Well, the first week of June was a tough one for our family; as my wife Jaime passed away on Friday, June 5 from complications from her 4 and ½ year battle with Multiple Myeloma Cancer. I know she loved all her interactions with our farming community and our Master Gardener Volunteers. Jaime had a gift of knowing how to bring a smile to every individual she met. Jaime knew no stranger. She was truly one in a million. I know many of you have your own “Jaime Story.” I hope each of you take a page from Jaime and live your life to the fullest. To honor Jaime, she would want you to laugh, love, and give more hugs!

David Marrison, AG Educator

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**Remembering Jaime Hofstetter Marrison**

As many of you know, Jaime Hofstetter Marrison has been battling Multiple Myeloma Cancer for over 4 years now. Since the end of March, Jaime has been in the Cleveland Clinic battling complications from this horrible disease. Through multiple surgeries, chemo & radiation treatments, and other complications, her spirit, smile, laughter and concern for others never wavered. Sadly, we lost our family jewel yesterday on Friday, June 5, 2015. Just as Jaime lived every day to the fullest and with laughter, we would like you to remember her with laughter.

Jaime was a 1989 Graduate of Jefferson Area High School and 1991 graduate of the Gemological Institute of America in California. She was a Graduate Gemologist and a 3rd generation jeweler at J.R. Hofstetter – The Family Jeweler in Jefferson, Ohio, where she had worked for 25 years.

Jaime was a fighter and my love for her grew even deeper over the past nine weeks. Words cannot describe how courageous she battled. Even as she battled, she was making sure everyone at home and everyone she met at the Clinic were doing ok. In fact, I think every employee of the Cleveland Clinic now has a “Jaime Story.” She has been an incredible friend, momma (the best ever) and wife. Jaime’s infectious smile and laughter filled any room she walked into. She will always be remembered for her sense of humor, and outgoing personality. She loved to sing and dance wherever she went. Jaime lived more in just 44 years than many could in 100 years. Some of her favorite things included art, reading, traveling, antiquing, going to concerts, and bonding with her family, friends, and pets.

No matter where she went, she made an impact. Anybody who knew Jaime would agree that she touched the hearts of all she met. Even though she was battling a serious illness, she retained her signature positive attitude. She always had a funny joke up her sleeve. Her spirit will live on through her two greatest creations, Gidget and Analese.
We have completed the arrangements for Jaime’s Celebration of Life. It will be held on Tuesday, June 16, 2015 from 5:00 to 8:00 p.m. at the Elks Lodge, 3115 Lake Road West, Ashtabula, Ohio 44004. This will not be a sad event, as that is not what our Jaime would have wanted. We invite you to join us and tell us and each other your favorite Jaime story! Jaime will be laid to rest in a private ceremony at a future date, in her favorite place, The Iao Valley in Maui, Hawaii.

In lieu of flowers, we suggest donations in Jaime’s memory be made to the Jefferson Area Music Boosters Association (JAMBA) earmarked for their new band instrument fund. This way, “the music will play on” just as Jaime would want. Please help us overwhelm the kids with lots of new instruments. Donations can be mailed to Jefferson Area High School, c/o JAMBA, 207 W. Mulberry Street, Jefferson, Ohio 44047.

**Master Gardener Recognition Banquet Held on Thursday, June 4, 2015**

The Ashtabula and Lake County Master Gardeners held their annual recognition banquet on Thursday, June 4, 2015 a Grand River Cellars in Madison, Ohio. This banquet was held to recognize the achievements from the past year for both groups and to welcome the graduates of the 2015 training program. We are very proud of the Ashtabula County Master Gardeners. Every hour which is given is a huge help in making Ashtabula County a better place to live and work. Since the program’s inception in 1998, our Master Gardeners have contributed 36,600 hours and attended 1,100 hours of CE and driven almost 25,000 miles.

We were very pleased to have 6 Ashtabula County residents in this year’s training class. Congratulations to the following persons for completing the 10 year Master Gardener Training Program and passing the final exam. We would like to recognize the following persons for successfully completing this year’s training: Elizabeth Cool, Pamela Himes-Ohler, Christine Seuffert, Pat Seymour, Emily Smith and Mike Tullai. Each year we recognize the top scholar for each class. This class did exceptionally well with their scores with the final average for the class at 94.8%. This year’s Ashtabula County Top Scholar scored 97.7% with 461 out of 472 points during the training program. Congrats to Patricia Seymour for being the 2015 outstanding scholar.

At the banquet, we also recognize volunteer milestones. The first milestone recognized is when the volunteer reaches their initial first 50 hours then every 250 hours of service thereafter (250, 500, 750 etc). This year 7 members were recognized from the Ashtabula County program for achieving milestones. They were: Ann Rapose & Dr. Jeffrey Brodsky for 50 Hours of service; Beth Baker & Lisa Kozy for 500 hours of service; Encie Moroski & Ruth Stocklas for 750 Hours of service and Susan Masirovits for 2,000 hours of service.

Each year our members are asked to nominate a peer and describe their positive attributes, teaching skills, activities benefiting the county program, advanced training and the member’s greatest contribution. After a review of nominations, a Master Gardener of the Year is selected. At this year’s banquet we were pleased to present the 14th Master Gardener of the Year award winner. Previous winners include: Betty Hansen, Phyllis O’Brien, Maxine Painter, the late Dorothy Shumake, Pat Smeby, Kelly Kanicki, Doris Silvieux, Sue Writz, Susan Masirovits, Meghan Davis, Matt Crawford, Marsha Gurich, Carol Blake, Rita Freeborn, Rees Davis and Encie Moroski.

Congratulations to Alice Vervais for being selected as the 2015 Ashtabula County Master Gardener of the year. Alice was a member of the class of 2010 and during her tenure as a Master Gardener she has volunteered over 350 reported hours and attended 48 hours of continuing education. Alice has is a no nonsense, ‘git it done’ kind of person. We need more volunteers like her. Her "no nonsense" approach to gardening simplifies what might otherwise become complicated. She is an accomplished teacher and interacts with "students" during the classes she teaches and she goes out of her way to make each participant feel comfortable and capable. Alice was responsible for starting and organizing the Library
Blitz which is a gardening program held in the county libraries each spring. Congratulations to Alice being selected as this year’s Master Gardener of the Year.

Forage Harvest Guidelines
By Rory Lewandowski, Extension Educator Wayne County

Our mechanical forage harvest season has begun. Forages are mechanically harvested for use as stored feed. We have 3 basic forage harvest systems that are used: dry hay, silage, and wet hay or baleage. Within each of these harvest systems there are some principles or guidelines that should be considered and followed to minimize losses and keep forage quality as high as possible. I'll summarize these harvest guidelines from a forage harvest presentation given by Bill Weiss, OSU Animal Sciences Department at a meeting this past winter.

The first principle that needs to be understood is forage maturity determines forage quality. Forage quality declines as the forage matures and fiber content increases. This quality decline is particularly pronounced during the spring first cutting harvest as plants shift from vegetative to reproductive growth. A second principle of mechanical forage harvesting is that there are losses at every step beginning at mowing and continuing through storage and feeding. For example, respiration losses continue from the time the plant is cut until it dries down to a moisture content somewhere around 40 to 45%. Dry matter (DM) losses from respiration average 2-4%, but in slow drying conditions could be doubled. Rain damage can account for further DM losses ranging from 0-25% depending upon the timing and the quantity of rainfall. Then there are DM losses associated with the harvest process of raking, tedding and baling or chopping. An average loss range is 2-10%. The drier the forage is when handled the higher those leaf shatter losses will be.

The maximum safe moisture content of dry hay depends upon the type of bale, whether or not a preservative is used and time of year the forage is baled. Hay can be baled wetter in the fall when ambient temperatures are cool and are going to stay cool. Since we are looking at hay production at the beginning of our harvest season, we need to consider moisture contents that will allow hay to go through the summer in good condition. If preservatives are not used then the maximum safe moisture for small rectangular bales is 20%, for large round bales is 15-16% and for the large rectangular bales is 13-15%. If forage is baled wetter than these percentages there will be mold growth and heat generated. This results in stored forage that will have lower energy, lower available protein and often dry matter intake is lower when feeding these forages. In severe cases of baling at too high a moisture content when hay is stacked, spontaneous combustion can occur.

If hay preservatives are used keep the following guidelines in mind. The most effective preservatives are propionic acid based. No preservative product is effective at greater than 30% moisture and most are iffy between 25 and 30 percent moisture. When used at less than 25% moisture, these products can allow you to bale hay and will provide protection against mold and excessive heating. To get this protection the preservative must be applied uniformly within the bale and at the correct amount. Recognize that because these products are volatile in nature, as they dissipate, their effectiveness in preventing mold decreases. In other words, if these higher moisture bales do not dry out in storage, they have a "shelf life" that limits how long they can be stored as a quality feed.

Baleage is a forage production system that combines baling with ensiling. In this system, hay is baled at higher moisture contents so the risks of losses from rain and leaf shatter are reduced. In order to avoid the mold and heating damage that would normally would occur at these higher moisture contents, the bale must be wrapped in plastic to exclude oxygen and allow ensiling to take place. Some guidelines to pay attention to in this system include:

- Forage should be baled at between 40 to 60 percent moisture
- Consider the use of a liquid lactic acid bacteria inoculant applied at baling to lower fermentation losses
- Wrap the bales quickly after baling, immediate is best but certainly within 12 hours of baling
Use enough plastic to wrap, generally 4 layers of 1.5 mil plastic
Recognize that the lifespan of wrapped bales is limited, practice a first made, first to be fed management

Sometimes concern is expressed about the possibility of listeria with baleage. Listeria is a risk in any ensiled system where the forage pH is greater than 5.0. When the pH of the ensiled forage is below 5.0 the risk of listeria is very low. Forage silage production involves chopping the forage at 30-40% dry matter, putting it into either an upright or horizontal silo and letting the fermentation process take place. The benefits are that once again some leaf shatter losses and potential rain losses can be minimized. On average, silage quality tends to be higher than hay because these losses are minimized. To make this system work effectively the forage must be harvested at the correct dry matter content, the chop length must allow for good packing of the forage in the silo, the forage must be packed tightly to exclude oxygen, and any new oxygen must be prevented from entering the silage mass by sealing quickly and completely.

First Baby Born in June Honored
June is Dairy Month! Each June, the Ashtabula County Dairy Service Unit and the Ashtabula County Dairy Princess present a basket to the first baby born in Ashtabula County in June. We are very pleased that Calla Mazzaro, 2015 Ashtabula County Dairy Princess was able to present a basket to Arabella Renné DeJesus last week. Arabella was born June 1, 2015 at 4:54 p.m. at the Ashtabula County Medical Center. She weighed 4 pounds and was 17 ½ inches. She is the first child of her mother Cassidy Bartone, and father Darwing DeJesus. Congratulations to Arabella!

Purple Corn Appearing in Some Fields
Purple corn? No, you’re not seeing things.

Growers who have reported finding corn seedlings in their fields that have turned purple or yellow probably don’t need to panic – the color change is likely just a cosmetic problem that will go away on its own, said an agronomist in the College of Food, Agricultural, and Environmental Sciences at The Ohio State University.

But, if the plants don’t change back to their normal color, growers will have to determine if a nutrient deficiency or some other issue may be causing the issue, said Peter Thomison, an Ohio State University Extension agronomist. OSU Extension is the statewide outreach arm of the college. Corn seedlings can take on strange hues for environmental reasons, but will change to normal healthy green after several days of 70 degree or higher temperatures, Thomison said. But they also might turn yellow due to low nitrogen uptake or limited chlorophyll synthesis or purple due to reduced root development, he said “If your plants stay yellow in hue or are dying, then it may be a serious problem that may call for replanting considerations,” Thomison said.

Conditions that can cause color changes to corn crops include:

- Environmental conditions such as high rainfall amounts that causes saturated soils, can lead to the appearance of yellow corn. Excessive water leads to poor respiration of the roots inhibiting nutrient uptake. After the soils dry out, the appearance of the corn should return back to normal.
- Cool temperatures at night combined with wet fields and high radiation levels during the day can result in purple plants in some cornfields. The purple tint is more attributable to the production of anthocyanin, which is a plant’s response to a stress or a combination of stresses.
➢ If corn follows a fallow season, a root fungus called mycorrhizae reaches a low population. Mycorrhizal infection of corn aids in phosphorus and zinc uptake. Until the fungal growth is stimulated by the corn roots, which exude starches and sugars, the plant may stay purple color for a while.

(Corn Photos by Les Ober, Geauga County)

June Weather Update
By Jim Noel

There is not much change from the last article. It appears June will remain a warm and humid month overall. Most daytime temperatures will remain at or below 90 degrees but nighttime low temperatures will be much above average due to more clouds and humidity during June. Expect lots of lows in the 60s and even some 70s in June. Even though there are pockets of dry areas, expect a wetter month of June. There are some scattered rain chances early and again the middle of the week but it will be scattered. Rain chances appear to increase into the week of June 14-21 with locally heavy rain possible.

See the latest week 2 outlook from NOAA at:
http://www.cpc.ncep.noaa.gov/products/predictions/814day/814prcp.new.gif
http://www.cpc.ncep.noaa.gov/products/predictions/814day/814temp.new.gif

The 16-day rainfall outlook on NOAA/NWS/Ohio River Forecast Center:
http://www.erh.noaa.gov/ohrfc/HAS/images/NAEFS16day.pdf

Normal rainfall is close to an inch per week.
The latest water resources outlook from the Ohio River Forecast Center can be found at:
http://www.erh.noaa.gov/ohrfc/WRO.shtml

Looking ahead into July, temperatures still look normal or slightly above normal with rainfall possibly drying out.

What's the Right N Rate for Corn in Ohio?
Harold Watters, CPAg/CCA

The first answer is we don’t know. The truth is that our soils, rainfall, temperatures, the year-to-year variation and cropping systems are different enough that any rate we tell you will be wrong. We formerly used crop yield goal to determine our nitrogen (N) rate. Shown here is Table 9 (Nitrogen recommendations for corn based on yield potential and previous crop) from the 1995 Tri-State Fertilizer Recommendations. With a corn yield of 160 bu/A we would recommend 190 pounds of N per acre in a corn after corn situation, and 160 pounds after soybeans. We gave a credit of 30 pounds nitrogen for soybeans.

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<thead>
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<th>Table 9</th>
<th>Yield Potential bu/A</th>
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<td>Previous Crop</td>
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<td>Corn</td>
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<td>Soybean</td>
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Those assumptions of the need for about 1 pound of N/bushel of corn and 30 pounds of N credit after soybean were wrong. Today we know that we have a rotation advantage for corn after soybeans – because the soybean residue breaks down more easily than corn fodder. We also from research know that we can grow a good corn crop in Ohio with about 160 lbs N/A, no matter what the yield. In some years and in some situations we can grow that corn crop
with no (as in zero) nitrogen and in some situations 240 lbs N/A is not enough. There is little correlation between N applied and crop yield.

So what is the better answer to arrive at an N rate for corn? Today the best suggestion we can make is to use an economic model to determine your most economical nutrient rate. Ohio has worked with a regional group of universities on a Maximum Return To Nitrogen model (MRTN). The regional calculator is based at Iowa State University, on a website dedicated to this on-line calculator: 

To use the MRTN calculator you need 3-4 pieces of information: location, crop rotation, price of N and corn price.

- We choose Ohio as the location, soybean as previous crop, $0.50 for a pound of N and $3.57 as the corn price (today’s local January delivery price).
- The calculator returns an N rate of 158 lbs N/A and that will cost us $79/A.
- And with this N rate, from research conducted in Ohio in on-farm trials, we should achieve 97% of our maximum yield – and delivers the maximum economic yield.
- This is the best suggestion we have for a corn crop in Ohio – use your own nitrogen and corn price for your operation to refine this number.

Not satisfied with the MRTN, or the no longer useful yield-goal method to determine your corn nitrogen rate? Then explore some of the calculators that are available – Adapt-N, Encirca, Climate Pro, soil nitrate testing, and many more – all have shown some promise. Use of an in-crop sensor is also being looked at in Ohio – again also showing some promise.

We also want you to consider an N rate trial on your farm, and share the results with us. We shared this trial plan during the winter meetings and encourage wider use.

N rate treatments:
- Treatment #1 = 0 N, as in no nitrogen at all – we allow some flexibility on this one. But you will be surprised at the corn yield.
- Trt 2 = 50,
- Trt 3 = 100,
- Trt 4 = 150,
- Trt 5 = 200,
- Trt 6 = 250 pounds of nitrogen.

With 3 replications in a trial plan such as this with randomization:

Sample Plot Design

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Other information we would request but not required is soil nitrate at V4-V6, an in-crop sensor reading such as from a GreenSeeker, an end-of-season stalk nitrate test and yield. The yield by rate and by replication is the most important information we require. We want to build our database, please help.

For more information:
Harold Watters, watters.35@osu.edu, office phone 937 599-4227.
Steve Culman, culman.2@osu.edu, office phone 330 263-3787.
Ohio Department of Agriculture Announces 2015 Local Agricultural Easements Approved for Purchase
The Ohio Department of Agriculture (ODA) on June 4 announced approval for local sponsors to purchase agricultural easements on 54 family farms representing 7,512 acres in 26 counties. Local sponsoring organizations, which include land trusts, counties, a township and local Soil and Water Conservation Districts, receive funding from the Clean Ohio Fund to manage the Local Agricultural Easement Purchase Program (LAEP). The easement ensures farms remain permanently in agricultural production. The program supports the state’s largest industry, food and agriculture.

To be eligible for the program, farms must be larger than 40 acres or next to a preserved farm, actively engaged in farming, participate in the Current Agricultural Use Valuation program, demonstrate good stewardship of the land, have support from local government and not be in close proximity to development. Landowners may use the proceeds of the easement in any way they wish, but most reinvest it in their farm operation.

Communities wishing to participate next year can apply to be Certified Local Sponsors between September 15 and October 15, 2015. Certified Local Sponsors assist landowners interested in selling easements with the application process, easement closing and monitoring, and are ODA’s valued partners in carrying out the Ohio Farmland Preservation program.

Funding for the state’s farmland preservation efforts is derived from the Clean Ohio Conservation Fund, approved by voters in 2008, and used to purchase agricultural easements from willing sellers through a competitive process. From 2002 to 2014, 247 family farms in 53 counties have collectively preserved 45,576 acres in agricultural production. Permanent easements preserved under related programs bring the total acres currently preserved in Ohio to 55,947.

The counties in Northeast Ohio approved include: Ashtabula, Lake Ashland, Medina and Stark. For more information go to: www.agri.ohio.gov/divs/FarmLand/FarmLand.aspx.

Vegetable of the Week - Sweet Potato (Ipomoea batatas)
Author: Tim Malinich; malinich.1@osu.edu

This herbaceous vine, related to the flowering morning glory that graces many gardens, produces large starchy and sweet edible roots. Native to Central and South America, the sweet potato will succeed in areas that can provide a long warm growing season. In Ohio, sweet potatoes are started from "slips", rooted cuttings or sprouts from a growing vine. The slips are grown in southern states or greenhouse grown and shipped north during the proper planting season (late spring). Slips are planted 18" apart in rows 3' apart. The vines quickly develop to cover the entire area crowding out most weeds. In recent years, sweet potato plants have also been available in local garden centers.

Sweet potatoes can be harvested beginning in late summer and harvest should be completed shortly after frost. Cold soil temperatures reduce the storage life of the sweet potato and rot organisms can quickly move from frosted vines to the roots. Dig carefully to avoid damaging the tuberous roots.

After harvest, the roots must be cured to develop their sweet flavor. After they are dried for a few hours, they are moved into a warm (85F) area with high humidity for two weeks. After this initial curing they can be stored long term in a cool area (55F).

Most varieties available are orange-fleshed ('Centennial', 'Georgia Jet', and the non-trailing 'Vardaman') but white-fleshed varieties might still be found. As a houseplant or school project, a sweet potato will grow an abundance of
fine roots, leaves and vines from a tuberous root suspended in water. They can also be stored through spring to
grow a crop of slips for next year's garden.

The term yam is often used interchangeably with sweet potato. Yams (Dioscorea spp.) are native to Africa and Asia
and produce very large starchy tubers. They grow only in the tropics. However, because the two names are often
thought to indicate the same vegetable, USDA labeling rules require "sweet potato" to be included anytime the word
"yam" is used.

Ornamental sweet potatoes (also Ipomoea batatas) are selected for their foliage and growth habit and not for the
eating or keeping quality of the roots. Additionally, pesticides used to grow ornamental sweet potatoes may not
have been labeled for use on vegetables.
For More Information, the University has a excellent information sheet located at:
http://extension.illinois.edu/veggies/sweetpotato.cfm

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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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