Hello Northeast Ohio Counties!

Happy holidays from all of us at OSU Extension in NE Ohio!

Check out today’s article on the 2021 ‘Pastures for Profit’ virtual program being offered in January. The program will include live webinars and recorded content that can be viewed on demand. If you pasture livestock, check it out!

Stay safe everyone!

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Temple Grandin Offers Alternatives to Livestock Farmers
By: Mike Estadt
Source: https://u.osu.edu/ohioagmanager/2020/12/21/temple-grandin-offers-alternatives-to-livestock-farmers/

Temple Grandin, Professor at Colorado State University and world renown animal welfare specialist and contributor to Forbes Magazine recently authored an article “Alternative Business Models That Farmers Should Consider” The full article can be found at: https://www.forbes.com/sites/templegrandin/?utm_source=newsletter&utm_medium=email&utm_campaign=follow&cdlcid=5eb5ad3af414222e4126b169&sh=cebb10433a73

First and foremost, small processing plants will never, let me repeat that, never compete with the large plants on cost efficiency. But a series of smaller plants will be less susceptible to the disruptions that happened in the spring of 2020. Grandin offers the following points that have been synthesized into a few sentences.

Use the Craft Beer Industry as A Model: Go Niche
During the restrictions placed upon restaurants and bars, craft brewers innovated and moved their dining outside so they could still sell their draft beers. More importantly craft brewers have been able to coexist with the Anheuser-Busch InBevs because they offer beers that the large brewers do not. That is the definition of a niche. And you must have one to justify the higher prices you charge to cover your production costs. Locally Raised by Farm Families is your niche.

Keep Start Up Cost Low
Avoid the high overhead of a brick and mortar plants. Grandin opinions on the feasibility of purchasing portable slaughter units that are self-contained systems capable of processing 8-15 head of cattle and 20-40 sheep or pigs per day.

Dealing with Inspection
Getting federal inspectors to staff smaller units and facilities is a hurdle. When meat is sold across state lines federal inspection is mandatory. State inspections vary from state to state. Custom-exempt is an option but limits the scope and reach of your sales.

Could A Cooperative Work?
Should a group of ranchers or livestock producers band together to get some efficiency of scale, especially important to maintain constant and consistent supply to a smaller plant. Three challenges exist from her experiences when she designed plants for this type of business structure. First, disagreements between producer board members on how the operation should be run. Second, one big member of the coop sells out their shares and the cooperative gets taken over by a bigger company. Thirdly and most
importantly, having a sufficient supply of product to meet demand. If your brand is “grass-fed”, it ALL must be grass-fed. It is always better to be a small, honest business. This sets you apart from the Anheuser-Busch InBevs of the meat packing industry.

Dealing with the Threat of Intentional Harm to Farm Property
By: Peggy Kirk Hall
Source: https://farmoffice.osu.edu/blog/thu-12172020-158pm/dealing-threat-intentional-harm-farm-property

Whether from trespassers, thieves, vandals, disgruntled employees, drug makers, activists, or extremists, farm security threats are a risk farmers face. Unfortunately, current social and political conditions have added new dimensions to that risk. Intruders can harm property in many ways: releasing or injuring livestock, stealing anhydrous or chemicals, destroying crops, contaminating water, introducing disease, setting fires, or committing other acts of theft, vandalism or destruction.

Recent suspicious activities on Ohio farms have reminded us of the need for constant awareness of farm security and the threat of intentional harm to farm property. Our newest publication, Intentional Harm to Farm Property: Legal Options and Strategies for Farm Owners aims to meet this need by addressing: What to do when a farm security issue occurs. Three immediate actions can be helpful to ensuring a clear-headed reaction to an incident:

- Call local law enforcement.
- Secure the property and preserve the evidence.
- Contact insurance provider.

Options for legal action. How can a farmer address a security incident through the legal system? Local law enforcement might pursue a criminal action, a farm owner might choose to file a civil action, or both criminal and civil actions could take place. Conferring with law enforcement and an attorney will help determine an appropriate course of action. The bulletin explains common criminal actions that might apply to a farm security episode, such as:

- Agricultural product or equipment terrorism
- Animal or ecological terrorism based on corrupt activity
- Arson
- Aggravated arson
- Breaking and entering
• Criminal damaging or endangering
• Criminal mischief
• Criminal trespass
• Injuring animals
• Poisoning animals
• Reckless destruction of crops or timber
• Theft
• Vandalism
• Attempt, complicity and conspiracy regarding any of the above crimes

We also review laws that provide for civil actions against someone who intentionally harms farm property, such as:

• Civil action for damages for criminal act
• Civil theft and willful damage
• Civil trespass to personal property, such as animals and equipment
• Civil trespass to real property
• Civil vandalism
• Civil action for animal or ecological terrorism
• Destruction of crops or timber

Preventing the risk of farm security occurrences. Farmers can adopt practices that reduce the possibility of intruders and incidents of intentional harm to farm property. We list a dozen strategies in the bulletin that may be helpful, such as marking, posting and security property boundaries, maintaining a record of suspicious activities, vetting employees, and conferring with a security professional.

Read more about Intentional Harm to Farm Property: Legal Options and Strategies for Farm Owners, which is available in the agricultural law library, here.

**Pastures for Profit Virtual Course Announced**

This year between January and March in 2021, the Pastures for Profit curriculum will be offered as a virtual course. One live webinar will be offered per month along with "work
“at your own pace” videos and exercises that accompany each webinar. The Pastures for Profit program is a collaboration between Ohio State University Extension, Central State University, USDA-Natural Resources Conservation Service, Ohio Federation of Soil and Water Conservation Districts, Ohio Department of Agriculture, and the Ohio Forage and Grasslands Council.

Each webinar will be offered live on Zoom at 7 P.M. and feature three presentations in a 90-minute span. Attendees will be able to interact with the speakers and ask questions in real time. Once registered, attendees will be granted access to the online course including the webinars and complementary resources. Participants that attend all three webinars will have the opportunity to earn a certificate of completion. Registered participants will also receive their choice of a curriculum binder or USB drive of the traditional course by mail.

The webinar schedule and topics are as follows.

Webinar One- Core Grazing Education: Wed., January 13th at 7 p.m.
- Evaluating Resources and Goal Setting
- Getting Started Grazing
- Soil Fertility

Webinar Two- The Science of Grazing: Wed., February 3rd at 7 p.m.
- Understanding Plant Growth
- Fencing and Water Systems
- Meeting Animal Requirements on Pasture

Webinar Three- Meeting Grazing Goals: Wed., March 3rd at 7 p.m.
- Pasture Weed Control
- Economics of Grazing
- Creating and Implementing Grazing Plans

A series of additional videos that complement each webinar will be accessible to registered participants that include topics such as:
- Soil Health & Fertility
- Species Specific Tips
- Stocking Densities
- Forage Sampling and Analysis
- Winter Feeding Strategies
- Conservation Practices
- Genetic Traits of Forages
- Pasture Layouts
- Farm Economics
Pasture Walks/Virtual Tours

These videos will focus on more specific pasture management topics at the beginner and experienced manager levels. The Pastures for Profit course utilizes Scarlet Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Cost of the course is $50, which includes the Pastures for Profit manual. Current and new members of the Ohio Forage and Grasslands Council are eligible for a $10 discount on registration. Register for the course by visiting https://afgc.org/ofgcwebinar.

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.

**Online equine classes offered by Ohio State ATI**

By: Frances Whited

Source: [https://u.osu.edu/beef/2020/12/16/hay-quality-beyond-proximate-analyses/](https://u.osu.edu/beef/2020/12/16/hay-quality-beyond-proximate-analyses/)

Whether you’re a horse owner or just a horse fanatic who can’t get enough of anything horse-related, you can take advantage of online equine courses at Ohio State ATI in Wooster, Ohio.

The two equine courses planned for spring semester are horse health and disease, and horse breeding and selection.

Horse health and disease is a study of equine disease, lameness, and emergency first aid with emphasis on preventative health care and the manager’s role with the veterinary professional.
Horse breeding and selection teaches the principles of equine breeding management with emphasis on applied equine reproductive physiology, breeding methods, breeding stock management, and basic genetics and selection.

Both courses include a hands-on lab that will meet every other week in Wooster; however, students have the option of enrolling as a continuing education student (a student who is not pursuing a degree) and taking part in the online portion only. Classes begin Jan. 11, 2021, and there is still time to enroll. For more information about these and other spring semester courses, contact ATI's Office of Business Training and Educational Services at 330-287-7511 or visit ati.osu.edu/spring21

Ohio State ATI is located at The Ohio State University College of Food, Agricultural, and Environmental Sciences (CFAES) at Wooster. In keeping with Ohio State’s land-grant mission, ATI provides affordable, accessible associate degree programs that lead directly to employment or bachelor’s degrees.

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information: http://go.osu.edu/cfaesdiversity.