Hello, Northeast Ohio Counties!

It is beginning to feel a lot like fall across Northeast Ohio. It was good to get some rain over the past week; although we need it to stay away now for harvest to continue at a nice pace.

There is a lot of good articles in this week’s edition (some examining topics that we sometimes don’t want to talk about!)—we encourage you to share with your employees.

Have a great and safe harvest week.
28th Annual Ashtabula County Beef Banquet to be held on November 11, 2017 in Lenox, Ohio

OSU Extension and the Ashtabula County Cattlemen's Association will be holding their 28th annual banquet on Saturday, November 11 at the Lenox Community Center beginning at 7:00 p.m. Banquet activities will include a prime rib dinner; business meeting; election of two members to the Ashtabula County Cattlemen's board of directors; entertainment; door prizes; and fine fellowship.

Tickets for the banquet can be purchased from the Directors of the Cattlemen’s Association. Directors are: Bart Kanicki, Pierpont Township; David Nye, Hartsgrove Township; Zach Ward, Austinburg Township; Tyler Brown, Dorset Township; and Dr. Bryan Elliott, Cherry Valley Township. Tickets are $25 per person. Call the Ashtabula County Extension office at 440-576-9008 for more information. Pre-reservations should be made by November 3, 2017. A program flyer can be found at: http://go.osu.edu/ne-events

Ohio Corn, Soybean and Wheat Enterprise Budgets Project
Low Returns for 2018
Barry Ward- Leader, Production Business Management, Ohio State University Extension

Production costs for Ohio field crops are forecast to be flat to slightly lower in 2018 depending on the crop and the profit picture remains poor, much the same as in 2017. Variable costs for corn for 2018 are projected to be $322 to $397 per acre depending on land productivity. Lower nitrogen fertilizer costs will likely be offset by somewhat higher fuel, chemical and interest costs. Variable costs for 2018 Ohio soybeans are projected to range from $195 to $211 per acre. Wheat variable expenses for 2018 are projected to range from $161 to $189 per acre.

With continued low crop prices expected for 2018, returns will likely be low to negative for many producers. Projected returns above variable costs (contribution margin) range from $176 to $350 per acre for corn and $193 to $371 per acre for soybeans. (This is assuming fall cash prices of $3.75 per bushel for corn and $9.60 per bushel for soybeans.) Projected returns above variable costs for wheat range from $130 to $244 per acre (assuming $4.80 per bushel summer cash price).

Returns to land for Ohio corn (Gross Revenue minus all costs except land cost) are projected to range from -$46 to $116 per acre in 2018 depending on land production capabilities. Returns to land for Ohio soybeans are expected to range from $22 to $190 per acre depending on land production capabilities. Returns to land for wheat (not including straw or double-crop returns) are projected to range from -$46 to $61 per acre.

Total costs projected for trend line corn production in Ohio are estimated to be $778 per acre. This includes all variable costs as well as fixed machinery, labor, management and land costs. Fixed machinery costs of $130 per acre include depreciation, interest, insurance and housing. A land charge of $187 per acre is based on data from the Western Ohio Cropland Values and Cash Rents Survey Summary. Labor and management costs combined are calculated at $76
per acre. Returns Above Total Costs for trend line corn production are negative at -$155 per acre.

Total costs projected for trend line soybean production in Ohio are estimated to be $566 per acre. (Fixed machinery costs - $108 per acre, land charge - $187 per acre, labor and management costs combined - $54 per acre.) Returns Above Total Costs for trend line soybean production are also negative at -$81 per acre.

Total costs projected for trend line wheat production in Ohio are estimated to be $541 per acre. (Fixed machinery costs - $126 per acre, land charge - $187 per acre, labor and management costs combined - $40 per acre.) Returns Above Total Costs for trend line wheat production are also negative at -$179 per acre.

These projections are based on OSU Extension Ohio Crop Enterprise Budgets. Newly updated Enterprise Budgets for 2018 have been completed and posted to the Farmoffice website: https://farmoffice.osu.edu/farm-management-tools/farm-budgets

**Snowbelt Woodland Owners Tree Farm Tour to be held on October 28, 2017**
By Dr. Paul Mechling

The Snowbelt Woodland Owner group will be sponsoring a tree farm tour at the Fred & Rebecca Pierce-Ruhland woodland located at 4352 Fox Road in Kingsville, Ohio on Saturday, October 28, 2017 from 9:00 a.m. until 12:00 noon. The purpose of this tour is to view a recent 32 acre timber harvest on the 220 acre Pierce-Ruhland property.

Consulting forester Jim Elze, who administered the harvest, will discuss marketing timber, timber contracts, selecting a logger, monitoring harvest progress, log landing sites, best management practices, forest sustainability, and income tax implications. Woodland owners in Ashtabula, Geauga, Lake, and Trumbull counties who appreciate and value their forests are welcomed to attend. This will be an educational and informative meeting.

A light lunch will be served and a $10 donation per person is requested to cover food, drinks, and mailing costs. Please RSVP by October 27, 2017 to Fred Pierce-Ruhlan at 440-813-1030 or fpierceruhland@gmail.com. Dress according to the weather as this will be an extensive walk in the woods.
Is your Farm MarketReady™? - MarketReady™ Producer Training will be held October 20, 2017, from 8:30 a.m. to 4 p.m.

By Ivory Harlow, Farm & Dairy Newsletter
Source: https://www.farmanddairy.com/top-stories/is-your-farm-marketready/

Is your farm or food business market ready for 2018, or do you need help getting locally produced food products to market? If you could use some assistance to expand your marketing channels, the MarketReady™ Producer Training is for you. MarketReady™ is an education program for farmers and individuals interested in starting or expanding a food business. Increasing demand for locally produced food provides an opportunity for local producers to sell their farm fresh products direct to restaurants, grocers, wholesalers and institutions. The program began as a University of Kentucky initiative, led by Dr. Tim Woods.

“[There is] tons and tons of opportunity in terms of a demand for local foods, but the challenge is just getting our producers up to speed to be able to bring the quality, consistency, and volume of product that these buyers are looking for,” Woods said in an interview with WalletHub.

MarketReady™ teaches farmers professional marketing skills. The curriculum covers market evaluation, packaging, pricing, relationship building, logistics, quality assurance and other key business functions.

Packaging
MarketReady™ teaches farmers how to label and package products in a way that appeals to customers. “I’m a farmer, not a marketer,” a local producer confessed. He underestimated the importance of product packaging when he started selling to grocers. “Large corporations have entire teams dedicated to branding; my product packaging has to compete.”

Pricing
Pricing products appropriately for various market channels is a challenge. On one hand, farmers need to price products at a rate that buyers are willing to pay; On the other hand, farmers must price products to support their business’s viability over the long-term. MarketReady™ helps producers develop a pricing strategy that meets buyers needs as well as their own.

Reaching Larger Markets
A small farm may have trouble producing a sufficient volume to access large markets. MarketReady™ explains how multiple small farms can pool product to supply larger markets such as schools, wholesale or retail. Training shares the benefits of cooperation and steps to starting a cooperative.

Dealing with Regulations
The legal aspects of selling food direct are vast and overwhelming. To complicate matters, state and federal regulations governing food production are ever-evolving. Brokers and retailers often require producers obtain food safety certifications such as Good Agricultural Practices and/or
Good Handling Practices (GAP/GHP) in order to conduct business. New legislation, the Food Safety Modernization Act (FSMA), affects growers, farmers and ranchers, as well as the people who pack and distribute their products.

MarketReady™ helps producers navigate the regulatory environment. Curriculum clarifies areas of concern, and links farmers to food safety resources to keep within compliance. The training also addresses risk management and insurance solutions for selling food and food products through various market channels.

MarketReady™ helps farmers and food producers market their products effectively from production to payment. Producers gain a better understanding of various marketing channels and how to successfully serve their channel(s) of choice.

MarketReady™ Producer Training will be held October 20, 2017, from 8:30 a.m. to 4 p.m. The cost is only $25. The upcoming training is at the Ohio State University Extension Office — Cuyahoga County, in Cleveland, Ohio. Contact Gardner.1148@osu.edu or 740-289-2071 ext 132 to register.

References

U.S. Senate Passes Changes to Federal Harmful Algal Bloom and Hypoxia Research and Control Act
Written by Ellen Essman, Law Fellow, Agricultural & Resource Law Program

The U.S. Senate has passed a bill sponsored by Ohio senators Sherrod Brown and Rob Portman that intends to improve the federal response to water pollution by amending the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998. Senate Bill 1057 will now move on to the House of Representatives for debate.

What are harmful algal blooms and hypoxia?

The EPA defines harmful algal blooms as “overgrowths of algae in water,” some of which “produce dangerous toxins in fresh or marine water.” The toxins can be dangerous for humans and animals. One major contributor to algal blooms is an excess of nitrogen and phosphorus in the water. Hypoxia can also be caused by too much nitrogen and phosphorus in the water. The EPA defines hypoxia as “low oxygen” in water. Hypoxia sometimes goes hand-in-hand with algal blooms, because as algae dies, it uses oxygen, which in turn removes oxygen from the water. Algal blooms and hypoxia have been a problem in Lake Erie and other parts of the country.
Background of the law

The Harmful Algal Bloom and Hypoxia Research and Control Act was passed in 1998 in response to harmful algal blooms and hypoxia along the coast of the United States. When passing the law, Congress cited scientists who said both problems were caused by "excessive nutrients." Furthermore, Congress found that harmful algal blooms had caused animal deaths, health and safety threats, and “an estimated $1,000,000,000 in economic losses” in the previous decade.

The law established an interagency Task Force on Harmful Algal Blooms and Hypoxia (Task Force), which was charged with submitting an assessment to Congress on the “ecological and economic consequences” of both harmful algal blooms and hypoxia. The assessments were to include “alternatives for reducing, mitigating, and controlling” harmful algal blooms and hypoxia. A number of other reports and assessments were also required, which were to all culminate in a plan to combat and reduce the impacts of harmful algal blooms. Additionally, the Act singled out the areas of the Northern Gulf of Mexico and the Great Lakes. For these two areas, the Act required additional progress reports and mitigation plans.

The Act has undergone a few amendments throughout the years. The amendments have expanded and/or renewed the duties of the Task Force and other state and federal actors. Most notably, amendments in 2014 created the national harmful algal bloom and hypoxia program (Program) and a comprehensive research plan and action strategy. Under the Program, the National Oceanic and Atmospheric Administration (NOAA) was charged with administering funding to programs combating algal blooms and hypoxia, working with state, local, tribal, and international governments to research and address algal blooms and hypoxia, and supervising the creation and review of the action strategy, among other duties. The action strategy identified the “specific activities” that the Program should carry out, which activities each agency in the Task Force would be responsible for, and the parts of the country where even more specific research and activities addressing algal blooms and hypoxia would be necessary.

What changes are proposed?

SB 1057 would make a number of changes and additions to the current law. Overall, the goal of the bill seems to be to strengthen the federal government’s ability to research and respond to water pollution in the form of algal blooms and hypoxia. The most important amendments in the bill would:

- Add the Army Corps of Engineers to the list of agencies on the Task Force.
- Combine the sections on freshwater and coastal algal blooms, and require that scientific assessments be submitted to Congress every five years for both types of water.
- Establish a website that would provide information about the harmful algal bloom and hypoxia program (Program) activities to “local and regional stakeholders.”
- Require the Task Force to work with extension programs to promote the Program and “improve public understanding” about harmful algal blooms and hypoxia.
- Require the use of “cost effective methods” when carrying out the law.
• Require the development of “contingency plans for the long-term monitoring of hypoxia.”
• Fund the Program and the comprehensive research plan and action strategy from 2019 through 2023.

Most importantly, SB 1057 would add a completely new section to the law that would allow federal officials to “determine whether a hypoxia or harmful algal bloom event is an event of national significance.” Under the new language, the federal official can independently determine that such an event is occurring, or the Governor of an affected state can request that a determination to be made.

When making the determination, the federal official would have to take a number of factors into consideration including:

• Toxicity of the harmful algal bloom;
• Severity of the hypoxia;
• Potential to spread;
• Economic impact;
• Relative size in relation to the past five occurrences of harmful algal blooms or hypoxia events that occur on a recurrent or annual basis; and
• Geographic scope, including the potential to affect several municipalities, to affect more than one State, or to cross an international boundary.

Finally, in the case an event of national significance is found, the the federal official would have the power to give money to the affected state or locality to mitigate the damages. However, SB 1057 states that the federal share of money awarded cannot be more than 50% of the cost of any activity. The federal official would have the power to accept donations of “funds, services, facilities, materials, or equipment” to supplement the federal money.

The bill now goes to the House of Representatives for consideration. Text and information on SB 1057 is available at: https://www.congress.gov/bill/115th-congress/senate-bill/1057/text

To read the current law, click here or http://uscode.house.gov/view.xhtml?hl=false&edition=prelim&req=granuleid%3AUSC-prelim-title33-chapter53&num=0&saved=%7CKHRpdGxlOjMzIHNlY3Rpb246NDAwMSBlZGl0aW9uOnByZWxpbSk%3D%7C%7C%7Cfalse%7Cprelim

For further information on water pollution, check out the EPA’s pages on harmful algal blooms https://www.epa.gov/nutrientpollution/harmful-algal-blooms#learn and hypoxia at https://www.epa.gov/ms-htf/hypoxia-101
Grass-fed Cows Won’t Save the Climate
By Jacquelyn Turner

If you thought eating only “grass-fed” hamburgers could absolve you from climate change guilt, think again. There’s a lack of evidence that livestock (such as cattle, sheep, and goats) dining on grassland has a lower carbon footprint than that fed on grains, as some environmentalists and “pro-pastoralists” claim, according to a new report by an international group of researchers led by the Food Climate Research Network (FCRN), based at the University of Oxford in the United Kingdom.

“Switching to grass-fed beef and dairy does not solve the climate problem—only a reduction in consumption of livestock products will do that,” says one of the report’s authors, Pete Smith of the University of Aberdeen in the United Kingdom.

Livestock is responsible for 14.5% of global greenhouse emissions, researchers estimate. The animals emit gases such as nitrous oxide, carbon dioxide (CO2), and methane in amounts that have significantly changed our atmosphere. And the impact is growing. As more people worldwide are lifted out of poverty, many more can afford to eat meat regularly; global demand for animal products, now 14 grams per person per day, is expected to more than double by 2050.

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Most modern-day cattle are raised on “landless systems,” also known as feedlots, where the cattle have little space, no access to pastures, and are fed a grain-based diet.

Proponents of this system argue that it is an efficient way to produce meat that helps prevent conversion of forests and other ecosystems to pasture. But feedlot systems are notorious for producing hydrogen sulfide and polluting waterways with animal waste, ammonia, pathogens, and antibiotics. Moreover, some experts say, because ruminant stomachs evolved to eat grass, feeding them soy or corn results in more greenhouse gas emissions.

Letting ruminants graze is a better system, some argue. Plants take up CO2 through their leaves and, when they die, leave part of it in their roots, where it remains and is converted to other forms of life; that makes soil a giant carbon sink. But human activities such as deforestation and plowing have released much of the stored carbon, and “pro-pastoralists”...
suggest that grazing cattle can help restore grasslands and soil, sequestering massive amounts of CO2 in the process. The cows’ manure would also recycle nutrients such as nitrogen and phosphorous to the soil, encouraging the growth of new vegetation and sequestering even more carbon.

But the 127-page FCRN report released today, *Grazed and Confused*, says there is no evidence that grass-grazing cattle will make a difference. Grass-fed cattle do contribute to CO2 sequestration, the international group concluded after sifting through more than 100 papers—but only under ideal conditions. When too many animals roam a field, they will trample plants and soil and impede carbon storage; when it’s too wet, carbon uptake is impeded as well. And even under the best of conditions, carbon sequestration is not at levels high enough to counteract the ruminants’ own emissions, the report says.

The findings don’t sway advocates of grazing. Richard Young of the Sustainable Food Trust in Bristol, U.K., says the report is too quick to dismiss the importance of grazing in some regions. “For me it’s very simple,” he says. “In countries like the U.K. and Ireland, and on rangelands where rainfall is too unreliable for much crop production, we should continue to encourage and make possible ruminant production.” Legislation and policy can help prevent overstocking, he says.

“Farming becomes sustainable when it looks like an ecosystem,” adds Richard Manning, the Helena, Montana–based author of *Grassland: The History, Biology, Politics and Promise of the American Prairie*. “It works when we mimic natural systems. And we have to include animals, because that’s what’s found in nature.” Manning says the report also ignores other services grasslands provide, such as absorbing flood water and filtering runoff. And as the report acknowledges, conventionally raised beef has other environmental issues, Manning points out, such as increasing the demand for grains, and therefore cropland.

In the end, the real solution is reducing global meat consumption, says Tim Benton, who studies sustainable agro-ecological systems at the University of Leeds in the United Kingdom. “Our ever-increasing demand for meat is driving the planet in an unsustainable direction,” Benton says. “No one farming system will fix it.”

**Honey Samples Worldwide Test Positive for Neonicotinoids**

Source: https://www.eurekalert.org/pub_releases/2017-10/aaft-hsw100217.php

A global sampling of honey finds 75% to be contaminated with neonicotinoid pesticides. Of note, the concentrations detected are below the amount authorized by the European Union for human consumption. The situation is more bleak for pollinators, however. Widespread application of neonicotinoids has been identified as a key factor responsible for the global decline in pollinators, particularly bees. Edward A.D. Mitchell et al. sought to explore the extent of exposure by testing 198 honey samples for five commonly used neonicotinoids: acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam. Samples were taken across all continents (except Antarctica), as well as numerous isolated islands. Overall, 75% of all honey
samples contained at least one neonicotinoid; of these contaminated samples, 30% of contained a single neonicotinoid, 45% contained two or more, and 10% contained four or five.

Concentrations were highest in European, North American, and Asian samples. While the authors emphasize that the concentrations of neonicotinoids were below levels that the EU authorizes in food and feed products, they do cite some emerging studies on the effects of neonicotinoids in vertebrates, such as impaired immune functioning and reduced growth, which may result in a re-evaluation of these restrictions. As for the effects on bees, 34% of honey samples were found to have concentrations of neonicotinoids that are known to be detrimental. These results suggest that a substantial proportion of world pollinators are probably affected by neonicotinoids. Christopher N. Connolly discusses these findings, and the implications of chronic exposure of bees to neonicotinoids, in a related Perspective.

**Fall Grazing Management**  
Rory Lewandowski, OSU Extension Educator, Wayne County

After clipping pastures throughout the growing season and managing pasture rotations to insure that plants are not overgrazed and that there is enough rest period between grazing passes, it can be tempting in the fall to let grazing management slide. There is fall crop harvest and a number of other fall tasks to get done before winter. However, from a plant health standpoint, overgrazing during the fall is more detrimental to the plant compared to overgrazing followed by rest in the early part of the growing season. Fall is the time when the perennial plant must store up carbohydrate reserves that will be used to survive the winter and generate new growth next spring.

In the fall of the year environmental conditions are not favorable for rapid leaf growth and an overgrazed plant will not be able to generate a lot of new leaf growth. Although leaf growth is slow, if sufficient leaf area is maintained throughout the fall season, photosynthesis is not slowed down. Physiologically this means that the carbohydrates produced by photosynthesis during this time period accumulate in plant storage organs. This is exactly what the plant needs to survive the winter and produce new growth next spring.

Once we reach the fall period it is critical that grass plants be managed to insure that adequate leaf area is left after a grazing pass. Since leaf regrowth is slow, this means leaving a typical
grazing residual plus some extra. For orchardgrass, leave 4 to 5 inches at a minimum. Tall fescue and bluegrass should be managed to leave a 3 to 4 inch residual. If there is not enough pasture growth to allow the rotation to be managed in this way, then consider feeding some hay. Think of hay use at this time as another management tool that allows you to protect your pastures. You will be rewarded with quicker pasture green up and more vigorous growth next spring.

**Don’t Guess, Forage Test!**

By: Al Gahler, OSU Extension Educator, Sandusky County (originally published in the [Ohio Cattleman](http://www.ohiocattleman.com), late fall 2017 issue)

Source: [http://u.osu.edu/beef/2017/10/04/dont-guess-forage-test/#more-3908](http://u.osu.edu/beef/2017/10/04/dont-guess-forage-test/#more-3908)

Across most of Ohio, 2017 has been a challenging crop year, especially for those in the hay production business. In 2016, while most producers did not have significant yields, quality was tremendous due to the dry weather which allowed for highly manageable cutting intervals and easy dry down. Since the end of June, however, 2017 has been just the opposite, with mother nature forcing many bales to be made at higher than optimal moisture levels, and cutting intervals measured in months rather than days.

With adequate moisture throughout most of the state for much of the summer, this equates to substantial yields, which in turn for the beef producer, means hay is readily available at reasonable prices. However, for the astute cattleman that either makes his/her own hay or knows the nature of the business, this also means high quality hay may just be the proverbial needle in the haystack, and for the most part, as the old adage goes, you get what you pay for.

While there are many options to manage the situation, including making the best use of all of our available feed resources such as crop residues, stockpiled pastures, and supplements, one of the easiest and cheapest management tools is often overlooked. It is not a feedstuff itself, but instead is the analysis of the feed through a forage nutrient analysis test.

With the increasing focus on soil and water health in agronomic crop production, most have certainly heard the phrase from their county Extension Educator or local agronomist – “Don’t guess, soil test!” Well, as an Extension Educator with a background and experience in forage production and beef cow/calf production, I challenge every hay producer and cattleman to “Don’t guess, forage test!” So many times I have attended hay auctions around the state, or even witnessed hay sales transactions on the farm that involved nothing more than a visual color test, a scratch-n-sniff test, a touch and feel test, and of course a price test. While pretty green hay is appealing to us, color actually tells us very little about the nutrient content. With the right weather conditions, even alfalfa/orchardgrass hay cut at 45 days or more can show up bright green in a bale, and we all know what happens to the nutrient content of alfalfa past 30 days. Now as for the scratch-n-sniff test, I will not dispute that an experienced nose can sniff...
out musty and/or heat damaged hay that may very well not be ideal. And sure, a touch and feel test can indicate how soft the stems are, which MIGHT equate to maturity of the plant, but let’s combine all these variables.

What is one of the best ways to make even mature hay soft to the touch? Bale it slightly higher in moisture. What is a good way to keep some color in mature hay? Bale it before the sun has a chance to bleach it out, which obviously means at higher moisture. But what about preservatives you might ask? Many hay producers are using propionic acid and other preservatives to bale hay at higher moistures and beat mother nature at her own game while preserving hay quality. When used properly, this can significantly affect the nutrient content vs. letting hay get rained on, and when used on borderline situations, can allow for hay to be made that may still heat, and take away from the visual appearance, but could prevent molding. While significant heating can damage the proteins in the forage, treated hay will still usually beat the alternative of rained on hay when tested for nutrients. So the moral of all these stories? We really do not know much about our hay, or which hay to feed at the proper time for the production cycle of the cow unless we test it for nutrient content! To further illustrate the above points, let’s analyze some actual forage testing from some 2017 Sandusky and Ottawa County hay fields. The chart below shows the date of when the field was mowed, how many days in between cuttings, and some of the basic nutrient analyses.

Table 1: Nutrient content and cutting intervals of Ohio hayfields. Field 1 is pure alfalfa – 3rd year stand, Field 2 is alfalfa/timothy – 3rd year, Field 3 is alfalfa/orchardgrass, 3rd year, Field 4 is alfalfa/orchardgrass/timothy – 6th year.

<table>
<thead>
<tr>
<th>Field</th>
<th>Cutting</th>
<th>Date Cut</th>
<th>Interval</th>
<th>Protein</th>
<th>ADF</th>
<th>NDF</th>
<th>TDN</th>
<th>RFV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field 1</td>
<td>1st</td>
<td>13-May</td>
<td>n/a</td>
<td>18.6</td>
<td>25.0</td>
<td>35.5</td>
<td>71.9</td>
<td>181.7</td>
</tr>
<tr>
<td>Field 1</td>
<td>2nd</td>
<td>19-Jun</td>
<td>37 days</td>
<td>18.2</td>
<td>33.3</td>
<td>38.3</td>
<td>63.0</td>
<td>152.8</td>
</tr>
<tr>
<td>Field 1</td>
<td>3rd</td>
<td>29-Jul</td>
<td>39 days</td>
<td>18.5</td>
<td>38.8</td>
<td>46.6</td>
<td>58.7</td>
<td>117.3</td>
</tr>
<tr>
<td>Field 2</td>
<td>1st</td>
<td>4-Jun</td>
<td>n/a</td>
<td>16.6</td>
<td>31.2</td>
<td>45.0</td>
<td>67.0</td>
<td>133.5</td>
</tr>
<tr>
<td>Field 2</td>
<td>2nd</td>
<td>28-Jul</td>
<td>54 days</td>
<td>17.0</td>
<td>39.5</td>
<td>49.0</td>
<td>58.1</td>
<td>110.4</td>
</tr>
<tr>
<td>Field 3</td>
<td>1st</td>
<td>10-Jun</td>
<td>n/a</td>
<td>19.4</td>
<td>33.1</td>
<td>45.4</td>
<td>64.9</td>
<td>129.3</td>
</tr>
<tr>
<td>Field 3</td>
<td>2nd</td>
<td>14-Jul</td>
<td>34 days</td>
<td>19.4</td>
<td>36.4</td>
<td>45.3</td>
<td>60.5</td>
<td>124.3</td>
</tr>
<tr>
<td>Field 4</td>
<td>1st</td>
<td>30-May</td>
<td>n/a</td>
<td>14.2</td>
<td>33.9</td>
<td>52.8</td>
<td>64.0</td>
<td>110.3</td>
</tr>
</tbody>
</table>
In a “normal” year, if there is such a thing in Ohio, we would expect to be able to harvest on 30-40 day intervals, and we would expect protein percentage, Total Digestable Nutrients (TDN), and Relative Feed Value (RFV) to increase with each cutting. In turn, Acid Detergent Fiber (ADF) and Neutral Detergent Fiber (NDF) should decrease if subsequent harvest is made in a timely manner.

As you can see from the chart, harvest was not always timely on these fields, but even when it was, we notice extreme variances across fields that were all managed similarly, and in the case of field 1, the exact opposite of what we would expect in terms of nutrient analysis through subsequent cuttings. There could be other variables having an effect here that we do not know about such as how many times the hay was handled in the field leading to leaf loss, field fertility, and variety of alfalfa and/or grass, but we do know that all fields were managed by the same producer using the same hay probe for sampling, and the same lab for testing. The main take home point is simple – to efficiently and effectively manage your herd when feeding hay, a forage test is the easiest and cheapest to use tool in your box, and essential no matter how good your eyes, nose, and fingers are at ‘evaluating’ hay!

**Farm Safety Tips and Reminders**

Chris Zoller, Extension Educator, ANR - Tuscarawas County

Fall harvest has started on some farms and will be going in full force very soon. A number of factors, including: heavy equipment, moving parts, long hours, fatigue, and a poor diet are common this time of year. These factors make agriculture one of the most dangerous occupations. You, or someone you know, may have experienced a close call at one time or another while operating machinery.

Data collected by the Ohio State University Extension Ag Safety and Health Program shows that 168 people have been killed on Ohio farms from 2004 - 2013. Over that ten year period, 75 of the 168 fatalities involved a tractor rollover. Not surprising, harvest is one of the times of the year when farm fatalities increase.

How can you create and maintain a safe work environment for you, your family, and employees? Dr. Bernie Erven, professor-emeritus and Ohio State University Extension specialist, offers the following:

1. **Create a Culture of Safety Values.** Talk frequently about safety, emphasize the importance of safety, and lead by example.
2. **Training is Essential.** Some training will require more time while others may be addressed in a less formal setting. One technique is called “spot training” where quick safety lessons are given at the time and place of a task that has special hazards involved. Ohio State University Extension has a number of “Tailgate Safety Training” resources available. Copies can be found by clicking: [https://agsafety.osu.edu/programs/cfaes-osha/tailgate-safety-training-employees](https://agsafety.osu.edu/programs/cfaes-osha/tailgate-safety-training-employees).
3. **Make Sure Workers Know How to Perform Their Job Safely.** Working safely is more important than working quickly.
4. **Involve Everyone in Finding and Reducing Hazards.** Get everyone in the habit of doing one of two things when they observe any situation that may be hazardous – repair it or report it.

5. **Use Progressive Discipline to Enforce Safety.** When hazardous practices are observed, they demand immediate attention to minimize the chances of that practice becoming a bad habit.

Dawn Milhalvoc-Bayer, Physician Assistant at the Mayo Clinic, offers the following safety suggestions:

**Equipment Safety**
- Turn equipment off before making repairs or adjustments. Do not reach into equipment while parts are moving.
- Do not remove safety shields, roll bars or guards.
- Avoid wearing baggy clothing, loose jewelry or long hair near moving equipment.
- Use safety glasses, noise protection and other precautions, including masks, when using chemicals and pesticides.
- Never leave running equipment unattended.
- Pay attention to all safety information. Read the operator’s manual and warning decals.
- Inspect the equipment, and correct any hazards before operating.
- Identify hazardous areas on equipment, and make sure you stay away from moving parts. Beware of pinch points, shear points, wrap points, pull-in areas, thrown objects, crush points, stored energy hazards and freewheeling parts.
- Shut down equipment, turn off the engine, remove key and wait for moving parts to stop before dismounting equipment.
- Keep bystanders and others away from equipment operation area.

**Road Safety**
- When on the road, make yourself easy for drivers to see by using the equipment’s lights and flashers, especially in the early mornings and evenings.
- Drive at speeds that will allow you to maintain control at all times.
- Avoid busy roads when possible.
- If there is a line of cars behind you and a suitable shoulder is available, pull over and allow traffic to pass.
- Stay alert for hazards, such as soft shoulders, narrow bridges, loose gravel, bumps, potholes, and deep ruts.

Safety is critically important for everyone involved in your farm. Make everyone a partner in creating and maintaining a safe work environment. Doing so will decrease lost work time and help with employee satisfaction.

Have a SAFE harvest!

Resources:

**Mayo Health System**

**Ohio State University Extension Ag Safety & Health Program**
[https://agsafety.osu.edu/home](https://agsafety.osu.edu/home)
**David’s Weekly News Column**

Hello, Ashtabula County! Cool nights, warm days and the crinkling of leaves under our feet remind us all why we love living in Ashtabula County. What a blessing to live in such a beautiful part of God’s creation. I hope all of you have the chance to get out and about this month. The sights and smells of harvest are upon us and there are a lot of activities across the region which you can take part in. Today, I would like to share details on the Ashtabula County Beef Banquet, Snowbelt Woodland Owner meeting and how farmers can get a copy of the Agronomy Guide. Enjoy our beautiful fall and I hope to see you at some of these events over the next few weeks!

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OSU Extension and the Ashtabula County Cattlemen’s Association will be holding their 28th annual banquet on Saturday, November 11 at the Lenox Community Center beginning at 7:00 p.m. This event is the largest agricultural banquet in the county due to its wonder Prime Rib dinner. Besides the great prime rib dinner, we will be entertained by a local musician and will recap the activities of the Ashtabula County beef industry. Beef producers will also be asked to elect two directors to the Cattlemen’s board and we will have a pile of door prizes to give out.

We are selling tickets for this event at the Ashtabula County Extension office or they can be purchased from the Directors of the Cattlemen’s Association. Directors are: Tyler Brown, Dorset Township; Dr. Bryan Elliott, Dorset Township; Bart Kanicki, Pierpont Township; David Nye, Hartsgrove Township and Zach Ward, Austinburg Township. Tickets are $25 per person. Call the Ashtabula County Extension office at 440-576-9008 for more information. Pre-reservations should be made by November 3, 2017. A program flyer can be found at: [http://go.osu.edu/ne-events](http://go.osu.edu/ne-events). I hope to see many of you at this event! It is the best Prime Rib that you will ever eat. Come join us to celebrate our local beef industry.

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The Snowbelt Woodland Owner group will be sponsoring a tree farm tour at the Fred & Rebecca Pierce-Ruhland woodland located at 4352 Fox Road in Kingsville, Ohio on Saturday, October 28, 2017 from 9:00 a.m. until 12:00 noon. The purpose of this tour is to view a recent 32 acre timber harvest on the 220 acre Pierce-Ruhland property.

Consulting forester Jim Elze, who administered the harvest, will discuss marketing timber, timber contracts, selecting a logger, monitoring harvest progress, log landing sites, best management practices, forest sustainability, and income tax implications. Woodland owners in Ashtabula, Geauga, Lake, and Trumbull counties who appreciate and value their forests are welcomed to attend. This will be an educational and informative meeting.

A light lunch will be served and a $10 donation per person is requested to cover food, drinks, and mailing costs. Please RSVP by October 27, 2017 to Fred Pierce-Ruhlan at 440-813-1030 or fpierceruhland@gmail.com. Dress according to the weather as this will be an extensive walk in the woods.

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Northeast Ohio Agriculture

Ohio State University Extension

Ashtabula and Trumbull Counties
The 15th edition of the Ohio Agronomy Guide is now available from OSU Extension. This guide has been the gold standard for crop production information since 1966. This guide contains management information on corn, soybeans, small grains, forage, pasture and soil management. Additionally, three new chapters have been added on cover crops, on-farm research and precision agriculture. This 148 page guide can be purchased from our Extension office for $15.75. Stop in today at 39 Wall Street in Jefferson, Ohio to get your copy. I can also send you a FREE PDF version of this guide if you email me at marrison.2@osu.edu and reference this news article!

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To close today’s column, I would like to share a quote from James H. Douglas, Jr. who stated, “Our deep respect for the land and its harvest is the legacy of generations of farmers who put food on our tables, preserved our landscape, and inspired us with a powerful work ethic.” Have a good and safe day!

**Easing into Native Plants**

Garden Reflections by the Ashtabula County Master Gardeners

Have you been thinking about going native? Autumn is a great time to take inventory in the home landscape and plan which natives to plant in weeks ahead or later in the spring. Did one or more of your exotic shrubs or perennials succumb to our cold, wet spring? Did a hot, dry September strangle a plant that had previously been struggling?

Then it’s time to begin the transition to natives, those trees, shrubs and plants that have been perfectly happy growing in Ashtabula County for decades and even centuries. Replace that loser with a native species that comes closest to displaying similar attributes of the lost alien.

If your Japanese barberry is looking peaked (or if you're just tired of being scratched when you work around it), replace it with a gentler, more beautiful shrub. Beautyberry (Callicarpa americana) sports purple berries that are as rare as they are charming. Its fruits are an important food source for many birds, such as bobwhite quail, robins, cardinals, catbirds, finches, mockingbirds, thrashers and towhees.

If powdery mildew covered your Japanese spirea this spring, yank it out. Better to replace it with New Jersey tea (Ceanothus americanus), sand myrtle (Leiophyllum buxifolium), Douglas spirea (Spiraea douglasii), mountain spirea (Spiraea spendens), or steeplebush (Spiraea tomentosa). All have the delicate pink blooms that may have attracted you initially to the spirea.

If you're tired of dealing with Euonymus scale on your burning bush, give it up. The problem with this shrub is that birds like to eat its berries, which means it spreads to wild environments rapidly. Currently, burning bush is considered invasive in most states east of the Mississippi

Brilliant fall berries stand out against the chartreuse fall foliage of Beautyberry (Callicarpa americana). Photo by Encie Moroski

Northeast Ohio Agriculture
where it threatens native forests, fields and coastal scrublands. Plant in its stead chokecherry (Aronia spp.), which has similar autumn color in the form of scarlet leaves, as well as bird-friendly berries. Mountain serviceberry (Amelanchier bartramii) also has nice autumnal foliage and fruit.

One plant you should seriously consider replacing in spite of its health and vigor is English ivy. When it sneaks into woods, it can entwine and choke trees and spread like a blanket over the forest understory. It’s also a favorite haven of mice, rats and carpenter ants. People who are allergic to the sap of any hedera species develop a non-itchy rash that looks just like poison ivy.

If you can successfully eradicate English ivy from your yard, plant a native that does what you wanted your ivy to do. Want a fast climber? Try crossvine, or native honeysuckle. Need a quick ground cover? Try Allegheny spurge (Pachysandra procumbens) or Green-and-gold (Chrysogonum virginianum).

You don’t need to adopt a slash and burn policy toward your exotics if you’re planning a shift to natives in your landscape. Ease into it with replacement plants or new beds devoted strictly to those trees, shrubs, plants and ground covers that support native birds and other wildlife. Biodiversity in your home landscape will reward you with beauty and a healthier surrounding for you and your family.

Ashtabula County Master Gardeners have been focusing on the importance of native plants in 2017. Articles include ways to go native, saving monarch butterflies, the dangers of alien invasives and landscaping for birds and other wildlife.

**Upcoming Extension Program Dates**

The following programs have been scheduled for Northeast Ohio farmers. Complete registration flyers can be found at: [http://ashtabula.osu.edu/program-areas/agriculture-and-natural-resources/upcoming-educational-programs-deadlines](http://ashtabula.osu.edu/program-areas/agriculture-and-natural-resources/upcoming-educational-programs-deadlines)

### 2017 Ashtabula County Beef Banquet
Saturday, November 11, 2017

### Private Pesticide Applicator & Fertilizer Re-certification Sessions
November 16, 2017 from 1:00 to 5:00 p.m. in Lake County
January 12, 2018 from 8:00 to 12:00 noon in Ashtabula County
February 2, 2018 from 8:00 to 12:00 noon in Geauga County
February 9, 2018 from 10:00 to 3:00 p.m. in Portage County
March 9, 2018 from 1:00 to 5:00 p.m. in Trumbull County

### Farm Management School
January 15, February 12 & March 12
Exploring the Small Farm Dream  
Saturday, January 20, 2018

2018 Northeast Ohio Winter Agronomy School  
Wednesday February 21, 2018

2018 Winter Beef School (Calving School)  
Thursday, February 22, 2018

2018 Ashtabula County Dairy Banquet  
Saturday, March 24, 2018

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

David Marrison       Lee Beers  
Ashtabula County Extension Office    Trumbull County Extension Office  
39 Wall Street                  520 West Main Street  
Jefferson, OH 44047            Cortland, OH 44410  
440-576-9008                  330-638-6783  
marrison.2@osu.edu          beers.66@osu.edu  
ashtabula.osu.edu          trumbull.osu.edu
Ashtabula County
28th Annual Beef Banquet

November 11, 2017
7:00 p.m.
Lenox Community Center
2509 Lenox-New Lyme Road
Jefferson, Ohio

Tickets are $25 per person. Includes your farm’s 2018 membership into the Ashtabula County Cattlemen’s Association.

Banquet will include the election of two ACCA directors, entertainment, door prizes, and a great Prime Rib dinner!

Call OSU Extension at 440-576-9008 for more details on how to purchase banquet tickets. Ticket reservations are required by November 3, 2017 so that adequate meal preparations can be made.