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OHIO STATE UNIVERSITY EXTENSION

NORTHEAST OHIO AGRI-CULTURE NEWSLETTER

Your Weekly Agriculture Update for Ashtabula and Trumbull Counties

June 25, 2019

Barley straw after harvest

In This Issue:

Hello Northeast Ohio Counties!

In a normal year, last weekend probably wouldn't have been notable, but three hot, drying days in a row has been rare for 2019. Ground conditions far from ideal, but at least it was a step in the right direction. Some producers around the area were even able to make dry hay and harvest some grains last weekend.

2019 has been stressful for everyone and I wanted to take a moment and remind you that at OSUE we are always here to help. Both me and Lee are always available to help you go over the options, or just talk things over. Give us a call or stop in!

Stay Safe!

Lee Beers
Trumbull County
Extension Educator

Andrew Holden
Ashtabula County
Extension Educator

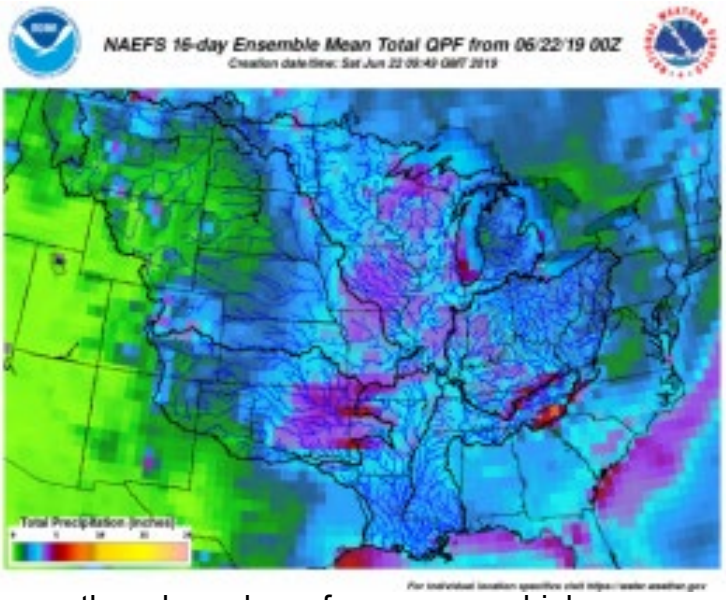
OSU Extension is Hiring a Local Foods Coordinator for Ashtabula County

See below for job details and qualifications. If you are interested, please visit http://www.jobsatosu.com/postings/95784 for more information.

Ohio State University Extension (OSUE) seeks a Local Foods Coordinator in Ashtabula County. Applications being taken for a 2 year grant funded position. Coordinator will work for OSU Extension in enhancing the local food system in Ashtabula County and surrounding area. For complete position description and online application instructions, please go to www.jobsatosu.com and search by Job Opening Number 450522. To assure consideration, applications must be made by on-line by June 30, 2019. The Ohio State University is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation or identity, national origin, disability status, or protected veteran status.

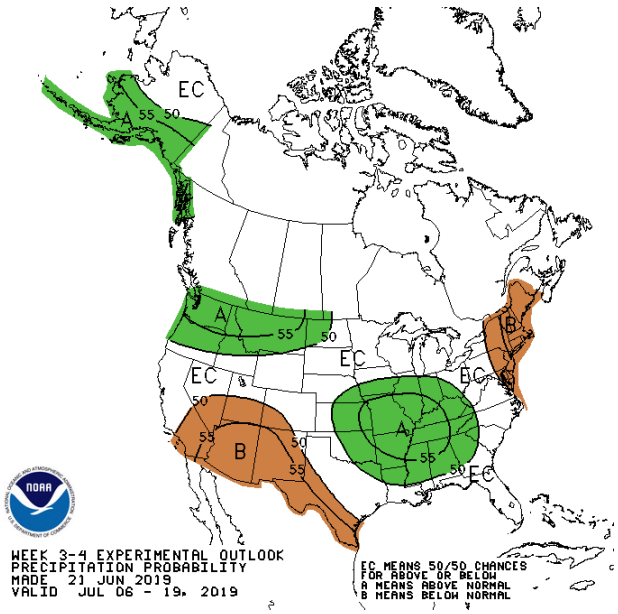
Wetter than normal still favored for much of Ohio into much of July

By: Jim Noel
Source: **https://agcrops.osu.edu/newsletter/corn-newsletter/201919/wetter-normal-still-favored-much-ohio-much-july**



After a wet start to the last week of June, we will see some drying for the second half of the week. As a dome of warm air builds aloft, it will produce an above normal temperature week ahead with maximum temperatures mostly in the 80s and minimum temperatures in the 60s and 70s across the state as well.

Look ahead to the week 2 outlook across Ohio, The NOAA Climate Prediction Center is calling for a greater chance of above normal temperatures and rainfall. This will be triggered by storms riding along the northern boundary of a very warm high-pressure system to the south of Ohio. The latest CPC week two outlooks at be found at https://www.cpc.ncep.noaa.gov



Looking further ahead to week 3 and week 4 outlooks, odds favor a return to slightly below normal temperatures. This will be a function of below normal maximum temperatures. However, minimum temperatures will remain at or above normal due to the high soil moisture conditions and the humid airmass in place. Rainfall is continuing to lean above normal especially in the western half of the heavy agriculture areas of Ohio. See the attached images. The week 3/4 outlooks can also be found at https://www.cpc.ncep.noaa.gov/ The two-week average rainfall total still looks above normal as discussed above with rainfall averaging 2-4 inches across Ohio. Normal rainfall for Ohio for the two week period is 1.50-2.00 inches.

From the Heart

By: Sarah Noggle
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/201919/heart

In trying times, where do you turn?

Farmers are some of the most humble, down to earth people I know and they thrive on being able to feed the country. The stresses these farmers and farm families are enduring are hard on everyone involved. While they know that they work in a business where risks are always present due to weather, they sometimes need support and encouragement to work through their own mental and physical stress and even fatigue during these times. Most of the farmers live on the land they farm and don't have the chance to get away from these stresses. Most of us that work, work at a place that when it gets stressful, we get to leave for the day. Farmers, on the other hand, don't usually have this option. They live, sleep and breathe their occupation.

There are so many decisions that farmers are making today into what this generation knows as uncharted territory. They are worried about wet weather, how will I feed my livestock and where will my income come from? Maybe you are a farmer reading this or

maybe the farm wife, the neighbor, the family member or an agribusiness person or neighbor, but one thing is for sure farmers are the heartbeat of many communities. This week in the CORN newsletter, I am asking you who are reading it to take into account some steps outside your normal routine.

1. Slow down and breathe - farmer, farm family or other - we live in such a fast-paced world. There are decisions that are being made that effect so many people. We are truly all in this together. We need to be kind and a friend at all times.

2. Take five minutes to take care of yourself. Depression and anxiety are real and you may seem like you can't even put one foot in front of the other today. Let me tell you something, you are valuable, you are needed and it will be okay. Maybe not okay in the sense that you think or the direction or path that was in your "Plan A" but you will be okay.

3. Give a smile, hello, nod or wave to another human being. Remember it takes more muscles to frown than it does to smile.

4. If you feel these families need some extra help, reach out to your local Extension Office and they will help point you in the right direction.

The CORN newsletter is full of information to help in the decision process. No, it's not all rainbows and unicorns – it is real-life decisions. Farmers, this week as you are reading the articles, remember these few things. Write down your options (the pros and cons). Talk with your local Extension Educator or call them out for a farm visit. We, at OSU Extension, are here for you. We care about you even if you have never stepped foot into our office. Our service to you is free.

Additionally, as you read through the articles, think about your options. When it comes to questions on prevent plant acres contact your insurance agent. Don't just assume they know your plans. This newsletter contains recommendations based on agronomic principals and potential considerations from an agricultural production perspective. If the management will be applied to crop insured acres you should check any impact that the management change will have on current or future insurance payments and eligibility.

Please share this information in any way possible - forward the email, tweet the post #FarmLivesMatter, share to your non-farm friends, Snapchat it to your kids, post on Instagram, print it off and drop it at church or even the local grocery store. The agriculture community is powerful and has many opinions, stresses, and directions. Some people have no clue what is going on in an agriculture world, share with them.

Lastly, I am asking the community to check on your farmer neighbors and their families. Drop into the farm to check on the farmer and family. Bring them dinner but don't just drop it off actually share some time with that family. They may come up with every excuse that the house is not clean or I am too busy. Maybe even drag them to your house for dinner. They may not want you there but they need you there as their support system. Getting a vacation from the farm is probably what many families are eliminating due to financial pressures, but human interaction is one powerful value. While a simple was to check in text message don't work in these situations. They need your empathy not your sympathy. Go old school and play the board game, shut down the social media and have a conversation. These things only cost your time. Did you ever think about giving back to those people who help feed the world?

Wet Weather and Soybean Stand

By: Laura Lindsey and Alexander Lindsey
Source: **https://agcrops.osu.edu/newsletter/corn-newsletter/201919/wet-weather-and-soybean-stand**

Saturated soils after soybean planting can cause uneven emergence and stand reductions of varying extent depending on the stage of the soybean plant and other environmental factors including temperature and duration of saturated conditions. Additionally, increased disease incidence may further reduce plant stand.

Saturated Soil Prior to Germination: While soil moisture is necessary for germination, soybean seeds will not germinate when soils are saturated because oxygen is limiting.

Saturated Soil during Germination: Saturated soils during soybean germination may cause uneven emergence. In a laboratory study, soybean germination was reduced by ~15% after only one hour of flood conditions (Wuebker et al., 2001). After 48 hours of flood conditions, soybean germination was reduced 33-70% depending on when imbibition (seed taking up water) began relative to the flooding conditions. Practically, for Ohio, this means if soybean seeds were further along in the germination process when flooding occurred, the seeds will be more susceptible to flooding stress.

Saturated Soil during Vegetative Stage: Warmer temperatures will cause soybean plants to die faster. At temperatures, 80 degrees and greater, submerged soybean plants will likely due in 24 to 48 hours. However, cool, cloudy days (…and we've had plenty this year) and clear nights increase the survival potential of a flooded soybean crop. Flooded plants may also exhibit poor nodulation, resulting in yellow, stunted plants.

Evaluate Stand: To quickly estimate stand, count the number of plants in 69'8" of the row for 7.5-inch row spacing, 34'10" for 15-inch row spacing, or 17'5" of the row for 30-

inch row spacing. These counts represent 1/1000th of an acre (i.e., 120 plants in 7.5-inch row spacing = 120,000 plants/acre).
Keep in mind, the effect of plant population on yield is very small over the normal range of seeding rates. For soybeans planted in May, final populations of 100,000 to 120,000 plants/acre are generally adequate for maximum economic return. For example, in our seeding rate trials in Clark County, 100% yield (77 bu./acre) was achieved with a final plant stand of 125,000 plants/acre. However, a 95% yield (73 bu./acre) was achieved with only 77,000 plants/acre. (This trial was planted the second half of May in 15-inch row width.)

Source:
Wuebker, E.F., R.E. Mullen, and K. Koehler. 2001. Flooding and temperature effects on soybean germination. Crop Sci. 41:1857-1861.

Forage Shortage and Prevented Planting Acres… think OATS!

By: Allen Gahler, Stan Smith
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/201919/forage-shortage-and-prevented-planting-acres%E2%80%A6-think-oats


Photo of oats that were planted August 5 and photographed three months later. Yield was in excess of 4 tons of dry matter grown.

Last week, USDA released the declaration that a cover crop planted onto prevented planting acres can now be harvested as a forage after September 1st, rather than the normal date of November 1st, which provides a small glimmer of hope for some livestock producers and those equipped to harvest forages. While Ohio is also experiencing a severe shortage of forages for all classes of livestock, weed control on prevented planting acres is a major concern, and with USDA's declaration, we can now address both problems in one action – seeding cover crops that will be harvestable as a forage after September 1st.

As with everything else this season, however, patience is the key! Although an ideal situation would be cover crops that can be put out immediately and reduce the need for tillage, chopping, or spraying of weeds already present, there are unfortunately not many species of cover crop that will accomplish this and still provide significant tonnage or feed quality as a forage in September. Sorghum/Sudangrass seed is in very tight supply, soybeans as a cover may not be ideal for making hay or producing desired tonnages, and corn as a cover crop is still questionable in terms of insurance payments,

and whether or not we can get it dry enough to make good silage. Teff grass, pearl millet, and Italian ryegrass may be good options if you can locate seed and get them established, but if planted now, they may be ready for harvest prior to September 1st, and quality will be sacrificed. Most other species of crops that fit the bill for making a good forage simply won't work well at all if planted right now. So, again, we wait. But once we get to late July or early August, our options begin to open up.

Our traditional cover crops of cereal rye, annual ryegrass, oats, peas, turnips, and other brassicas have been used by livestock producers for many years with good success at producing forages. There are several good articles, fact sheets, and recommendations on these crops used as an annual forage following a wheat crop, or even aerial seeded into standing soybeans and corn acres available in our library at www.u.osu.edu/beef, and on the OSU Extension forage site at www.forages.osu.edu. With over 15 years of experience with summer planted oats under our belts, preceded by and intermixed with several years of experience with cereal rye, brassicas, and grasses, we know there's still plenty of time to 'create' anywhere from one to five tons of forages in wheat stubble or prevented plant fields. From our experiences with many operations in all parts of the state, and on our own farms in Northwest Ohio and Southeastern Ohio, oats would be the species of choice to provide the lowest input, most readily available forage, with the best chance for significant tonnage this year.

The ideal situation is planting oats into vacant fields resulting from Prevented Planting or harvested wheat on or around August 1. Existing weeds must be controlled prior to planting with a herbicide application. With just a little moisture (no pun intended), and a small amount of nitrogen, you might be surprised at the growth you can get out of oats planted in late July or August.

Oat hay is an acceptable forage for all classes of livestock, and while nutrient content will vary depending on maturity at harvest, we have repeatedly seen oats harvested at 60 days of growth with crude protein levels from 12-19%, and digestible organic matter as high as 65%. If you are looking to make dry hay, it can be a challenge in late

September or October, often requiring 5-7 days after being cut, but it is certainly possible, and small amounts of rain during the dry down process will not deteriorate this forage nearly as rapidly as alfalfa and other grasses. If you do not get that window to cut them for dry hay, it may cost a little more, but having the oats wet-wrapped beats the alternative of having no hay available, and your cows, goats, and sheep will literally run you over to get to it once you start feeding it!

There are some options on oats as far as what to plant, including forage type oats that are bred specifically for forage production, bin run oats that may be harvested locally or around Ohio yet this summer, or feed oats that are likely shipped in from Canada and used in many of our livestock rations at co-ops all around the state. Depending on your

goal, all three sources of seed will work. If you are feeding dairy cows or maybe even looking at horse quality hay, forage oats will be more expensive, but are likely the best option, as nutrient levels tend to be higher, given the later maturity of the plant and the lower likelihood of the plant trying to form a seedhead. Fungus issues in the form of rust are about the only major issue we see in any type of oats seeded for forage, but the varieties bred for forage production are generally less susceptible, helping keep these more palatable as hay. If you plan to use this option, contact your seed dealers ASAP to check on availability.

If you are simply looking for the cheapest and easiest source of seed, and are not as concerned about germination, seed quality, or foreign material in your seed, then locally produced oats are your best option. Be aware that many oats were planted late this year, may not yield as much as needed, and likely will have significant weed seed in them at harvest, so cleaning would be a must, or we lose sight of the original intent of covering the ground on prevented plant acres.

The final option of utilizing feed grade oats as the seed is likely the most realistic and economical option. First off, most feed oats have come from Canada, where production has not been an issue, and we have not talked to any co-op or feed mill that has any indication of a tightening supply or major cost increase. Feed oats are usually triple-cleaned to provide horse quality feed, so weed seeds should not be present, and you can likely buy these in bulk from your local co-op for $15-22/hundred weight.

Once you have obtained a source of seed that is right for you, the establishment is usually pretty simple: No-till 60-90 pounds into harvested wheat fields, or prevented plant fields anytime from late July up until early September. It appears that late July or early August may be the optimum time to plant oats when high-quality forage is the goal. "Spring" oats seldom make seed when planted after the days begin to shorten in July, but will continue to grow leaf until Thanksgiving or after in Ohio. Consider applying 40-50 units of nitrogen about 60 days before you plan to harvest them, regardless of the harvest method for optimal nitrogen use. Common scenarios for this include broadcasting urea ahead of the drill, mixing UAN 28% with roundup if a burndown is needed, or applying ammonium sulfate after germination. Conventional till planting scenarios have worked as well and could be required this year depending on weed control up until planting time, but typically drier conditions make germination and early growth slightly less productive with oats.

While many of the hardest hit portions of Northwest Ohio may not even have their own livestock or be considering grazing options, it could be relevant in some areas where fences exist around prevented plant acres, and some of these areas could also have the need for spring forages.

If your primary needs are forage for grazing, hay, or silage next spring, cereal rye appears to be the best alternative. The opportunity exists to graze it in the late summer and fall, however, the most abundant tonnage will come in the spring. In addition to planting it with the options mentioned above for oats, you may also no-till it after row crop harvest - particularly soybeans and silage corn - this fall.

If your primary needs are grazeable forages as soon as possible, consider turnips or a combination of oats and turnips. Previous summers we've seen good results locally when planting a 'grazing turnip' such as Appin in combination with oats. If some precipitation is received shortly after planting, this combination could be strip grazed as early as 5-6 weeks after planting. The oats will provide some additional fiber in this grazing mix, and the Appin turnips will continue to regrow after being topped off with early grazing.

As you review your options, realize that at times seed oats are difficult to purchase this time of year. Contact the Ohio Seed Improvement Association or visit http://www.ohseed.org for a list of growers who may have seed oats available. If you take the opportunity to try any of these extended grazings or forage production alternatives, please keep us updated on your progress and success. We hope to be able to follow along with some real-time updates through the summer and fall with the status of cover crop forage plantings, and we also have plans to seed trials at the North Central Agricultural Research station near Fremont that will evaluate seeding dates, variety of oats, and possibly the benefits of a fungicide application on oats planted for forage. Many fact sheets and articles are available on these forages at your local extension office, the OSU Beef team website, the OSU Forage team website, or at www.ohioline.osu.edu

2019 Challenge: Forage Production Options for Ohio

By: Mark Sulc, Bill Weiss, Dianne Shoemaker, Sarah Noggle
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/201919/2019-challenge-forage-production-options-ohio

Across Ohio, farmers are facing challenges unimagined just four months ago. Widespread loss of established alfalfa stands coupled with delayed or impossible planting conditions for other crops leave many farmers, their agronomists and nutritionists wondering what crops can produce reasonable amounts of quality forage yet this year. In addition, frequent and heavy rains are preventing harvest of forages that did survive the winter and are causing further deterioration of those stands. With July 1st just around the corner, Mark Sulc, OSU Extension Forage Agronomist and Bill Weiss, OSU Extension Dairy Nutritionist, help address this forage dilemma. If one is looking for quality and quantity, what are your best options? The article starts with a quick summary of options and then dig into some of the pros and cons of these options (listed in no particular order of preference).

Options

1. Corn plant silage– Still has the highest potential yield but silage quality will decline with delayed planting and getting it harvested at the right moisture is the biggest risk.
2. Forage sorghum – Brown midrib (BMR) varieties are best for lactating cows. Conventional varieties are okay if BMR seed is not available.
3. Sorghum-sudangrass - BMR varieties are best for lactating cows. Conventional varieties are okay if BMR seed is not available.
4. Sudangrass - BMR varieties are best for lactating cows. Conventional varieties are okay if BMR seed is not available.
5. Oat or spring triticale silage – Safer option than corn silage but lower yield than corn silage. It can be mowed and allowed to wilt to correct harvest moisture. Spring Triticale is commonly planted as a hay or haylage crop and can produce high levels of dry matter under challenging conditions. It is later maturing than oats or barley and will maintain its forage quality for an extended harvest window.
6. Oat and Winter Rye mixed silage – Has the advantages of oat silage with a slightly higher yield in the fall and the potential for rye silage harvest in the spring.
7. Italian Ryegrass silage – Small fall harvest with three cuttings next year starting in April.
8. Soybean silage – If you need a replacement for alfalfa, soybean silage is a reasonable alternative. Care must be taken with spray programs that allow harvest as a forage.
9. Teff – Is a warm-season annual grass best suited for Sheep and Beef, lower yield than sorghum grasses despite multiple harvests being possible.
10. Millets – Millets are a major grain crop worldwide and best suited for beef and sheep, many will produce a single harvest.
11. Brassicas - High in energy, but very low in fiber (more like a concentrate) with high moisture content. Only for grazing by Sheep and Beef.

Note: These forage options all require adequate nitrogen fertilization to maximize yield potential. Check any potential herbicide restrictions from the previously planted crop. Work with your nutritionist to incorporate these alternative forages into properly balanced rations.

Option 1: Corn silage

The biggest risk with late-planted corn is getting moisture down to a reasonable level at harvest. With current soil moisture conditions, it will be a crap shoot when many farms will be able to plant. Corn planted into July will not make corn silage as we know it because it won't have many ears and will be low in starch. This silage will primarily be a source of fiber with potential yields about half of normal. Harvesting corn silage at the

proper moisture will be critical to a successful fermentation (drier than 30% DM up to about 40% DM). Before a frost, many of these plants will be about 20% DM. Some late-planted corn may require a frost to allow the plant to dry down. Because leaves die after frost, plants look drier than they actually are, so measuring dry matter regularly is essential. When a plant is frosted, the window of opportunity to harvest as silage - before the plant is too dry - may be limited depending on local weather conditions. Harvest timing is critical, so regularly monitor plant moisture post-frost and be ready to harvest when conditions are met. Another possible option for corn with no ear would be to mow at some point before a killing frost and wilt the crop to the proper dry matter before chopping and ensiling the crop.
This high fiber feed will probably contain about 60% NDF. Work with your nutritionist as substantial diet changes must be made. More than likely these changes will include increased feeding of corn grain. With higher corn prices looming, this is not an attractive option, but the tradeoff is feeding more expensive hay.
Check with seed suppliers for any seed treatment restrictions on the use of the corn seed for silage or forage when planted this late.

Option 2-4: Forage sorghum, Sorghum-sudangrass hybrids, Sudangrasses
Brown midrib (BMR) varieties are most desirable, but the seed may not be available. If this is the case in your area, conventional varieties are your next best choice. Plant by July 15th and plan for one cutting. A mid-September cutting will optimize quality for milking cows. An early October cutting will have a much higher yield, but the higher-fiber forage will be more suited for heifers, dry cows, or beef cattle.
Sudangrass harvested at 50 days of growth is an okay feed for dairy cattle. At a 60-day harvest range, it is more challenging to feed to dairy cows for good milk production.
Challenges: If the sorghums are frosted, prussic acid formation in the plant is an issue. It can be mitigated by ensiling, but avoiding frost is the best option.

Option 5: Oat or Spring Triticale silage
Do not plant these for silage before the last week of July or overall yield will suffer. The overall potential yield is the lowest of the forage options. Yields of 1.5 to 3 tons of DM per acre (about 5 to 5.5 tons at 30 to 35% DM) of chopped oat silage are possible if planted in early August. Harvesting between late boot, or early heading, will optimize quality. The potential feed value of oat will be similar to mid-bloom alfalfa. As a grass, inclusion rates in a lactating cow diet would have to go down, but it is a very acceptable feed. Spring Triticale is a biotype of the hybrid cross between cereal rye and wheat (there is a winter biotype that acts like winter wheat). In our research, oat averaged slightly higher fall yields than spring triticale, but this varied with season. Spring triticale yields a higher feed value similar to early mid-bloom alfalfa. Seed cost for spring triticale will be higher than oat, but it is later maturing than oat or barley and will maintain its forage quality for an extended harvest window. Spring triticale yields a higher feed value similar to early to mid-bloom alfalfa.

These forage options all require adequate nitrogen fertilization to maximize yield potential. Check potential herbicide restrictions from the previously planted crop. Potential challenges include rust infection in damp conditions, especially with oat. Rust could impact yield and feed quality and depends on when the infection of rust occurs during the growing season.

Option 6: Oat or Spring Triticale and Cereal Rye mixed silage
Planting mixtures of oat or spring triticale and cereal rye will allow a fall harvest as well as a spring harvest. Note that the window for harvesting rye silage in the spring to optimize feed quality is usually very short. The rye harvested in early spring can yield 2.5 to 3 tons of DM per acre of dairy-quality forage when harvested at boot stage. In the fall, the oat/rye or spring triticale/rye mix should yield slightly more than oat or spring triticale alone, with the potential for the spring cereal rye harvest.

Option 7: Italian Ryegrass silage
This crop emerges as fast as oats and could produce up to a ton of dry matter per acre in the fall if planted in August, and less yield if planted into September (it should be planted by mid-September at the latest). This crop would also be available for additional cuttings next year, starting in late April or early May and then every 25-30 days.
Plot work with fall harvest and three harvests the following year have shown average yields between 3 to 5 tons of dry matter from improved varieties with good winter survival and adequate moisture. It will winterkill in severe winters. Do not let a lot of growth go into the winter to avoid winter as mold growth that damages the stand. To avoid this, make a late fall cutting or graze to a height of 3 inches. This crop will shut down by mid- to late-summer the year after a fallen establishment.
As a grass, harvesting earlier optimizes quality. If planted in September and harvested in late fall, the quality will be superb (NDF 48% and Neutral Detergent Fiber digestibility (NDFd) about 80%). August plantings harvested in late fall will not be quite as high in quality. It will probably have protein in the mid-teens and NDF in the mid-50s. Next year, the crop will head out quickly at each harvest. Overall it is a medium quality forage, but with proper diet, this formulation can work for lactating cows.

Option 8: Soybeans
Soybeans planted at this time of year and harvested as silage will yield about 2 tons of dry matter per acre (dry plants to 65 to 70% moisture before chopping). Narrow rows will yield about 15% more than wide rows. Harvest between R5 and R7 stage, but no later than R7 (one pod on the stem is a mature color).
Silage harvest will be easier than dry hay because of difficulty in getting the crop dry. Silage harvesting later creates issues with the high oil content of the beans, and more leaf shatter will inhibit a good fermentation. Harvesting later than R5 to R7 creates an issue with the high oil content of the beans, and more leaf shatter will inhibit a good fermentation. Feed quality would be similar to early bloom alfalfa.

Check seed treatment labels or ask seed suppliers for any restrictions on using soybean seed for forage, as some seed treatments may not allow it. Review any herbicides applied and see labels for restrictions before use to verify that the crop can still be used for animal feed.
Adding an annual grass such as oats, spring triticale, or sudangrass could be a good option to lower the protein content for some classes of livestock and improve the mechanical handling of this crop.

Option 9: Teff
Teff is a warm-season grass that can be used for hay, silage, or pasture. The first crop should be ready in 40 to 50 days. It may produce up to 2 to 2.5 tons per acre of dry matter in multiple cuttings and can tolerate both drought-stressed and waterlogged soils.
Cornell research showed that when teff was harvested at the proper time and sufficient N was applied, crude protein was between 15 and 16% of dry matter and neutral detergent fiber (NDF) 48-hr digestibility averaged about 60%. It should be planted as soon as possible because it dies at the first frost.

Option 10: Millets These summer annuals can be used as hay, silage, green chop, and pasture. There are varietal differences between the pearl, foxtail, proso and Japanese types. Because of evidence that Pearl Millet may cause butterfat depression in lactating dairy cows. Millet forages are better suited for beef, sheep or dairy heifer feed.

Option 11: Brassicas
Turnip, swede, rape, kale, and other brassica species and hybrids are highly productive annual crops that can be grazed 80 to 150 days after seeding. When planted by early August they can extend the grazing season in November and December. They are highly digestible and crude protein levels are high, varying from 15 to 25 percent in the herbage and 8 to 15 percent in the roots depending on the level of nitrogen fertilization and weather conditions. These species contain high moisture content, so they should be used for grazing only. Brassicas have very low fiber and high energy and should be treated more like a concentrate than as forage in diets.

References: More detailed information on many of these options including seeding rates are available in these publications:

- Supplemental Forage Options for Late Summer to Early Autumn Planting:https://agcrops.osu.edu/newsletter/corn-newsletter/2015-22/supplemental-forage-options-late-summer-early-autumn-planting
- Feeding Low Forage Diets to Dairy Cows:https://dairy.osu.edu/sites/dairy/files/imce/DIBS/DIBS33-16_Feeding_Low_Forage_Diets_to_Dairy_Cows.pdf
- Fall-grown Oat Forages: https://fyi.extension.wisc.edu/forage/fall-grown-oat-forages-cultivars-planting-dates-and-expected-yields/

- How Late can you Plant Corn for Silage?https://www.canr.msu.edu/news/how_late_can_you_plant_corn_for_silage
- Forage and Bedding Shortage Issues: https://dairy.osu.edu/newsletter/buckeye-dairy-news
- Soybeans for Hay or Silage https://fyi.extension.wisc.edu/forage/soybeans-for-hay-or-silage/
- Teff as an Emergency Forage:http://nmsp.cals.cornell.edu/publications/factsheets/factsheet24.pdf
- Millets Forage Management:https://www.extension.iastate.edu/sites/www.extension.iastate.edu/files/iowa/MilletFS55.pdf
- Growing and Managing Forage Cover Crops http://mccc.msu.edu/wp-content/uploads/2016/10/OH_2015_Using-Cover-Crops-as-Forage-051815.pdf
- Brassicas: http://www.forages.psu.edu/topics/species_variety_trials/species/brassica/char_adapt.html
- Emergency Forages for Planting Early to Mid-Summer: https://agcrops.osu.edu/newsletter/corn-newsletter/2019-14/emergency-forages-planting-early-mid-summer

Definitions

- BMR: Brown midrib - Brown midrib (BMR), a genetic mutation in several grassy species, reduces lignin content in the total plant parts. Lignin is mostly indigestible but also plays an important role in plant rigidity. The brown midrib trait has been incorporated into forage sorghum, sudangrass, and corn.
- DM: Dry Matter – feedstuff sample remaining after the water is removed; 100 minus moisture % = DM %.
- NDF: Neutral detergent fiber – a percentage of cell walls or other plants structural material present; includes cellulose, hemicellulose, and lignin; only partially digested by cattle; greater NDF values are associated with less dry matter intake.
- NDFd: Neutral detergent fiber digestibility (NDFd) is a measure used to improve the predicted energy value of forages. The digestibility of NDF can be measured by either In vitro or In situ methodology. Incubation times vary, although 24, 30, or 48 hours are typical times used by commercial labs. Using the amount of NDF present at the beginning of the incubation and the amount of NDF remaining at the end of the incubation, NDF digestibility is calculated (often this is called NDFd). NDFd values will vary across laboratories, as there will be differences in either rumen fluid (In vitro) or rumen environment (In situ). For this reason, it is important to compare forage reports from a single lab.

Summer Heats Up and So Are Brisket Prices

By: David P. Anderson, Professor and Extension Economist, Texas A&M
Source: **http://u.osu.edu/beef/2019/06/19/summer-heats-up-and-so-are-brisket-prices/#more-6999**

Brisket prices are heating up just like summer temperatures. One of the most interesting beef demand trends over the last few years has been the growth in demand for briskets. It's not just new craft bbq joints popping up everywhere in Texas, but even big chains like Arby's jumping in and they all serve brisket.

Briskets used to be an inexpensive beef cut that benefited from long, slow cooking at low temperatures. They are no longer inexpensive. What used to be a very inexpensive cut, the primal brisket is now only behind the primal rib and loin in value. In the last week of May, the comprehensive cutout brisket value was $213.47 per cwt., up 19.4 percent from the same week the year before. Just during May brisket prices jumped from $194.39 to $213.47 by the end of the month. The monthly average price was up 12 percent compared to last year. In comparison, only the primal short plate was up as much as 1 percent and the primal rib and loin were both down about 1 percent from a year ago.

Many top-end bbq joints, called by some craft bbq, working to produce a truly exceptional meal use and advertise USDA Prime or Branded briskets. USDA Prime briskets hit $215.76 per cwt at the end of May and were outpaced by Branded primal briskets that hit $220.82 per cwt. Prime, Branded, and Choice primal briskets are up 21 percent compared to a year ago, while Select and Ungraded are "only" up 17 and 15 percent, respectively.

This is a case where demand is outstripping supply, leading to quickly rising prices. Fed steer and heifer slaughter is up a little less than 2 percent through May compared to last year. Quality grade composition of beef supplies matter. About 8.1 percent of cattle graded, graded Prime in May, compared to 6.9 percent in May 2018. Slightly fewer cattle graded Choice 70.1 percent in May 2019 compared to 70.4 percent in May 2018. Select supplies were down just over a percentage point in May. Increasing steer slaughter and cattle on feed should increase available supplies in coming months.

The future growth rate in the nation's cattle herd will be critical for brisket prices. While we cut many products from other primal beef cuts, a brisket is a brisket (forgive my simple economist description). As herd growth slows and overall cattle prices decline, brisket supply growth won't keep up with current demand growth. It's likely that restaurant prices will rise in response to higher wholesale brisket costs to try to preserve a bit of margin.

Farming with Family through the Tough Times

By: Christine Gelley, Agriculture and Natural Resources Educator, Noble County
Source: **http://u.osu.edu/beef/2019/06/19/farming-with-family-through-the-tough-times/#more-6478**

There are days where every farmer wonders what they got themselves into. Days where the work ahead is overwhelming, the kids are sick, the cows are calving, your 4×4 is stuck in the mud, and to top it off, you are running low on stored feed and stored energy in your soul. Farming is tough. No doubt about that.

When the weather and the markets are uncooperative with your plans, the stress can pile up on the farm and on your family. One temporary way to deal with that stress is to be thankful for what you have. Someone out there always has it worse than us and we should be thankful for the things we have each day, instead of dwelling on the things we do not.

This past winter at the American Forage and Grassland Council Annual Conference, a beef farmer named Buron Lanier of Piney Woods Farm in North Carolina, shared a story of forage tragedy and triumph that can help put 'thankfulness' into perspective.

Mr. Lanier had presented at last year's conference about the efforts made to convert his farm from KY-31 fescue to novel endophyte fescue. A significant portion of his farm is dedicated to silvoculture, combining the production of pine trees and feeding stocker cattle. With great effort, he progressed into a 365-day grazing system. He had no need to feed hay and very little supplemental feed. The system was working marvelously.

But this year he had a different story to share. Hurricane Florence hit the East Coast in September 2018. Mr. Lanier had just started stockpiling his novel endophyte fescue for the winter when his farm became submerged by hurricane waters for over 5 days. The water levels were up to five feet in most of his pastures. He lost over 75 percent of his newly converted pastures. His neighbors also lost their KY-31 pastures and many of them lost their homes as well.

Due to his 365-day grazing plan, Piney Woods Farm had no stored feed. Mr. Lanier was devastated by the destruction, but his home was still livable, his cattle alive, and his family safe. Donated hay and feed were his saving grace. He has since learned how to feed cottonseed and plant by-products and low quality hay. Despite the set-back, he intends to re-establish his pastures back into novel endophyte fescue and begin again.

At the end of his presentation he shared that when something this devastating happens, you question all your motives for farming. He had retired as a successful entrepreneur and started a new venture, grazing stocker calves and farming trees. Why was he doing this? He was doing it for the future of his family, agriculture, and our country's ability to feed itself. He determined that it is worth it to carry on.

The take home message that stuck with me from Mr. Lanier was that you never know when devastation is lurking around the corner. In a business like agriculture, that devastation could be caused by weather or a market crash, or by the most common two

factors, death or divorce. Appropriate insurance, business structure, and succession planning can help soften the blow if or when an unfortunate event comes along.

Planning for the unexpected can help prevent complete devastation of the family farm. Wesley Tucker, an Ag Economist for University of Missouri Extension, also shared his personal story about the beef business at the conference. His was about building his farm from scratch with no land of his own. He created a system that worked economically, but in the long run, it has not worked well for his family.

When he first started, he was single and had time to run from one rental site to another checking cattle. After starting a family, he took his daughter along with him. She enjoyed helping move temporary fence and riding in the truck. His daughter is now ten years old and according to Mr. Tucker, “she hates the farm.” He continued to say, “I have failed because my daughter hates the farm. She hates it because instead of spending dedicated time with her, I’m checking cows before and after work.”

The take home message of his story was to be smart and economical, but don’t forget that your time has value too. You should be careful how you spend it before it is gone.

The story that struck me most directly at the AFGC Conference was that of Dr. Jason Salchow, a veterinarian and custom grazer. Dr. Salchow drove the point home that success in farming is like a crockpot, not a microwave.

He said, “Everyone wants quick results, like a microwave. But, nothing good comes out of a microwave. A crockpot on the other hand, that’s what the good stuff comes out of, but you have to cook it low and slow.”

The past 20 years have been a long rough road for Dr. Salchow, his wife, and five children to get to where they are today. Currently they farm as custom grazers. They own the land and graze it with other people’s cattle. All their clients make monthly payments for their grazing services based on average daily gains. Clients maintain the liability for animal health and the Salchows maintain the liability for the land.

His wife maintains the records and he maintains the pastures and cattle. They are making money, they have gained the trust of their clients, and they are expanding. He continued to share that expanding would be a lot easier if his family’s farm hadn’t been separated by the previous generation in a divorce.

The leading cause of farm fragmentation in the U.S. is not urbanization, but rather death, divorce, and a family that cannot compromise. Dr. Salchow lamented over the loss of the American family farm by saying, “If you want to be successful on the farm, go home and love your wife. We have to be better husbands, wives, fathers, and mothers. There is no success outside the home that can compromise for failure in the home.”

A fellow member of the audience tied Dr. Salchow's comments back to liability insurance, to say that the best liability insurance you can hold for your farm is a good relationship with your family. That is the glue that holds the farm together.

From my perspective, none of these presentations were about the animals or land as much as they were about relationships with your neighbors and your family. Success in agriculture requires capital, but it is built on perseverance and trust. Trust takes time to develop and perseverance is what drives the crockpot approach to success.

Take the time to build trusting relationships with your family, neighbors, and clients. Don't take them for granted. Make time for your family, especially when the times are tough. Offer to help your neighbor before they need it. Do your best to meet the needs of your clients, but don't neglect your family to do it. Those relationships are better than insurance for your current struggles and future successes. Through the muck, through the mess, treasure the people who are by your side.

Summer goes out with a "BANG"

By: Thomas deHaas, Andrew Kirk, and Les Ober

Late summer warm days and cool night are dreamy and quiet, but not for long. In Grape/Wine country, the warm temperatures bring on the ripening of grapes. However, lurking in the trees is one of the biggest dangers to a good harvest; BIRDS.

In two days, a flock of birds can strip all the grapes from a vine. Once they get the taste of the ripening fruit, they swoop in and feast. It can be likened to a child the day after Halloween. Once they start eating their candy, they cannot stop.

So how can you stop them? The best way is to use a loud startling noise, intermittently to scare them. The best way is to use a bird cannon. The birds are not harmed. They just disperse. The drawback is the cannons sound like a shotgun that can be annoying.

They work by igniting a propane gas charge, which produces the bang.
On the positive side, birds are not harmed or killed in the process, just scared away. From ripening to harvest takes about 6 weeks, which is about how long the cannons need to be deployed. Since birds are not active after dark, the cannons should not discharge in the middle of the night.

There are many benefits to residing in 'Wine Country' and the growers ask for your understanding during this critical time. Their livelihood, and your wine, depends on harvesting grapes. Thank you.

Extended Forecast – NOAA, Weather.gov, Cortland, OH

This Afternoon	Tonight	Wednesday	Wednesday Night	Thursday	Thursday Night	Friday	Friday Night	Saturday
Mostly Sunny	Partly Cloudy	Chance Showers	Slight Chance T-storms then Partly Cloudy	Mostly Sunny	Partly Cloudy	Mostly Sunny then Chance T-storms	Chance T-storms	Chance T-storms
High: 78 °F	Low: 64 °F	High: 82 °F	Low: 64 °F	High: 85 °F	Low: 64 °F	High: 86 °F	Low: 67 °F	High: 86 °F

Extended Forecast – NOAA, Weather.gov, Jefferson, OH

This Afternoon	Tonight	Wednesday	Wednesday Night	Thursday	Thursday Night	Friday	Friday Night	Saturday
Sunny	Mostly Clear	Slight Chance T-storms	Partly Cloudy	Mostly Sunny	Slight Chance T-storms	Mostly Sunny then Chance T-storms	Chance T-storms	Chance T-storms
High: 76 °F	Low: 65 °F	High: 81 °F	Low: 64 °F	High: 83 °F	Low: 64 °F	High: 85 °F	Low: 67 °F	High: 83 °F

Upcoming Event

THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

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cfaes.osu.edu/deanscharitysteershow

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