Too much rain has really flooded our fields. We are wet! I hear in other parts of the state complaints of being too dry....not the case here! Our state crop specialists have written some nice articles dealing with the impact of all the rain and I have included them in today’s issue. Have a good week. Looking for sunnier days for us.

David Marrison, AG Educator

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**Jackson Bogardus Selected as Winner of the 2015 Ashtabula County Beef Scholarship**

The Ashtabula County Cattlemen’s Association is pleased to announce that Jackson Bogardus, son of David and Sarah Bogardus of Andover, has been selected as the 2015 Ashtabula County Cattlemen’s Association Youth Scholarship. This scholarship was established in 2011 to award a deserving Ashtabula County Senior student for their involvement in the beef industry in Ashtabula County.

Jackson has been an active in the Ashtabula County 4-H program for 8 years and the Pymatuning Valley FFA Chapter for 4 years. Jackson has raised beef steers and heifers with his family. In school, Jackson participated in baseball, cross country, botany team, parliamentary procedure team and was the Vice-President of the PV FFA. Jackson is a 2015 graduate of Pymatuning Valley High School and will be attending Hocking College next fall majoring in Resource Wildlife Management.

**Northeast Ohio Crop Update**

By Les Ober, OSU Extension (written June 12)

Here is a quick update on what has been happening in the fields around NE Ohio.

**Corn:** is rapidly reaching V-6 and nitrogen is being side-dressed. The wet cool temps did contribute to some purpling of corn around the area. For the most part this is the result of sugars that are not being metabolized properly due to cool night temps. The recent hot weather should take care of this problem and the condition will go away. If persists then there may be some nutrient issues primarily Phosphorus. Overall the corn looks good to excellent with some fair mixed in in areas that were saturated due to rain.
Soybeans: are anywhere from emerging 3rd trifoliate. Most of the fields and the stands look good. The big issue here will be weed control. For those of you who have not sprayed due to wet conditions or high wind. We have had an abundance of both lately; timing will be everything from now out. Try to spray on the third flush of weeds but do not let the larger early emerging weeds get ahead of you. Several applications may be needed.

Wheat: This week the Fusarium Head Blight Center issued a moderate to high probability warning for most of Ohio. This included Geauga and parts of Ashtabula and Trumbull Counties. This warning went into effect do to a combination of high temperatures, high humidity and the fact that some wheat varieties were still flowering. As the heads start to ripen scout look for bleached florets that indicate the disease is present. There is no treatment at this point. Up until now the wheat plants I have seen have had very little sign of disease and head scab may not appear.

Oats: are in the boot stage and doing well. Keep an eye out for cereal leaf beetle.

Forage: hold on for another bumpy ride if the weather does not straighten out. Ther has been no weather to make dry forages and the heat is pushing the maturity on the hay. If you have a wrapper, use it and let the hay take advantage of the moisture and regrow.

Concerns for N Loss in Corn from Recent Storms
By Ed Lentz and Steve Culman

Some parts of Ohio have recently experienced heavy rains, especially the northern part. Producers in these areas may have concerns about nitrogen loss in corn fields. Nitrogen losses occur by two main pathways: denitrification (gaseous loss of N) and leaching of nitrate from soil through water leaving the tile line or into groundwater. There is no tool or test that can tell how much has been lost. An estimate can made on the loss potential, which is based on N source, time of application, soil temperature, and number of days that soils have remained saturated.

Most nitrogen that is lost from a field is in the nitrate form during wet conditions. Time of transformation to nitrate is dependent on the type of N fertilizer applied. Anhydrous ammonia is less susceptible to loss since it converts to nitrate rather slowly. Urea-ammonium nitrate (UAN) solution has about 25% as nitrate at application time has a greater risk for loss than anhydrous.

Soils have been warm enough that some transformation to nitrate may have already occurred this year depending on application date. However, the nitrate N will not be lost by denitrification unless soils have remained saturated long enough. Risk of loss is minimal for soils that remain saturated for one day, moderate risk for two days of saturation, and a substantial risk for three or more days of saturated conditions. Standing water is evidence of saturated soils, but even soils without standing water are considered saturated if an individual cannot walk across without making footprints.

Since there are no absolute tests that can tell the N status a point system developed years ago by the University of Minnesota and modified to Ohio conditions has been useful. This system asks a series of questions and assigns a point value depending upon the answer. The probability of a response to additional N increases with more points. The questions and points are given below:

**FACTOR 1:** What N product was used?
- Anhydrous ammonia with N-Serv 2 points
- Anhydrous Ammonia 3 points
- Other fertilizer banded 4 points
- Other fertilizer broadcasted 5 points
FACTOR 2: When was the majority of the fertilizer N applied?
After April 20 3 points
Before April 20 5 points

FACTOR 3: What has been the field soil moisture status the past month?
Normal soil conditions 1 point
Wet soils 3 points
Standing water/saturated soils 4 points

FACTOR 4: What is the crop's current condition?
Green plants > 12" tall 1 point
Green plants < 12" tall 2 points
Chlorotic plants < 12" tall 3 points
Chlorotic plants > 12" tall 5 points

Total the score for the four factors and use the following guidelines:
Less than 11 No supplemental N recommended
11-16 Evaluate again in 4-7 days
17 or more Add an additional 40 or more lbs. N/acre

The "re-evaluation" option is only viable until you no longer have side dressing options. Illinois research from the 1990’s found that 50 lb. N/acre as a supplemental N rate was satisfactory for a wide range of conditions. While a total score of 17-18 would merit a 40 lb./acre N recommendation. A total score of more than 18 may require a higher N rate. Losing 100% of the N fertilizer applied via denitrification or leaching is extremely unlikely and so a reapplication of the total amount of N for the season is not recommended.

Wet Weather: Flooding, Poor Nodulation, and Disease Concerns
By Dr. Laura Lindsey and Dr. Anne Dorrance

The forecast for the coming week is for continued rain and in many cases this will fall on already saturated soils across the northern and west central part of the state. This is going to be tough on soybeans. Here is a guide to help differentiate among some key problems when these types of weather events occur.

1. Flooding: In fields that have had standing water for >48 hours, you’ll notice stunted soybeans and a smell as you approach the “drowned” out areas. When you dig the roots up, they may or may not be brown but the trick is that the outer layer of the root tissue, the cortical cells, can be easily pulled off leaving the white center of the root or root stele. The roots almost look like rat tails.

When plants are completely underwater for approximately 24-48 hours under high temperatures (>80°F), they will likely die. Plants respire more under high temperatures, oxygen is depleted, and carbon dioxide builds up suffocating the plant. Cool, cloudy days and cool, clear nights increase the survival of a flooded soybean crop. If the waters recede quickly and the plants receive some light rain, they can recover.

2. Poor nodulation: Yellow soybeans that can also be somewhat stunted – is often indicative of poor nodulation (see picture). Nodules are the small knots found on roots, often near the top of the root system. Nodules are the result of a symbiotic relationship between soybean and bacteria (Bradyrhizobium japonicum). These bacteria convert nitrogen into a form that is usable by the soybean plant.
Nodulation is reduced in wet soils. Soybeans at the V2 growth stage when grown in saturated soil for two weeks retain the ability to recuperate nodule function when normal (aerobic) conditions are restored. To determine if a nodule is actively fixing nitrogen (i.e., converting nitrogen to a usable form), split the nodule with your fingernail and examine the inside. If the inside of the nodule is pink or red, nitrogen is being fixed.

3. Disease: Flooded and saturated soil conditions will also provide the optimum conditions for the water molds that are common across the state. In these cases, the whole roots are brown, sometimes with dark brown lesions on the roots, and the tissue can be brown to tan. Both Phytophthora sojae and Pythium are contributing to this problem. Once the soybeans are at the V2 growth stage or greater, the protection from the seed treatment is gone and we are relying on the soybean plants’ defense system to mitigate the damage. For these areas in Ohio, the Rps genes for Phytophthora will only protect a few of the plants; we are relying on the partial resistance (field resistance, tolerance) part of the package.

What can you do for these, wait. When dryer weather returns the roots will re-establish. Anne has had some samples when dug up and mailed to Wooster, actually grew new roots during the transit. The roots just need some oxygen to get moving again. Check your drainage, these are excellent opportunities to see where some improvements can be made.

References:

Ohio Slips to Eighth in the Nation in Maple Syrup Production
By Les Ober, Geauga County

We knew the year got off to a late start and that could translate to a below average season. We hoped that would not happen and in a way it did not. Ohio only lost 15,000 gallons in production from 2013 but ended up being ranked 8th in the nation, slipping from 6th place last year and 4th place in 2012. This was reported in the USDA Nation Agricultural Statistic Service June Crop Production REport on June 10th. It is not that Ohio did not have an average season; it is just that there are other states that are also continuing to improve their production and are doing better than Ohio. The stand out statistic is tap numbers. According to USDA NASS Ohio has not significantly increased their tap numbers in three year. We remain stuck between 440,000 and 450,000 taps. New Hampshire, a state that perennially has finished below Ohio in production, added close to 100,000 taps in the last year and is now ranked ahead of Ohio. Our neighbor to the east Pennsylvania continues to take advantage of their growth potential and has steadily increased its production each year.

Maybe you disagree with the results of this annual survey, I know I do. To report that Ohio has not increased tap numbers in 3 years is beyond belief. But it is not the surveys fault. NASS only reports what they get and they only get reports from a small number of producers. If you consider a large producer to be 5000 taps and above and took that number and divided it into 440,000 that would equal 88 producers across the state of Ohio who run 5000 taps or more. That number may not be outside the realm of believability, in fact it may be high but what about all of the producers that run 2000 taps or more. If you take this into consideration you can quickly see that there is a large amount of syrup going unreported.

Why should we care? In a world that is run on statistics and where more times than not the squeaky wheel gets the grease, Ohio maple producers could quickly come out on the short end of the deal. From time to time the OMPA has
applied for funds to help facilitate the industry. These funds are limited and we are ranked against other with similar needs. An industry in decline or standing still will not get the consideration that a growth industry will. I have always said the Ohio maple industry is a growth industry and I am sticking by that, but it is not being reflected in the NASS Report. There are many people that judge a book by its cover and the cover report from NASS is that maple syrup production is slipping in Ohio. Insiders know different but that does not count. Unfortunately the NASS report is the only tool we have to evaluate our progress, everything else is just speculation. That is why OSU Extension took the time to invite a representative of Ohio NASS to our winter meetings. We hoped that attending producers would see the value of the survey and participate. I have said this before, too much syrup in Ohio is going unreported and this may eventually hurt our industry.

Overall Ohio production was average at best. Blame that on a late start and a shortened number of days in production. On the average we started production on March 7th and closed on April 3rd. Ohio producers were only in production 27 days this year. However, that was one day longer than Vermont, which produced 1,390,000 gallons. This showed up in a rea where Ohio normally excels, yield per tap. Ohio continued to slip closer to a quart of syrup per tap producing only .26 in 2015. We produced .352 gallons of syrup per tap in 2013 second highest in the nation. Overall it was a below average year. Let’s hope 2016 is better. If you want to read the whole report, go to the USDA NASS website and enter Crop Production June 2015 into search.

In What Growth Stage is this Corn Seedling?
This photo shot recently depicts the average corn plant in this year’s Crop Watch '15 field. At what stage of growth is it? Why does it matter? First, Bob Nielsen, Purdue University Extension corn specialist, refers people to the Purdue Corn & Soybean Field Guide (https://ag.purdue.edu/agry/dtc/Pages/CSFG.aspx) a handy pocket guide, also available as an app for tablets, to learn about staging corn growth.

There are two methods – droopy leaf and leaf collar method. Most agronomists feel the leaf collar method is more accurate and more repeatable.

The first, shorter leaf with a rounded leaf tip counts as the first true leaf in both methods. Then the leaf collar method only counts leaves with a collar exposed at the leaf base near the stalk. The droopy leaf method is sometimes used by insurance adjusters. It typically will result in staging corn one leaf further along than the leaf collar method. It counts leaves that are "drooping," whether a collar is visible or not.

For corn at five leaf collars or younger, the droopy leaf method is usually one leaf stage ahead. For older corn, it is usually two leaf stages ahead. By the leaf collar method, the plant pictured is at the three-leaf stage, also called the V3 stage, where 'V' stands for vegetative.

Find the growth stage: Count the first rounded, short leaf and leaves with collars to determine growth stage. Why does it matter? Many herbicide labels today refer to growth stages rather than height of corn plants. That's because height may vary more with weather conditions. A shorter plant growing under different conditions may actually be as mature or more mature than a taller plant when staged for growth stages. Some hybrids are also taller than others at the same growth stage.

The method is also useful in knowing where the growing point is in the plant. It usually moves above ground in the V5 to V6 stage, using the leaf collar method. Once it is above ground the plant is vulnerable to hail or other damage, and won't regrow if destroyed.
USDA Opens Enrollment Period for Agriculture Risk Coverage and Price Loss Coverage
Safety-Net Programs

WASHINGTON, June 15, 2015 - U.S. Department of Agriculture (USDA) Secretary Tom Vilsack today announced that eligible producers may now formally enroll in the Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs for 2014 and 2015. The enrollment period begins June 17, 2015, and will end Sept. 30, 2015.

"The extensive outreach campaign conducted by USDA since the 2014 Farm Bill was enacted, along with extending deadlines, is central to achieving an expected high level of participation," said Vilsack. "We worked with universities to simplify these complex programs by providing online tools so producers could explore how program election options would affect their operation in different market conditions; these tools were presented to almost 3,000 organizations across the country. The Farm Service Agency also sent more than 5 million educational notices to producers nationwide and participated in over 4,880 educational events with more than 447,000 attendees. I am proud of the many committed USDA employees who worked hard over the last several months to provide producers support to help them make these important decisions."

The new programs, established by the 2014 Farm Bill, trigger financial protections for agricultural producers when market forces cause substantial drops in crop prices or revenues. More than 1.76 million farmers have elected ARC or PLC. Previously, 1.7 million producers had enrolled to receive direct payments (the program replaced with ARC and PLC by the 2014 Farm Bill). This means more farms have elected ARC or PLC than previously enrolled under previously administered programs.

Nationwide, 96 percent of soybean farms, 91 percent of corn farms, and 66 percent of wheat farms elected ARC. 99 percent of long grain rice farms, 99 percent of peanut farms, and 94 percent of medium grain rice farms elected PLC. For data about other crops and state-by-state program election results go to www.fsa.usda.gov/arc-plc. Covered commodities under ARC and PLC include barley, canola, large and small chickpeas, corn, crambe, flaxseed, grain sorghum, lentils, mustard seed, oats, peanuts, dry peas, rapeseed, long grain rice, medium grain rice (which includes short grain and sweet rice), safflower seed, sesame, soybeans, sunflower seed and wheat. Upland cotton is no longer a covered commodity.

The 2014 Farm Bill builds on historic economic gains in rural America over the past six years, while achieving meaningful reform and billions of dollars in savings for the taxpayer. Since enactment, the U.S. Department of Agriculture has made significant progress to implement each provision of this critical legislation, including providing disaster relief to farmers and ranchers; strengthening risk management tools; expanding access to rural credit; funding critical research; establishing innovative public-private conservation partnerships; developing new markets for rural-made products; and investing in infrastructure, housing and community facilities to help improve quality of life in rural America. For more information, visit www.usda.gov/farmbill.

Safety Tips For June
Andy Bauer – Ohio AgrAbility Educational Program Coordinator
With most crops in the ground a lot of the long days are done and others are just starting. Working safely is still an important mission that everyone needs to follow. June brings on spraying of crops, baling hay, taking care of the garden and mowing grass. These are but a few of the tasks that must be done safely.

Spraying pesticides:
• Be sure to read all labels on pesticides and follow the safety precautions listed.
• Follow the proper application rates for the product being used and be sure to use the proper personal protective equipment for that product.
• Even though it may be hot outside, wear long sleeve shirts and long legged pants.
• Wear eye protection when mixing and using pesticides.
• Take your time and don’t rush the job, it may take a little longer to do the job but it’s your health your protecting along with others.

Baling hay:
• Be aware of PTO shafts and other moving parts on equipment.
• Don’t wear loose torn clothing that could get caught in moving parts.
• Do not jump down off wagons and other equipment; climb down and save your ankle, knee and hip joints.
• Be safe when handling bales whether small square or large round bales, if lifting by hand lift properly, use your legs and if using equipment to pick them up beware of balance points.
• Don’t overload wagons and trucks.

Working around the yard and mowing grass:
• Always wear good protective shoes not flip-flops.
• Always shut the mower deck down when getting off riding mowers.
• Keep your feet away from mower decks and blades so you don’t spend the rest of the summer with missing toes.
• Be aware of your surroundings and where young children are and keep them away from the mower.
• Be aware of the discharge of the mower so as not to throw an object at someone or something.
Always keep safety in mind and keep June and the rest of your summer SAFE!

For more information contact Ohio AgrAbility at agrability.osu.edu or Andy Bauer at bauer.528@osu.edu or (614) 247-7681.

Student Loan Forgiveness Proposed for Novice Farmers
WASHINGTON – Young farmers weighed down by college loan payments would qualify for forgiveness from those loans after 10 years of agricultural work, under bipartisan legislation in Congress. The Young Farmer Success Act of 2015 unveiled this week would add farmers to the Public Service Loan Forgiveness Program that already offers breaks for certain teachers, law enforcement officers and other public service professionals.

Republican Rep. Chris Gibson of Kinderhook and Democratic Rep. Joe Courtney of Connecticut are sponsoring the bill. To prevent abuse by hobby farmers, the measure would apply only to farmers with annual gross revenue of at least $35,000. The average age of American farmers was 58 in the last survey taken by federal government in 2012.

Gibson said the aging of America’s farmers will threaten the nation’s agricultural independence unless more young people are encouraged to choose farming as a career. He considers farming as a public service. “I think it’s common sense,” said Lindsey Lusher Shute, executive director and cofounder of the National Young Farmers Coalition, who joined Gibson in announcing the bill on Tuesday. “People are interested in eating food that is grown in the United States of America, and this would achieve that.”

Shute, 36, and her husband own a 70-acre diversified vegetable farm in Columbia County that sells directly to consumers in Brooklyn, the Bronx and Manhattan, where they make deliveries. Agriculture’s capital intensive nature that often stymies young people with college debt. Alison Smith, who manages the educational vegetable garden at Sprout Creek Farm in Poughkeepsie, pays about $200 a month on her remaining $8,000 in college debt from Nazareth College in Rochester, where she earned a business degree in marketing. Smith, 28, of Hyde Park, would like to someday own a small vegetable farm. “I am drawn to farming, but it is a path riddled with obstacles,” Smith said. “Within the next few years I hope I have a more predictable income.” She doesn’t think the proposed federal loan
forgiveness bill would make a major difference for her, but added, “I would love for this to pass to make farming a more viable option for young people.”

Justin Whipple, co-owner of Whipple Brothers Farms in the Orleans County community of Kendall, would hit the legislation’s 10-year mark in 2019. He pays about $400 a month on his college loans. “It would a huge benefit to our business,” said Whipple, 30, who is married and has a four-month-old daughter. He and his brother Christopher, 33, both graduated from SUNY-Brockport with student loan debt. Justin has a degree in finance and Christopher has a degree in accounting. The two drafted a business plan for growing hops that helped them obtain two loans to purchase 92 acres. They rent out most of their land but have begun growing hops on two acres with a plan to eventually expand to at least 20 acres, selling their product to the state’s thriving microbreweries. “Each year gets a little bit better,” said Justin. He and his brother both have full-time jobs on nearby apple farms and work their own farm on their days off. Justin said he hopes to someday grow apples on Whipple Brothers Farms, but that’s going to be costly because apple trees don’t produce a crop for three to five years.

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Monsanto, Angling For Global Pesticide Dominance, Woos Syngenta
By Dan Charles
Source: http://www.npr.org/sections/thesalt/2015/06/09/413125856/monsanto-angling-for-global-pesticide-dominance-woos-syngenta

Selling seeds and pesticides used to be a sleepy, slow-moving business. That was, until about 20 years ago, when the chemical company Monsanto introduced genetically modified crops and started buying up seed companies. Ever since, companies in this industry have been maneuvering like hungry fish in a pond, occasionally dining on pieces of each other, hoping to survive through size and speed.

Monsanto, now the world’s biggest seed company, is attempting its biggest bite ever. It wants to acquire Syngenta, a Switzerland-based company that sells pesticides and seeds, for $45 billion. Syngenta is currently the world’s biggest seller of agricultural chemicals, and it is ranked third in seed sales. Syngenta has rejected the deal, at least for now. The European company says Monsanto is offering a "grossly inadequate" price. It is also wary of pursuing a deal that government regulators in some parts of the world might end up blocking. The company also says it worries about the "reputational risk" of combining with Monsanto — implying that Monsanto is the corporate equivalent of a high school boy who's not cool.

In fact, a dose of cultural and personal animosity does appear to stand in the way of a deal. This past week, Syngenta took the unusual step of publicly releasing two letters in which Monsanto’s CEO, Hugh Grant, made his case for a merger. In the first letter, Grant had expressly asked that the offer be "kept strictly confidential."
"I've been watching this with fascination," says John Sorenson, the former president of Syngenta's global biotechnology division. Sorenson now is CEO of a startup company in Kalamazoo, Mich., called Vestaron. He says that his former employer fits the European stereotype: hierarchical in structure, deliberate in making decisions, sometimes slow-moving. Monsanto, on the other hand, is "very American — Wild West." It has been aggressive, nimble, and single-minded. As a result, it is also widely reviled.

"Can you imagine them merging?" I ask. "No!" Sorenson says, with a laugh. "But I would not underestimate Monsanto." When Monsanto pursues something, he says, "it's relentless." "Ultimately, it comes down to price," Sorenson says. If Monsanto offers enough money, Syngenta's shareholders will make sure the sale goes through. Sorenson says if he were forced to place a bet, he'd estimate the chance of a deal at about 60 percent.
To preserve competition in the seed industry, and make the deal more palatable to antitrust regulators, Monsanto is promising to sell off Syngenta’s seed business. It is also proposing to move the combined company's headquarters to London and to adopt a new name. Dropping the Monsanto name might not be a bad move. One attempt to measure the reputations of 100 top companies, conducted by Harris Interactive, ranked Monsanto fourth from the bottom.

Small Unmanned Aerial Systems in Agriculture: Preparing for Legal Issues Webinar
The Agricultural & Food Law Consortium will be hosting a webinar on Tuesday, June 30, 2015 from 12:00 – 1:00 (EDT) on the legal issues of using small unmanned aerial systems (drones) in agriculture. This webinar will address the current legal and future status of Unmanned Aerial Systems/Vehicles (UAVs) operation in the United States. Issues to be discussed include the current rules and conditions for operating UAVs, the proposed federal regulations for small commercial UAVs released by the Federal Aviation Administration (FAA) in February of 2015, and the range of proposed and enacted state laws across the country dealing with concerns around privacy, nuisance and trespass.

Presenters for this webinar include Peggy Kirk Hall from the Ohio State University Agricultural Law and Taxation Program and Rusty Rumley B.S., J.D., LL.M. from the National Agricultural Law Center. This webinar is offered free of charge and is limited to the first 100 registrants. It is recommended that you test your computer for software compatibility prior to the webinar. More information on how to connect to the webinar can be found at: http://nationalaglawcenter.org/consortium/uavwebinar/

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