We were making great progress in the fields until the gully washers of this past weekend and yesterday afternoon. But, the rain does provide a chance to catch up on some equipment maintenance. If my memory serves me correctly, we were not even in the field at this time last year! It won’t be long before we will turn our attention from planting to hay making. I found three good articles this week to include on hay making. I hope each of you take time to come eat some great chili and support our camp counselors next Friday at the fairgrounds! Have a great week and a relaxing Memorial Day Weekend.

David Marrison, AG Educator

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Kip Cullers to Speak in Ashtabula on May 26, 2015
The Saybrook Banquet Center located at 3116 North Bend Road, Ashtabula Ohio is hosting an evening with Kip Cullers on May 26, 2015 at 5:00 PM. Kip is a six time world champion soybean producer and 11 time champion in corn production. Kip is also recognized as the worldwide authority in soybean production. This event is being sponsored by the Independent Business Owners Association.

Kip Cullers and his company of professionals are dedicated to helping farmers and we invite you to contact us to learn more about how the world renowned farmer and his company can help you break your own records, while putting more food on your table, and more money in your pocket. To reserve your seat at the program contact Frank Cole (440) 994-9363 or Mark Shorts (440) 344-7792, Dinner will be served after the program.

Northeast Ohio Agronomics Crop Report
By Les Ober, Geauga County. Posted on May 15, 2015
http://neohiocropweather.blogspot.com/

The last two weeks have been phenomenal to get crops in the ground. At this writing 80 to 90 percent of the corn and 50 percent of the soybeans have been planted. With corn and beans planted early we should be on tract for some excellent yields but we have a long way to go. As the planters are rolled back into the shed the focus now shifts to managing weeds and scouting for insects and disease. Of the three, weed control or should I say weeds out of control, can have the most impact on yield.
Without question every producer needs to have a plan that starts with a weed history on each field they are planting. The first step to that plan should be completed. You know what your problem weeds were last year. Those problems should have already been addressed with a pre-plant/ pre-emerge weed control program prior to planting. The next step is to take care of the weeds that you did not plan for. This requires some time spent scouting your fields looking for late emerges or escape weeds. These are the weeds that we talk about in Pesticide Recertification. This is the 10% of the weeds that get around your weed control program. They may or may not be resistant but they require your attention. What you are looking for is weeds with a history of know resistance to specific chemicals. If you identify these weeds the next step is to look at the herbicides you are using, especially their mode of action. Weeds like Marestail are strongly resistant to Glyphosate, category 9 and chemicals known as ALS Inhibitors, category 2 such as Classic or First Rate in soybeans. All of this information should be written down to compile a weed history for every field. Normally a 10% weed population means that you have 90% control and that is what you are shooting for.

However, in the world weed resistance a 10% population of resistant weeds can develop into a 30 to 40% resistant population next season. You may or may not have an answer for this problem in this year’s crop but you must be aware of the weeds presence and the potential for future problems.

Another scenario to watch for in a year that has been a little cool and somewhat dry is the potential of late emerging weeds. These are the late emerging weeds that form the second and third weed growth. They are primarily annual weeds like Foxtail, Lambs quarter or Common Ragweed but this could also include Marestail. Marestail is a winter annual weed that has the potential to become a summer annual weed. For the most part they are not resistant weeds but in the case of Marestail they definitely are resistant. In most cases the problem occurs when your early applied herbicides start to breakdown allowing these weeds to get around the initial program. This requires a second application of herbicide that specifically targets these weeds.

Here, the key is to catch weeds at a stage of growth where they can easily be controlled. This is usually when they are less than 3 to 4 inches in height. You must be able to identify the weeds in their early stages of growth and be ready to treat the field if needed. Ignoring or not recognizing the problem can be very costly in the end. A few sprigs of foxtail can turn into a meadow and it is almost impossible to control a weed like Lambsquarter once it starts to reach maturity. The result can be harvest problems and significant yield loss. You have gotten the crop in the ground successfully but the work does not end there. You need to invest the time scouting your field to insure that success.

Agronomic Crop Progress Report for the week of May 11th 2015
Corn: 80 to 90% planted conditions excellent
Soybeans: 50 to 60% planted conditions excellent
Wheat: Feekes 7 good to excellent condition
Oats 100% planted

**Protect Your Back as Spring Planting Continues**
By Andy Bauer, Ohio AgrAbility Educational Program Coordinator

Now that spring planting is finishing up and summer work is coming on, we must remember to take care of and protect our backs. Agricultural workers are at a very high risk for back injuries since much of their job involves lifting, pushing, and pulling heavy loads, awkward working positions, vibrations and sudden jolts when driving across rough terrain as well as trips and falls from uneven ground.

Back health is often ignored on the farm until an injury has occurred. Often individuals continue working in spite of pain. With an endless “to do list”, farmers often put off seeing a physician or even taking time to rest, which can many times add to the injury.
Let’s stop for just a minute and take a look at some preventive measures we can do to protect the back from injury. Think about your posture, balance, and body mechanics. Then remember to incorporate the following tips into your daily routine.

- Stretch and warm up before starting. Warm muscles work better than cold.
- Use proper lifting techniques. Keep your back straight, lift with your legs, keep the object being lifted close to your body.
- Avoid twisting at the waist when lifting. Turn with your feet.
- Get help if something is too heavy for you or if help is right there, use it.
- Take breaks when operating equipment for extended periods of time. Stop on a regular basis to stretch, walk around. Use this time to check equipment.

Jumping down off equipment, prolonged sitting, vehicle vibration, jolts from rough terrain, along with twisting and turning of the trunk and neck to monitor equipment can all cause back pain or increase already existing back issues. Some things to consider to help with these are:

- Replacing old worn out seats.
- Use mirrors or cameras to monitor equipment.
- Extend steps to make mounting and dismounting equipment easier.
- Modify tongues on equipment to reduce bending and pulling when hooking up equipment.

All of these measures should be considered to help reduce back injuries and make the long hard hours of spring work easier to handle and safer. A little bit of prevention now can help avoid a lot of pain for years to come. For more information on prevention of back injuries contact Ohio AgrAbility at agrability.osu.edu or Andy Bauer at bauer.528@osu.edu or (614) 247-7681.

**USDA develops first government label for GMO-free products**


The Agriculture Department has developed the first government certification and labeling for foods that are free of genetically modified ingredients. USDA’s move comes as some consumer groups push for mandatory labeling of genetically modified organisms, or GMOs.

Certification would be voluntary - and companies would have to pay for it. If approved, the foods would be able to carry a "USDA Process Verified" label along with a claim that they are free of GMOs. Agriculture Secretary Tom Vilsack outlined the department's plan in a May 1 letter to employees, saying the certification was being done at the request of a "leading global company," which he did not identify. A copy of the letter was obtained by The Associated Press.

Right now, there are no government labels that certify a food as GMO-free. Many companies use a private label developed by a nonprofit called the Non-GMO Project. Vilsack said the USDA certification is being created through the department's Agriculture Marketing Service, which works with interested companies to certify the accuracy of the claims they are making on food packages - think "humanely raised" or "no antibiotics ever." Companies pay the Agricultural Marketing Service to verify a claim, and if approved they can market the foods with the USDA label.

"Recently, a leading global company asked AMS to help verify that the corn and soybeans it uses in its products are not genetically engineered so that the company could label the products as such," Vilsack wrote in the letter. "AMS worked with the company to develop testing and verification processes to verify the non-GE claim."

A USDA spokesman confirmed that Vilsack sent the letter but declined to comment on the certification program. Vilsack said in the letter that the certification "will be announced soon, and other companies are already lining up to take advantage of this service."
The USDA label is similar to what is proposed in a GOP House bill introduced earlier this year that is designed to block mandatory GMO labeling efforts around the country. The bill, introduced earlier this year by Rep. Mike Pompeo, R-Kan., provides for USDA certification but would not make it mandatory. The bill also would override any state laws that require the labeling.

The food industry, which backs Pompeo's bill, has strongly opposed individual state efforts to require labeling, saying labels would be misleading because GMOs are safe. Vermont became the first state to require the labeling in 2014, and that law will go into effect next year if it survives a legal challenge from the food industry.

Genetically modified seeds are engineered in laboratories to have certain traits, like resistance to herbicides. The majority of the country's corn and soybean crop is now genetically modified, with much of that going to animal feed. GMO corn and soybeans are also made into popular processed food ingredients like high-fructose corn syrup and soybean oil.

The FDA says GMOs on the market now are safe. Consumer advocates pushing for the labeling say shoppers still have a right to know what is in their food, arguing that not enough is known about the effects of the technology. They have supported several state efforts to require labeling, with the eventual goal of having a federal standard.

**Hay Quality Is Improved by Understanding How it Dries**
by Stan Smith, PA, Fairfield County OSU Extension
Source: [http://beef.osu.edu/beef/beefMay1315.html](http://beef.osu.edu/beef/beefMay1315.html)

The late spring and seemingly slow early growth of our forages this year may fool some into thinking that we can delay harvest in order to capture more tonnage without sacrificing quality. Don't be fooled! While the early growth of forages may have been less than we hope for, maturity of those forages is arriving right on schedule. See the orchard grass that was photographed in Fairfield County last evening. Fescue and cereal rye can also be found coming into head. Regardless how tall a forage may be, maturity dictates it's time to make hay.

University of Wisconsin Extension Forage Agronomist Dan Undersander says in his fact sheet that if we understand and use the biology and physics of forage drying properly, not only does the hay dry faster and have less chance of being rained on, but the total digestible nutrients (TDN) of the harvested forage are higher. Specifically, Undersander offers 3 key recommendations:

1. Put cut forage into a wide swath at cutting that covers at least 70% of the cut area.
2. For haylage: If drying conditions are good, rake multiple swaths into a windrow just before chopping (usually 5 to 7 hours later).
3. For hay: If drying conditions are good, merge/rake multiple swaths into a windrow the next morning after mowing (when forage is 40 to 60 % moisture) to avoid leaf loss.


For additional detail, you may also want to review the University of Wisconsin publication, "Best Practices to Hasten Field Drying of Grasses and Alfalfa" which Undersander also contributed to (accessible at: [http://learningstore.uwex.edu/Assets/pdfs/A3927.pdf](http://learningstore.uwex.edu/Assets/pdfs/A3927.pdf))

Considering the many challenges for quality hay production in Ohio, I've heard lots of discussion regarding alternatives for harvesting and storing forages. A few years ago during the Buckeye Shepherds Symposium, Dr. Bill
Weiss of the OSU Animal Science Department gave a presentation on making and storing forages for ruminants. The session was recorded and is available on-line. It covers nearly all of the considerations for harvesting and storing forages in order to maintain the highest quality possible. Forages are expensive to grow, expensive to harvest, and become even more expensive if not stored and fed properly.

If you plan to mechanically harvest any forage this year, in addition to reviewing the publications linked above, set aside 45 minutes of your time and follow this link to Dr. Weiss presentation . . . it will be time well spent! http://go.osu.edu/storingforages

Proper Hay Storage Techniques Can Increase Value, Decrease Quality Losses
Written by Tracy Turner (OSU Extension). Sourced by John Grimes (OSU Extension)

Producers who follow the proper techniques for hay storage will find their crops will retain more value and suffer fewer losses, said a beef cattle expert from the College of Food, Agricultural, and Environmental Sciences at The Ohio State University.

Considering that hay production is very costly, producers may want to take special care to store hay correctly to ensure it retains quality, said John Grimes, beef coordinator for Ohio State University Extension and a member of the OSU Extension Beef Team. OSU Extension is the outreach arm of the college. According to the OSU Extension 2013 enterprise budget, at 3 tons per acre, grass hay costs $112.77 per ton to produce. Alfalfa, at 4 tons per acre, costs $133.02 per ton, Grimes said. “Hay is an expensive crop to harvest, and storage losses can be significant,” he said. “Much like corn and soybeans, hay is a valuable crop and should be treated as such.

“Hay is an asset, and with the current hay prices, you can’t afford to have losses. If you are losing hay at 10 to 20 percent, those are real dollars that you are losing.” Ohio farmers produced some 1.12 million acres of hay in 2011, Grimes said. “At an average of about 2.5 tons per acre, this yielded a total production of 2.7 million tons of hay in 2011 used to support several types of ruminant animals, including beef, dairy, goats, horses and lambs,” he said.

Grimes offers the following tips to avoid hay storage losses:

- Hay to soil contact is typically the primary source of losses associated with hay stored outdoors.
- If placing bales on the ground cannot be avoided, make sure a well-drained area is selected.
- Hay should be stored in an open area that can receive maximum sunlight.
- When aligning bales for storage, bales should be placed so that the sides of the bales do not touch. An exception to this would be if you were stacking bales in a pyramid fashion for covering under a roof or with a tarp or other material.
- The flat ends of the bales should be firmly butted against one another, as this can protect the ends almost as well as if they were one continuous bale.
- Losses are kept to a minimum when hay is either covered by a roof or some other type of covering. The losses could increase when the hay is moved outside, especially when hay is stacked on bare ground.

“For example, hay loss is generally 4 to 7 percent when stored in a conventional shed, while hay stacked outside on the ground can see losses of 25 to 35 percent, according to a study by the University of Kentucky,” Grimes said. “In general, the more protection you can provide, the less hay loss you will experience.”

The ideal storage for hay is in bales placed on a rock foundation stored underneath a structure with a roof, he said. “If you don’t have a protected storage, place hay on a layer of geotextile fabric cloth covered with rock to avoid bale-to-soil contact,” Grimes said. “Another option is to stack in a pyramid covered with a tarp or other protective covering for outside.”
When choosing a bale storage area, producers should consider ease of access to the bales during the next feeding periods for their livestock, he said. “When you get into the baling season, you have to start to think about how you’re going to store the hay to make sure you have adequate feed for your livestock next winter,” Grimes said. “You may have plenty of feed now, but you may have a shortfall around the corner, and if you run short on hay, you will have to make up for it another way.”

Other tips he offers producers:
- A bale stored under a tree canopy isn’t a good idea because it offers only minimal protection from rain and is slow to dry.
- Losses are minimized when adequate space is left between the bales and the sides of the bales are not allowed to touch.

More information on proper hay storage can be found in a podcast posted by Grimes as part of OSU Extension’s May 6 Beef Cattle Letter at beef.osu.edu/beef/beef.html.

**Tips on Selling and Purchasing Hay**

It is customary in many areas to price hay by the bale. Purchasing and selling hay by the ton is rapidly becoming a more equitable method of buying hay. Purchasing hay by the ton allows buyers to know precisely how much hay they are getting for their money, provided the hay is cured properly and accurately weighed. The following charts can be used as a guide to convert from bale prices to ton prices.

**Useful Conversion Formulas**

To convert the price per ton to price per bale:
1. Determine average weight of bales you are purchasing in pounds.
2. Divide the price per ton by 2,000 and multiply the results by the average weight of the bales to determine the price per bale.

Example: You are considering purchasing hay at $160 per ton. You determine the average bale weighs 50 pounds.

What is the price per bale?
($160/ton) divided by (2,000 lbs/ton) multiplied by (50 lbs/bale) = $4 per bale

To convert price per bale to price per ton:
1. Determine average weight per bale.
2. Divide 2,000 by the average weight per bale to get the number of bales per ton.
3. Multiply the number of bales per ton by the price per bale to get the price per ton.

Example: You are considering purchasing hay for $4 per bale. What would you be paying for each ton of hay purchased? You determine the average bale weight to be 45 pounds.
(2,000 lbs/ton) divided by (45 lbs/bale) multiplied by ($4/bale) = $177.78 per ton

Source: North Carolina Cooperative Extension
**Fruit of the Week- Blueberry (Vaccinium spp.).**  
By Cindy Meyer, OSU Extension

Blueberries have many health benefits and are becoming more and more desirable to grow in the home garden, although in Ohio they are not as well-suited for our soils. By making some alterations to the growing area such as, using raised beds and/or containers to help increase soil drainage, utilizing elemental sulfur to lower pH (blueberries need a pH between 4.5 – 5.2), providing high organic matter (5 - 7%), and a consistent supply of water, growers can be successful with growing blueberries.

Many plants are commercially grown in southern Michigan in the sandy, well-drained soils that are found there. Highbush blueberries (Vaccinium corymbosum) are the primary type of blueberry grown commercially, although others such as southern highbush (Vaccinium spp.), rabbiteye (V. virgatum; syn. V. ashei), and lowbush (V. angustifolium) are also commonly grown. Some of the suggested blueberry cultivars for the home garden are 'Blucrop', 'Bluejay', 'Blueray', 'Duke', 'Draper', 'Herbert', and 'Elliott'.

Growing recommendations include, planting two different cultivars for cross pollination to boost yield as well as conducting a soil test to determine the soil pH. When planting, incorporate 30% (by volume) sphagnum peat moss into the garden soil to increase organic matter content. Cover the top of the rootball with 1” of amended soil. Mulch around the blueberry bushes with 4 - 5” of bark mulch, sawdust, or peat moss. Make sure that the mulch does not touch the blueberry canes at the crown level. Water blueberry bushes 2 - 3 times a week.

**Seven Things to Know About Growing an Ohio Buckeye Tree**  
Kurt Knebusch (writer) and Paul Snyder & Kathy Smith (Sources)

Spring’s a great time for Buckeye nuts to plant their own source of buckeye nuts. Experts at The Ohio State University say the Ohio buckeye makes a good yard tree, though with caveats, and does best when put in before summer’s heat. Fall planting, too, is an option. The Ohio buckeye is Ohio State’s symbol and is also Ohio’s state tree.

Paul Snyder, program assistant at the university’s Secrest Arboretum in Wooster, said the tree’s virtues include greenish-yellow spring flowers, pumpkin-orange fall leaves and eventually buckets of rich-brown nuts. The nuts are toxic and can’t be eaten but find good uses in crafts, especially for fans of the Scarlet and Gray. “Ohio buckeye is native and is well-adapted to our soils and climate,” Snyder said. “But it’s not well-suited to small yards as it tends to get quite large with age.” The tree can grow 50 feet high.

“You have to know its limitations,” said Kathy Smith, Extension forestry program director in the university’s School of Environment and Natural Resources. The school, like the arboretum, is part of Ohio State’s College of Food, Agricultural, and Environmental Sciences.

Here are the Ohio buckeye’s scarlet — er, red — flags to watch for.

1. **Moist A Must**—It needs deep, well-drained, moist — but not wet — soil. The soil also can’t be too dry. In the wild, Ohio buckeyes tend to grow near streams and rivers, Snyder said.

2. **Cool and Green and (partly) Shady**—It also needs sun to partial shade. “In its native habitat, it grows almost as an understory tree, meaning it has protection,” Smith said.
3. **Blotch on its record**- Its bane is a disease called leaf blotch. Leaf blotch doesn’t kill the tree, but starting in late summer, “the leaves take on an almost scorched appearance, and the tree usually ends up completely defoliated,” Smith said.

4. **Best on the Side**- For that reason, don’t use an Ohio buckeye as a focal point in your landscape, Snyder said. Instead, tuck it in your backyard or side yard. “At home, I have one growing at the edge of my woods,” Smith said. “It’s actually growing quite well. It gets early morning light and some protection from the hotter afternoon sun.”

5. **Grass Goes**- The Ohio buckeye’s dense leaf canopy makes it hard to grow grass underneath. But that has some benefits, too, Snyder said: Shade, less mowing and easier gathering of the nuts.

6. **Totally toxic**- Not just the nuts but all parts of the Ohio buckeye tree, including its leaves and bark, are highly toxic when taken internally, according to a U.S. Department of Agriculture [fact sheet](https://www.ars.usda.gov). That goes for both people and livestock.

7. **Oo, that Smell**- Its leaves also smell bad when crushed. That’s why the Ohio buckeye has such unflattering old names as “fetid buckeye” and “stinking buckeye.” Still, Snyder, like Smith, is a fan. “Ohio buckeye is a nice addition to the arboretum and has grown well here over the years,” he said.

Several of those buckeye trees fell when a 2010 tornado hit part of the arboretum, which covers about 115 acres at the college’s research arm, the [Ohio Agricultural Research and Development Center](http://research.oas.ohio-state.edu). “Since then, we’ve planted about a half dozen new ones throughout the grounds,” Snyder said. “There are still some nice buckeyes in the older part of the arboretum as well as near the bottom of the slide in the children’s area. “Every Ohio State fan should have an Ohio buckeye tree if they have room.”

### 4-H Camp Counselor Chili Cook-off & Family Fun Night

The Ashtabula County 4-H Camp Counselors will be hosting a [Chili Cook-off Fundraiser](http://chilicookoff.eventbrite.com) on Friday, May 29, 2015 at the Ashtabula County fairgrounds 4-H Expo Building in Jefferson, Ohio from 5:30 to 8:30 p.m. This cook-off is being held to help the 31 volunteer camp counselors raise funds to conduct the 2015 Ashtabula County 4-H Camp. Over 30 different chili recipes will be on hand for attendees to try. In addition, cornbread, salad, desserts and beverages are included. Each attendee will be able to vote on their favorite chili. Tickets are $5 per person and children under the age of three are free. Music will be provided by Blue Line Entertainment and a get some of your local favorites wet in a dunk tank. To purchase tickets are to receive more information about the event, contact the Ashtabula County Extension office at 440-576-9008.

Anyone wishing to enter a chili into the contest can also make an entry. Entries will be taken on a first come, first served basis. Three categories for entries are: #1: Thick & Hearty; #2: Hot & Spicy; and #3: Unconventional. Two tickets will be given for each entry. Each entrant will need to supply a 18 quart roaster of chili. The grand prize winner will receive...
$250 cash and the first place in each category will receive $50. The chili with the best table display will receive $30 cash. More information about making an entry into the cook-off can be obtained by calling the Ashtabula County Extension office at 440-576-9008.

**Taking Your Vegetable Garden to the Next Level Class to be held on May 21 in Cortland**

Would you like to take your gardening skills to the next level? If so, OSU Extension and the Trumbull County Master Gardeners will be offering a “Taking Your Vegetable Garden to the Next Level” class on Thursday, May 21, 2015. This workshop will feature Amy Enfield, a consumer horticulturalist from Scotts Miracle-Gro Company based out of Columbus, Ohio. The class will be held from 10:00 to 12:00 noon at the Trumbull County Extension office located at 520 West Main Street in Cortland, Ohio.

Amy Enfield will share ways to make your vegetable garden more productive, sustainable, nutritious and fun. She will also highlight new vegetable varieties and share information on organic practices and products. The registration cost for this program is $15 per person. Seating is limited so call today at 330-638-6783 to reserve your spot.

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PLEASE SHARE...this newsletter with farmers or others who are interested in agricultural topics in Ashtabula & Trumbull Counties. Past issues can be located at: https://go.osu.edu/ag-news. Please tell your friends and neighbors to sign up for the list. CONTACT: marrison.2@osu.edu

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