Hello Northeast Ohio Counties!

Andrew and I are in Columbus this week attending OSU Extension’s Annual Conference. We are learning how to bring new and better programming back to NE Ohio and get to hear about the innovative programs our colleagues are developing. The Land Grant mission is alive and well with Ohio State University!

We will be spending time with family and friends next week to celebrate Christmas so there will be no newsletter. We’ll return in the new year.

Stay safe and Happy Holidays!

Lee Beers
Trumbull County Extension Educator

Andrew Holden
Ashtabula County Extension Educator
Dorrance named associate dean and director of The Ohio State University Wooster campus

By Sherrie R. Whaley


**Editor’s Note – We are very excited to have Anne as the new dean and director of the Wooster Campus. Congrats!**

COLUMBUS—Plant pathologist Anne E. Dorrance has been named to the top leadership position at The Ohio State University Wooster campus.

On January 1, 2020, she will begin a four-year term as associate dean and director for the Wooster campus and associate director for the Ohio Agricultural Experiment Station in Ohio State’s College of Food, Agricultural, and Environmental Sciences (CFAES).

When announcing Dorrance’s new position, Cathann A. Kress, vice president for agricultural administration of Ohio State and dean of CFAES, said “Dr. Dorrance’s appointment to this position is essential to the continuing success of our Wooster campus and the college.”

In her new role, she will also serve on the Vice President and Dean’s Administrative Cabinet, providing leadership and oversight for the Wooster campus. The campus is home to both the two-year Ohio State ATI and the Ohio Agricultural Research and Development Center (OARDC).

Dorrance has been a faculty member in CFAES’ Department of Plant Pathology and based in Wooster since fall 1997. She currently serves as a professor in the department and was the director of the CFAES Center for Soybean Research.
She has developed a nationally recognized research and outreach program on the management of soybean diseases that impact Ohio producers. Her main responsibilities are in soybean and field crop research, with emphasis on soybeans, wheat, and corn. She also co-teaches the Diseases of Field Crops course, educating students on key diseases impacting crop plants, with an emphasis on identification and management strategies.

Dorrance’s educational activities also involve statewide Ohio State University Extension programming for production agriculture, intensive soybean disease short courses, development of OSU Extension literature, and extensive participation in county and statewide educational sessions. OSU Extension is CFAES’ statewide outreach arm.

She and her students have contributed to identifying and characterizing new sources of resistance to many soybean pathogens evaluation of new chemistries for effectiveness, focusing primarily on those that are soilborne as well as determining when host resistance and/or chemistries are needed to manage the predominant soybean pathogens in Ohio.

Dorrance earned an associate degree in biology from Herkimer County Community College, Herkimer, NY; a bachelor’s degree in forest biology from SUNY College of Environmental Science & Forestry, Syracuse, NY; a master’s degree in plant pathology from University of Massachusetts, Amherst, MA; and a PhD in plant pathology from Virginia Polytechnic Institute & State University, Blacksburg, VA. She also was a post-doc in plant pathology at Washington State University, Pullman, WA.

She has received several awards including the Ohio Soybean Council’s Outstanding Achievement Award (2002), the American Soybean Association’s Special Meritorious Award (2008), and the American Phytopathological Society Excellence in Extension Award (2009). She was also designated a Fellow in the American Phytopathological Society (2016).

Leadership of the Wooster campus was most recently held by long-time director David Benfield, who is retiring this month. Benfield has been a professor in the OARDC Food Animal Health Research Program since 2002, where he has conducted research in virology, immunology, and microbiology.
Cut your hay storage and feeding losses
By Michaela King
Source: https://hayandforage.com/print-article-2795-permanent.html

Improper storage and feeding methods can lead to drastic amounts of forage waste. Reducing losses by just a few percentages has a direct effect on the financial status of a livestock operation.

Striving to lower forage storage and feeding waste also often improves forage quality. Jessica Williamson, Penn State University extension forage specialist, explains in her recent article the different options producers have for better utilizing winter feed.

"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," Williamson writes. "But quality must be maintained throughout the storage period. If not, supplemental nutrition or more of it often becomes a necessity."

Many factors at play

Uncovered hay can exhibit dry matter storage losses of near 30 percent, resulting in one of the largest economic losses on a livestock operation. The extent of these losses is impacted by bale density, weather conditions, and forage species. Williamson explains that as rain leaches through a bale, it also washes away soluble carbohydrates. This reduces the total digestible nutrients (TDN) of the hay.

She notes that dry matter loss occurs after harvest as a result of plant respiration, even if the hay is less than 20 percent dry matter at harvest. Dry matter losses are even greater when levels are more than 20 percent due to microbial activity and mold growth.

The best solution to these problems is to cover the hay. The optimal solution is to use a hay barn to provide storage, but other options such as plastic coverings also are effective in reducing losses. If no cover is available, Williamson recommends storing bales off the ground, either on pallets or gravel. This prevents bales from sitting in water during periods of high precipitation.
Williamson cites a University of Tennessee study that showed bales stored in a hay barn had a 5 percent loss and those stacked or tarped had a 14 percent loss. Net-wrapped bales had a 23 percent loss while uncovered, twine-bound bales had a loss of 30 percent.

Feed it right

Each method of feeding hay has its benefits and disadvantages, but overall, ensuring high-quality forages are fed prevents the biggest factor in feeding losses — hay refusal. The other losses during feeding such as trampling, fecal contamination, and leaf shatter are related to how the hay is fed.

“Feeding hay on pasture ground can have benefits and downfalls,” Williamson notes. “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 works best if the hay is very clean and weed-free,” she adds.

When feeding hay on pasture, offer only a single day’s worth of feed at a time to reduce loss due to sorting, trampling, bedding, and fecal contamination.

Using feed rings prevents waste from trampling or fecal contamination by providing a barrier between the hay and the livestock, but this could lead to loss of pasture as a result of compaction and trampling of the sod. Williamson recommends to feed hay out of rings on concrete or gravel. Regardless of the feeding method, the feeding site should always be well-drained.

Carefully plan methods to improve storage and feeding. The small improvements can make a direct and immediate impact on the bottom line of a livestock operation.

“Peter Pan” heifers never catch up

By Abbey Bauer

The age at first calving has been trending downward, with many farms aiming to bring heifers into the milking herd at 22 months or even younger. While this reduces rearing costs, Gavin Staley, D.V.M., explained why it may not be such a good idea during a presentation at World Dairy Expo called “Why heifer maturity matters.”
Staley, a technical services specialist with Diamond V, compared immature heifers to Peter Pan, the child-like cartoon character who never grows up.

“Do they ever catch up?” he asked the audience, in reference to heifers that calve in younger and smaller. “No. There is no compensatory growth.”

It’s not that those heifers won’t keep growing as they are milking; Staley explained that they will. It will come at a cost, though.

“If an animal does not reach the required level of maturity before calving, it will reach it after calving, but at the expense of production,” he said. According to Staley, every pound of growth after calving costs 7 pounds of milk production.

“This is heifer shrink. You never ever see it, but it’s there,” he said.

How big should heifers be at calving? The general rule of thumb is 85 percent of mature body weight. Staley went into more detail on what that number really means.

Weigh, measure, and track
First off, a farm must know the average weight of mature animals in the herd. Staley said third and fourth lactation cows that are 80 to 100 days in milk should be used as the goal.

Then, you must weigh heifers. Springing heifers should reach 95 percent of the average mature body weight in the herd; recently fresh first lactation heifers should be 85 percent of mature body weight.

Following these targets, we create heifers that can reach their potential. “A mature heifer will have the phenotypic characteristics (frame and weight, and specifically weight) that allow it to express its full genetic potential (milk production),” he said.

To reach these goals, farms must maintain an ambitious daily rate of gain during the rearing process. Staley shared an example calculation where a calf that weighed 85 pounds at birth needed to reach 1,444 pounds by calving — a total growth of 1,359 pounds.
To meet that growth goal by 21 months of age, average daily gain through the entire rearing period would need to be more than 2 pounds per day. Even at a more moderate goal of 24 months of age at calving, average daily gain would need to be 1.81 pounds per day. Staley pointed out that many farms are below that level for daily growth.

When heifers calve immaturely, there is a price to pay that lingers beyond the first lactation.

“First lactation milk production sets the ceiling for the whole herd. You cannot outperform the production level set by the first lactation,” Staley said. “Immaturity affects the whole productive life.”

**Dividing line between hemp and marijuana not so cut and dry**

By Patrick Cooley


Hemp and marijuana come from cannabis, but are separate crops. However, the difference between the two is more complicated than you might imagine, and that’s giving potential hemp farmers pause.

Ohio legalized medical marijuana in 2016, and marijuana’s close cousin, hemp, was legalized this year.

What differentiates hemp and marijuana? The answer is deceptively complex. Both come from cannabis. Hemp, however, has less THC, the intoxicating ingredient in marijuana.

“That’s the main chemical difference that separates them,” said Marguerite Bolt, a hemp specialist at Purdue University’s Department of Agronomy. Marijuana plants tend to be bushier and have more seeds, but the two crops are virtually indistinguishable to the untrained eye, Bolt said.

Hemp has dozens of uses. It can be made into rope, clothing, lotions, even food, making it appealing to farmers looking for a new cash crop after a hard year stemming from poor weather and a trade war with China.

The Ohio Department of Agriculture hopes to finalize its hemp rules by spring. On Tuesday, the state Controlling Board, which handles adjustments to the state budget, approved the purchase crime lab equipment to differentiate hemp and marijuana.
Ohio’s crime labs can’t currently measure the quantity of THC in a sample, and prosecutors worry they will have to drop marijuana cases if they can’t differentiate the drug from legal hemp.

Staying under the THC threshold that separates hemp from its cousin is an undertaking, farmers and agricultural experts say, as THC levels in cannabis are inconsistent. And while the law is set, the appropriate minimum THC level remains a matter of debate. State and federal laws require cannabis to include less than 0.3% THC to qualify as hemp. Ohio legislators who wrote the state hemp law said they used the U.S. Department of Agriculture standard for guidance.

USDA representatives did not return messages from The Dispatch seeking comment. Cannabis experts say the 0.3% figure comes from a Canadian study conducted in the 1970s. Canada adopted that threshold and it became an industry standard. The figure was chosen “because of a need to differentiate hemp from marijuana,” said John Hudak, deputy director of the Center for Effective Public Management for the Brookings Institution, a center-left research think tank.

He called the dividing line “arbitrary.” “If you talk to most people who have been in the cannabis industry for a while, most are pushing for 0.5 to 1%,” said Troy Erickson, an entrepreneur who plans to harvest hemp in Ada, in Hardin County.

Medical marijuana producers for the most part aren’t interested in cannabis that includes less than 20% THC, said Gary Pierzynski, director of the Ohio Agricultural Experiment Station at Ohio State University’s College of Food, Agricultural and Environmental Sciences.

“If it has 0.5%, or even 1%, I doubt it would present much of a risk,” Pierzynski said. Remaining under the threshold presents a challenge.

“It’s a matter of having the right genetics and seeds and working with the right people up front,” said Garett Fortune, CEO of the hemp company Commodigy, based in northeastern Ohio.

But Ohio farmers have a potentially steep learning curve, Erickson said. “I think it’s going to be very hard, with the current genetics, for many first-time farmers to raise a crop that is within the threshold,” he said.

Cannabis generates more THC as the plant ages, and farmers worry they may have to dispose of crops that threaten to surpass the threshold before they mature into their most valuable form.
Farmers must test hemp for THC content before they can sell it, and they have some
leeway. The draft rules account for a margin of error in testing equipment. For example,
if a lab has a 0.03% margin of error, then hemp that tests at 0.33% will pass.

The similarities between hemp and marijuana carry other potential headaches for
aspiring hemp farmers, who worry about cross-pollination. That process can depress
the THC content in marijuana and increase it in hemp.

Legal marijuana must be grown indoors in Ohio, but growers are still concerned about
pollen entering or leaving dispensaries on someone’s shoes or clothes. Studies suggest
that the pollen can travel several miles, said Alex Thomas, executive director of the
Ohio Medical Marijuana License Holder Coalition.

Ohio’s hemp law includes a minimum distance of a half-mile between hemp farms and
marijuana cultivators. David Miran, executive director of the state agriculture
department’s hemp program, said the agency arrived at the figure with input from the
hemp industry, but industry groups are pushing for an increase.

“We’ve asked for it to be 10 miles or more,” Thomas said. The industry continues to
discuss the issue with the agriculture department, he added.

**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.
Upcoming Events

December 12, 2019 1:00pm
ARC/PLC Public Meeting – Geauga 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

April 15, 2020 11:30AM
Trumbull Farmer Lunch Series – Cover Crops – A Farmer Discussion

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CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information: http://go.osu.edu/cfaesdiversity.
WHEN
January 8, 2020
8:00am to 3:30pm

WHERE
NEW Location:
Champions Center
4122 Laybourne Road
Springfield, OH

HOW
Registration Cost: $50
RSVP by January 3 at
go.osu.edu/precisionu

CONTACT
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937-484-1526

FEATURED SPEAKERS
Dr. Scott Shearer - The Ohio State University
Dr. Ian McDonald - Ontario Ministry of Agriculture
Dr. Mark Hanna - Iowa State University
Dr. Jason Warren - Oklahoma State University

COMBATING COMPACtion
Learn how to minimize compaction and maximize soil productivity from industry and academic experts.

OHIO STATE UNIVERSITY EXTENSION
ohiostateprecisionag.com
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Industrial Hemp: What You Need To Know

JANUARY 15, 2020  11:30A.M.

The Trumbull County Farmer Lunch Series returns for 2020! We’re kicking off the series with a presentation on the newly legal industrial hemp and will discuss agronomic, legal, and markets. If you are thinking about growing this crop in 2020, don’t miss this opportunity to learn more. To register call our office at 330-638-6783.

This series of education events is brought to you by OSU Extension Trumbull County, Trumbull County SWCD, and the USDA NRCS. 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 (Includes Lunch)
Contact information: 330-638-6783 or beers.66@osu.edu

trumbull.osu.edu
Managing Stored Grain – 2019 Considerations

FRIDAY, DECEMBER 20TH, 2019
3:00 - 4:00 PM

2019 conditions led to variable grain quality causing many potential storage issues. Dr. Ken Hellevang, North Dakota State University, will join us for a webinar to share information on managing stored grain including high moisture and damaged grain.

Register: go.osu.edu/StoredGrain
Cost: Free
For more information, contact: Elizabeth Hawkins, hawkins.301@osu.edu

go.osu.edu/agcrisis
No matter the size of your woodlot, your trees have value that increase with time, proper management, and optimal health.

Join us as we explore tools and resources to sustainably and profitably manage woodlands on your property. Learn about federal programs that can help you achieve your timber and wildlife goals for the new year!

This workshop is being offered in Trumbull County on 1/23/2020 and Portage County on 2/20/2020. All are welcome to attend either workshop location regardless of residence.

This workshop is FREE, but registration is requested in order to prepare materials. If you need special accommodation for this meeting, please contact Kara MacDowell at 330-282-8622.