 from 9:00 a.m. to 12:30 p.m. The agenda for the day:

- **Evaluating and Selecting Your Pig Project** (Video evaluating pigs)  
  A.J. Genter, Archbold, OH and Justin Rodibaugh, Rensselaer, IN
- **Nutrition and Feed Management**  
  Dr. Joel DeRouchey, Swine Nutritionist, Kansas State University
- **Meat Science**  
  Dr. Steve Moeller, OSU Swine Extension Specialist
- **When Science and Pig Shows Collide**  
  Dr. Andy Bowman, OSU Veterinary Preventive Medicine
- **Vaccinations / Pig Health**  
  Dr. Todd Price, North Central Vet Services, Sycamore, OH
- **Showmanship** (Video with interviews and showmanship discussion)  
  Kelly Morgan, Manager of Showpig Programs, Ohio Pork Council

12:30 p.m. - **Wrap Up and Answer Questions**

Registration for this program is free and can be made at: [www.go.osu.edu/jsd2021](http://www.go.osu.edu/jsd2021) Please register once per household. The registration deadline is Wednesday, February 16, 2021. For more information, contact Dale Ricker at ricker.37@osu.edu
Wooster, Ohio has long played an important role for The Ohio State University College of Food, Agricultural, and Environmental Sciences (CFAES).

Two of its major components, the Ohio Agricultural Research and Development Center (OARDC), and the two-year associate degree-granting program, the Agricultural Technical Institute (ATI), got their start there in 1892 and 1968, respectively.

While in past years, the research and student pieces have operated separately, new changes are afoot to unify the campus. A first step in ensuring this evolution is a name change to CFAES Wooster.

Changing the name of the campus will also produce shared resources, infrastructure, personnel, and equipment. “It allows us to think about this location as a full campus, rather than simply two components,” said Cathann A. Kress, vice president of agricultural administration and dean of CFAES. “It will brand the location as an integral part of CFAES and provide a gateway for Ohio State in northeast Ohio.”

OARDC has evolved to be the main research enterprise of the entire college, encompassing not just research in Wooster, but activities in Columbus and statewide— including outlying agricultural research stations located in Kingsville, Caldwell, Jackson, Willard, Fremont, Custar, Coshocton, and South Charleston.

“We have grown so that OARDC is broader than just the Wooster location,” Kress said. “And this campus is much broader, dedicated not only to research, but also to teaching and OSU Extension activities.”

A renaming and rebranding of the 4,200-acre campus as CFAES Wooster is but one of many planned changes. Road and campus signage will be updated along with campus infrastructure, such as roads and sidewalks, buildings, and laboratories.

“Unfortunately, the buildings and spaces designed in the past do not support newer ways to collaborate and innovate,” Kress said. “Through increased efficiencies, we are enriching the educational, extension, and research experiences for our students, faculty, staff, and clientele to interact more in modern, common buildings and spaces.”

Infrastructure enhancement and renovation capital projects have been underway since 2017.

In January 2021, a new ultramodern 60,000-square-foot, $33.5 million campus science building will be officially opened. “This building has been a great bright spot,” said Anne Dorrance, CFAES associate dean and Wooster campus director. “To have faculty and students be able to perform cutting-edge research together in a building appropriate for the type of science we do now is really exciting.”

Seen as the new central hub of the Wooster campus, the science building will feature:

- A first-floor café that will serve as a social gathering space—something that has been missing on campus; a large, divisible multipurpose room to support teaching, research, outreach, and community programs; and open seating and gathering space.
- The Department of Entomology’s popular Bug Zoo will also move into the science building, which will allow the collection to be showcased for visitors and school groups.
- Four entomology research labs for faculty and graduate students.
- Two undergraduate chemistry teaching classrooms for ATI students.
• The second and third floors will have offices, research labs, space for small conferences, and shell space to allow for additional growth.
• Outdoor space will include an outdoor patio and pollinator garden.

“The teaching labs and classrooms are a big improvement over converting a research lab for teaching and will offer ATI students a shorter walk to chemistry labs,” Dorrance said. “It’s one of the first steps in bringing the campus together and incorporating our ATI colleagues into central campus.”

In addition to entomology, the CFAES Wooster campus includes representatives from the Departments of Animal Science, Food, Agricultural and Biological Engineering, Horticulture and Crop Science, Plant Pathology, the School of Environment and Natural Resources, and the Food Animal Health Research Program.

“Current investments demonstrate a commitment from Ohio State and CFAES, but more is needed to remain competitive and to support our mission: We Sustain Life, not only related to agriculture, but also to food and environmental fields,” said Kress.

At present, 112 faculty and 356 staff are employed on the Wooster campus. Student enrollment includes 540 ATI undergraduates and 82 graduate students. As one of a handful of two-year agriculture programs in the nation and consistently ranked near the top, ATI offers a competitive advantage to CFAES. Thirty-one programs of study provide career preparation that maintains a 99% job placement rate for all ATI graduates within four months of graduation. Many students who start at ATI also transfer to main campus in Columbus, taking advantage of CFAES’ goal of a seamless Buckeye experience. Last year, over 200 ATI students continued their studies in Columbus.

CFAES Wooster is also a vital asset and catalyst for workforce development across the state of Ohio. Faculty and staff in both Wooster and Columbus have expertise in agricultural-related research, innovations, lifelong learning and continuing education, higher education, workforce development and technical education, and industry partnerships. Additionally, workforce certifications, trainings, and approximately 20 OSU Extension events are held in Wooster for community members each year.

“We want CFAES Wooster to be seen as a comprehensive campus, with impact, opportunities, and potential as a hub for discovery, innovation, learning, and partnerships,” said Kress.
Ohio Cow-Calf Outlook Webinar

TUESDAY January, 26, 6:30 – 8:00 P.M.

FREE REGISTRATION at go.osu.edu/2021beefschool

Presenter: Dr. Kenny Burdine, Livestock Marketing Specialist
University of Kentucky Extension

Must Pre-Register online to receive Zoom webinar link.

Join the OSU Extension Beef Team as we kick off 2021 with our Ohio Cow-Calf Outlook meeting. This program will take a look at the cattle markets and how management decisions influence marketing outcomes, including calf value in the marketplace.

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