We are officially half way through December. It has been an incredibly mild December which I know many of our farmers are very happy for. After all, life on the farm does not stop because winter arrives. Milder weather usually makes everything operate a lot smoother. We are busy working on setting the dates for our winter agronomy, beef, dairy, and grape Extension programs. Be watching future editions of this newsletter for more details on all of these programs. On the tax front, I am hearing there may be light at the end of the tunnel with regards to the tax extender bill. Rumor has that it may be done by this Saturday and the good news appears that it may be a two-year extension for both 2015 AND 2016. It appears as if the 50% bonus depreciation should also be extended through December 31, 2016 and the Section 179 deduction will be at the $500,000 level up to November 30, 2017. As we get better clarity on the tax extender bill, I will let you know, but as usual, this is clear as mud.

David Marrison, AG Educator

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Northeast Ohio Phosphorus Task Force Seeking Farmers to Help Track Data for Pilot Project

By David Marrison

A newly formed committee is meeting in Ashtabula County titled the Northeast Ohio Phosphorus Task force. Thus far, the committee has met twice and we are trying to be proactive in response to Senate Bill 1 which has created new rules for manure and fertilizer application in Northwest Ohio. A concern of our committee is Senate Bill legislation could be made state wide which would severely hamper animal agriculture in NE Ohio. Our committee is looking for PROACTIVE research and education measures which our farm community can adopt to help improve water quality in both the Lake Erie and Ohio River watersheds.

Our first project is to track two items during the upcoming winter. We are asking farmers to monitor the weather & soil conditions which are present each day from January through the end of March. We are asking for cooperators to track two questions each day; these being: #1: Is your ground snow covered or frozen and #2: Is the top two inches of
the soil saturated. According for the new legislation from Senate Bill 1, no manure or fertilizer can be applied (without incorporation) if these conditions exist in Northwest Ohio. We are completing this research to ascertain the percentage of days in our watersheds where it would be acceptable for manure or fertilizer application. Our goal is to have at least one cooperator from each township in Ashtabula, Geauga, Lake or Trumbull County to track this data for us.

Attached to this newsletter (see last pages) is our simple tracking calendar. Farmers interested in tracking should contact David Marrison at 440-576-9008 or marrison.2@osu.edu so that your name is added to our cooperator list. Thanks for helping us be proactive.

Who is Going to Milk Cows on Christmas Day?
By Phil Durst, Michigan State University Extension

Dairying is a 365 day-a-year job. Every day, Christmas and New Year’s included, cattle need to be fed, milked and the barns scraped. But who is going to do it on those special days?

The question is not whether the cows will have to be milked on Christmas or any other holiday. The only questions are who will do those chores on Christmas morning when kids are waking up to check their stockings, and how will farm owners make those days special in some ways, for themselves and for their employees? Each farm is different and the approach that works on one farm may not apply to another, but there are some principles that apply across farms.

Plan ahead to avoid extra chores. Inventory needs well in advance so that supplies of bedding, bagged minerals, towels or anything else will not run out during the holidays. Schedule routine work, such as vet checks and hoof trimming, away from the holidays as much as possible, and work ahead on what can be done ahead.

Treat all employees with fairness. In general, people are willing to sacrifice if they feel that everyone shares equally in sacrifices. Also, ask employees about their time-off needs. Some employees may prefer to have off Christmas Eve, whereas others may prefer to have off New Year’s Day. Find out their preferences in advance and work with that as possible. Employees also need to know that their boss shares in the sacrifice as well.

Make employees who work feel appreciated and noticed. Employees will bear with much if they feel that they are truly appreciated and noticed. On Christmas, farm owners may have three shifts of employees working. Greeting all employees on this day is important, especially the night crew. Each person who comes to work that day has a need to be recognized for being there on Christmas.

Help employees embrace the greater goal. Why are they there on Christmas? They are there to make sure that when moms go to the grocery store the next day, that milk is in the dairy case and yogurt cups are on the shelves. They are there to ensure that hospitals and schools have milk for patients and children. They are there to provide continuous care of cows and keep them healthy. Give employees a vision to hold onto when things are not going well, and when they miss the opportunity to be home.

Make the day special in some ways. Don’t ignore the fact that it is Christmas (or some other special day), or pretend that it is just like any other day. Celebrate it even in the workplace. Maybe it is by tying bows to pipes in the parlor, having a card for each employee at their locker, or by writing “Merry Christmas” on the whiteboard. Find some way to recognize each special day when employees work, even if it is a holiday with which you are unfamiliar.

Create a festive atmosphere. Take the opportunity to celebrate together. Maybe it is breakfast for the morning shift, lunch for the afternoon shift and cookies and eggnog for the night shift.
Consider rewarding employees for their sacrifice. Some employers offer bonus wages for working special days. That may not be your first choice of action since employees don’t make the business more money on that day than any other. However, it may be necessary to pay bonus wages to get work done on special days.

As educators with Michigan State University Extension have learned, the work of farming takes a team. A team works together through tough times and good because they need each other. Managing employees is about building your team of people, committed to the purpose and success of the farm.

2015 Ohio Soybean Performance Trials: Sortable Tables Available Online
By: Laura Lindsey

The purpose of the Ohio Soybean Performance Trials is to evaluate soybean varieties for yield and other agronomic characteristics. This evaluation gives soybean producers comparative information for selecting the best varieties for their unique production systems. Varieties were grouped, tested, and analyzed by maturity (early and late). Conventional, Liberty Link, and Roundup Ready varieties were tested together and sprayed with conventional herbicides to allow for head-to-head comparisons. Conventional, Liberty Link, and Roundup Ready entries are statistically comparable within a maturity range (early or late). The 2015 Ohio Soybean Performance Trials with sortable tables are now available online at: http://www.oardc.ohio-state.edu/soy2015/
A pdf of the 2015 Ohio Soybean Performance Trials that can be found here: http://stepupsoy.osu.edu/node/46

Stagnant Demand & Ample Stocks Could Keep Grain Prices Flat in 2016
By Tracy Turner

Grain prices aren’t likely to rise next year because of stagnant demand growth and ample grain supplies, says an agricultural economist with the College of Food, Agricultural, and Environmental Sciences at The Ohio State University. With the slowing Chinese economy contributing to stagnant demand growth and the ample supply resulting from large harvests in major production nations the past two years, along with destocking in Argentina and China, the 2016 grain market will remain one of flat, weak prices, said Matt Roberts, an Ohio State University Extension economist.

“The global and U.S. wheat market remains well supplied,” he said. “To date, Great Plains weather has been positive for the 2016 winter wheat crop, and globally, U.S. wheat is struggling to find export sales against Black Sea wheat.” Roberts spoke Dec. 7 during the kickoff of the college’s 2015-2016 Agricultural Policy and Outlook series. The event featured presentations by experts from the college’s Department of Agricultural, Environmental, and Development Economics, who discussed issues the food and agricultural community should expect in 2016, including policy changes and market behavior with respect to farm, food and energy resources, and the environment.

Due to multiple factors, grain markets will continue to reflect excess supply and depressed prices, Roberts said. “U.S. prices for corn remain weak on the back of two record harvests,” he said. “Combined with good to excellent yields in major growing nations, global corn and feed grain supplies are quite large. “Meanwhile, demand is weak.” Roberts said that growers could continue to see corn at $3.50 to $4 per bushel, $8-$9 soybeans and $5 for wheat as the norm, “until prices are low enough to drive acres from production or demand growth from developing countries soaks up the expanded acreage from recent years. “Uncertainty about China’s plan to reduce domestic corn stocks means that not only will China not import corn in 2016, but may actually be an exporter,” he said. “Worries about China’s economy have also kept a lid on Chinese import demand for soy.
“While soybean imports remain solid, another year of explosive growth in soybean imports doesn’t appear to be in the cards.” There are ways that farmers can prepare for the impact of these lower prices, Roberts said. “Farmers should build working capital, pay taxes, lower your land costs, fix your interest rates and bank some cash if you can,” he said. “No, this isn’t a happy message, but this is the reality now.”

**County meetings**
The kickoff event initiated a series of county meetings to be held statewide through the end of the year. The county meetings, which are open to the public, will be held on the following dates:

- **Dec. 16, 4 p.m.,** at the Attica Fairgrounds Social Hall, 15131 E. Township Road 12 in Attica. RSVP: Jon Ewald, jewald@suttonbank.com or 800-422-3641, or register online at suttonbank.com by Dec. 9. Cost: free with reservation by Dec. 9; $20 without a reservation.
- **Jan. 20, 4 p.m.,** at the Bellevue VFW Hall, 6104 U.S. Route 20 in Bellevue. RSVP: Valerie Bumb, BumbV@fnblifetime.com or 419-483-7340, by Jan. 13. Cost: free with reservation; $22 without a reservation.
- **Jan. 22, 9:30 a.m.,** in Fisher Auditorium at the Ohio Agricultural Research and Development Center, 1680 Madison Ave. in Wooster. RSVP: Wayne County Extension, lewandowski.11@osu.edu or 330-264-8722, by Jan. 15. Cost: $15.
- **Feb. 15, 7:30 a.m.,** at the Trinity Lutheran Church, Noecker Hall, 135 East Mound St. in Circleville. RSVP: Pickaway County Extension, 740-474-7534, by Feb. 8. Cost: $10.
- **Feb. 19, noon,** at Romer’s Party Room, 118 East Main St. in Greenville. RSVP: Darke County Extension, custer.2@osu.edu or 937-548-5215, by Feb. 12. Cost: $20.
- **Feb. 24, 6 p.m.,** at the Jewell Community Center, 7900 Independence Road in Defiance. RSVP: Defiance County Extension, cleveenger.10@osu.edu or 419-782-4771, by Feb. 19. Cost: $15 in advance or $30 at the door.

A meal is provided at each meeting and is included in the registration cost. Questions can be directed to the local hosts noted above.

**2016 Outlook: Look for $3 Corn to Continue**
By Nate Birt (published on December 10)

There’s little question corn will maintain its position as king of U.S. row crops in 2016. Just don’t expect its footprint or price point to change substantially from levels seen this year amid a massive supply of grain and low commodity prices. Some factors suggest acreage might increase slightly in light of low soybean prices and basic in-field best practices. “Land that was planted to soybeans could go back to corn simply because of agronomic practices,” says Brian Grete, editor of Pro Farmer. He predicts corn plantings will range from steady to up to 2 million additional acres.

**Acreage Holds Steady**
Pat Westhoff, director of the Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri, agrees the corn-soybean relationship will factor into plantings. “We do have a big shift in the relative prices of corn and soybeans [compared] to what we’ve seen the last couple of years,” Westhoff says. “We would expect that to result in a little more acreage back to corn in 2016.” Although those sentiments aren’t particularly bullish, other experts think plantings might move in the reverse direction.

“It will likely be a slightly smaller number of acres,” predicts Matt Stockton, ag economist at the University of Nebraska, both in his state and nationally. “The crop size will then depend on conditions.” Nor does Gary Schnitkey, ag economist at the University of Illinois, anticipate much change. “I would expect at this time about the same
acreage and yields as in 2015,” Schnitkey says. “I would expect 88 million acres of corn planted in the U.S with a yield in the high 160s or low 170s bu. per acre. In Illinois, I would expect 11.8 million acres with a yield in the low to mid-170s bu. per acre.”

**Three-Dollar Prices**
Prices in the high $3-per-bushel range are likely for 2016, Schnitkey adds. Others echo his expectations. “We don’t see a lot of reason to expect much change in 2016/17 given what we know today,” Westhoff agrees. Recall that USDA has projected a price midpoint of about $3.65 for the 2015/16 corn crop harvested this year, and that number is projected to be similar for 2016/17.

**Demand Factors at Home and Abroad**
Domestically, the biggest unknown that will impact prices is the demand for corn in feed, Schnitkey says. Globally, the biggest unknown is the economic outlook. If more economies enter a recession, demand for corn and soybeans could dip lower. Another wild card is Chinese demand for soybeans, he says, which will impact how many acres of corn and soybeans U.S. producers plant. Stockton agrees, and he adds another global factor to watch—ethanol policy in Brazil.

**Geographic Trends Remain Balanced**
One area that could see more corn planting in 2016 is the South, where drought has evaporated, Stockton says. In the Corn Belt, meanwhile, planting trends should remain more or less unchanged. Schnitkey agrees. “At this point, I would not expect much change,” he says. “Prices are low, but they are low for all commodities. The comparative returns of crops have not changed much.”

**Maple Syrup May Just Be A Sweetener That's Good For You**
Maple syrup is having a moment. From stories about Tour-de-France cyclists incorporating it into their racing diets, to the creation of new companies like UnTapped, which sells its "athletic fuel" of 100% pure Vermont maple syrup in 100 calories gel packets, the amber, sticky-sweet substance has even garnered praise from science, with one study claiming to find anti-inflammatory properties in certain syrups. But, before we start slathering everything in syrup, we thought it'd be a good idea to talk with Jim White, R.D., certified health-and-fitness specialist, owner of Jim White Fitness & Nutrition Studios, and national spokesman for the Academy of Nutrition and Dietetics.

First, we need to clarify something: when we talk about maple syrup, we're talking 100% pure maple syrup, not that Aunt Jemima junk. With that out of the way, let's address one of the biggest advantages maple syrup has over sugar or other sweeteners, namely, that it actually contains vitamins and minerals.

"Minerals found in maple syrup include potassium, calcium, magnesium, manganese, zinc, and iron," says White. "Vitamins such as B2, amino acids, and organic acids are also found in maple syrup." The presence of these nutrients is what sets maple syrup apart from other sweeteners, though White was still hesitant to call it anything close to a "super-sweetener."

"Evidence suggests that there are significant antioxidant levels found in maple syrup, based on a study using maple syrup to inhibit the growth of cancer cells in colon cancer," stated White. "Some data suggests that the use of maple syrup does not cause the same blood sugar spike as is seen with other sweeteners, such as sugar. [Overall], it is still unknown how consumers can benefit from using maple syrup as an alternative to sugar, other than the vitamin and mineral content found in pure maple syrup."

If you're looking for a mid-race energy boost, maple syrup is certainly one answer, but White offered up a few more firmly established ideas, too.
"There are many other foods that could be used as an energy supplement with less sugar and more vitamin and mineral values. Blueberries, known for their antioxidant qualities, contain magnesium, significant amounts of potassium, and 4 grams of fiber in a 1 cup serving with a total of 84 calories," explains White. "In comparison, maple syrup contains less magnesium, potassium, and no fiber in a 1 ½ tablespoon serving with 78 Calories."

Downing a shot of maple syrup sounds great, but when you really break it down, unless you’re in the middle of an endurance race, it really is just sugar, with some vitamins and minerals to boot. Hey, at least now you know you're getting some nutrients with those chocolate chip pancakes.

**What Will the Ohio Maple Syrup Industry Look Like in 2050?**

By Les Ober - Ohio State University Extension Geauga County

(This is a follow-up post to the July 16th post on leasing and evaluating maple stands. It contains more questions than answers.)

Over the Thanksgiving holiday I had a chance to read in depth the latest edition of The Maple News. What caught my eye was and articles about a recent scientific study concerning with the health of the maple trees in the Adirondacks Mountains in upstate New York. The article documented the relatively slow growth of the sugar maple trees in that region. For many reading articles like these, the importance does not always hit home because it is about a potential problem in an area that is a long way from the home sugar bush. Therefore, why should we be concerned? The answer to that question became all too clear after attending a two day planning meeting on woodlot management held at the Holden Arboretum in Kirtland, Ohio.

The Holden Arboretum is considered to be one of the top Arboretum’s in the country. Their research on trees is highly respected around the world. The arboretum covers 4000 acres and includes all types of hard and soft wood species. It also includes the sites of several old sugar bushes and a grove of super sweet trees. One of Holden’s latest projects is entitled the “Working Woods”. It is setup to take a hard look at how local woodlots are managed, for not only timber sales but forest products including maple syrup production. The initial meeting was more of an introduction to the project and a chance to share opinions on the subject of forest management. The group sitting at the table included arborists from several states, commercial foresters and foresters from the Ohio Division of Forestry, along with members of the Holden staff. I was fortunate to be selected to represent the local maple syrup industry at this meeting. What I was able to take home from the discussion changed my prospective on forest management. I quickly became aware that there are many things we need to be concerned about regarding the health of our trees and their future.

For several years now, one of my projects at the Geauga County OSU Extension has been to examine what is happening to the maple tree resource in NE Ohio. This project entitled, “Preserving Sugar Maple for the Next Generation”, is finding out that NE Ohio maple syrup production may be entering a new phase. After WWII just about every farm (most were small dairy farms) in NE had a sugar bush. The sugar bushes were small and there were many individual sugar camps in a square mile area. This gave the appearance of an endless supply of maples to tap. Fast track to the year 2000, most of the small dairy farms are sold because their owners could not keep pace with the modern expansion of the industry. Many of the sugar bushes are cut down and replaced with housing developments. This type of development also increases the demand for home furnishings. One of the most popular furniture’s today is made of hardwood which includes maple. It is no surprise that Ohio has become one of the leading producers of hardwood furniture in the country. That industry is centered in Holmes County just 60 miles from the Geauga County. Suddenly there is a new interest in the maple tree and it is not only for syrup production. Tracts containing old sugar bushes are being harvested at a steady pace to keep up with the demand of the furniture industry. This would be ok if we lived in an area where there were expansive tracts of timber but we do not. Instead we live in an area where there are small woodlots, 10 to 20 acres that cannot stand extensive harvest. To make matters worse the people
doing the logging feel that the only economical cut they can make is a clear cut. Selective cutting just does not generate enough revenue to bring in a mill. As a result NE Ohio has become the poster boy for bad logging practices.

One of the things I learned at the Holden meeting was that along with increased harvest our maple trees are now coming under increased environmental pressure on multiple fronts. We live in a world of invasive species, natural imbalances and yes the dreaded term, climate change. As the article on the Adirondack forest maples pointed out, trees that should be thriving are just not growing at the rate they should, do to multiple factors affecting their growth. In Ohio we have also seen increased pressure from wildlife and insect damage on the surface and earthworm damage from beneath the soil. Both have led to reduction in the regeneration of young trees to replace the aging trees that will soon be lost. I was able to document this at Holden over the last 8 years. While recently standing in the middle of the Holden Arboretum Working Woods demonstration sites (an Old Sugar bush) I was very alarmed at the lack of regeneration that had taken place over that span of time. The question came to mind; if you are unable to regenerate a new growth in a well-managed woodlot, within an arboretum, what are the chances of maple trees coming back in a site that had been clear cut for timber production? The answer to that was all too obvious. Only under the best circumstances could a clear cut woodlot come back into maple production. Unfortunately in NE Ohio, Best Management Practices in logging are seldom used. This leaves one to ponder; with 60% of Ohio’s maple syrup currently being produced in NE Ohio, what will the Ohio Maple syrup Industry look like in 2050? The bigger question is what will be needed to protect this valuable resource.

One of the facts produced by the OSU study is that the risk to maple trees is significantly higher on private property, than on public property. There are still good healthy stands of maple trees growing in our parks and on other publically owned land. However, even those maple stands are under constant pressure from expanding poorly managed deer herds. For the most part we will always have stands of maple on public lands; it is the maples in privately owned woodlots that are at risk. The goal of both of these projects is to educate private landowners on how to manage woodlots on their property. The education process starts by showing a landowner what the options are for available for woodlot utilization and management. Beyond that, they still need to be convinced that the best way to make those decisions is to seek professional help before they sign any contractual agreement. This means that certified foresters need to be brought in to appraise the resource. If they decide not to cut and to go with maple syrup or sap production then they need to contact someone who can show them how to make that happen. As Cornell University Maple Specialist Dr. Michael Farrell points out in his book, “A Sugarmaker’s Companion”. “Often the best way to save a maple tree is to utilize it for maple syrup production”.

It is not the intention of anyone to dictate what a landowner should do with his or her property. Certainly if they have made up their mind to harvest the timber for whatever they are offered, they have the right to do that. The big problem here is that what looks good on the surface does not always end up that way and there are often regrets when the process is completed. We need to make sure when a woodlot owner makes a decision it is an educated decision. Hopefully somewhere along the way we will see less woodlots with maple trees being cut down and more going into maple syrup production. In the meantime enjoy the hours you spend in your sugar bush and never take the sweet gift of making maple syrup from these magnificent trees for granted.

Ohio Maple Days on Tap for January 21-23, 2016
This year’s Ohio Maple Days are set for Jan. 21 in Morrow County, Jan. 22 for Wayne and Holmes Counties, and Jan. 23 in Geauga County. The programs, which are the same at each location, offer educational sessions on maple production. They are timed to help producers get ready for the coming season. Both hobby and commercial producers are welcome.

The locations:
- Jan. 21, Morrow County, 8 a.m.-4:30 p.m. at the Lutheran Memorial Camp, 2790 State Route 61, Fulton.
Jan. 22, Wayne and Holmes Counties, 8 a.m.-4:30 p.m. at the Mennonite Christian Assembly Church, 10664 Fryburg Road near Fredericksburg.
Jan. 23, Geauga County, 8 a.m.-4:30 p.m. at Joe J.S. Miller’s Window Shop, 15020 Shedd Road, Burton.

Featured topics include:

- Food Safety and Modernization Act and Ohio Department of Ag updates will be given to keep producers up to date with the changing laws governing maple syrup production on both the state and federal level. Also covered will be the ODA inspection process. An ODA maple representative will be on hand to answer questions.

- New International Maple Syrup Grading System: This new grading system was passed into law in January 2015 with full enforcement to take place in the 2016 maple syrup production year. Producers who have not yet switched to the new system will learn how and what they will need to do to be in compliance. There will also be samples of new grading kits on the market to aid producers in meeting the new grading laws.

- Cornell Maple Research Station has been working on many topics to aid producers on how to properly size and layout a tubing collection system as well and how to get the most out of their vacuum system. Another very informative program will be given on how candy making with maple can greatly expand sales revenue to any maple operation. Demand for Pure Ohio Maple Syrup and maple value added products has grown tremendously over the last few years. With stabilized prices for bulk syrup, value added products gives producers more opportunities to grow the potential income of their operation.

- With the flat-line bulk prices in today’s market place it is evermore essential for producers to market their products. Tips on how to market their sweet products will be given with examples of what to think about in efforts to reach the largest audiences. The marketing efforts of old do not have the same impacts as in the past as our society moves to more digital hungry consumer. The younger generation consumers are the ones looking for more “natural food” streams. It pays for producers to pay attention to current marketing practices.

Featured speakers include:

- Mr. Steve Childs, Maple Specialist at Cornell University of NY.
- Mr. Dan Milo, Food Safety Supervisor, Ohio Department of Agriculture Division of Food Safety. Dan a hobby maple producer himself has been working with the federal rulings under the Food Safety Act.
- Gary Graham, coordinator of Ohio State’s Ohio Maple Program, serves as the Ohio State University Extension Specialist for Ohio’s Maple Syrup Industry.

Also, there will be a trade show; reports from OSU Extension and the Ohio Maple Producers Association; Free testing of hydrometers and Vermont Temporary Maple Syrup Grading Kits (bring them to the program); and a session called “Maple Nuggets” for sharing questions, ideas and information. Pre-registration is required, which includes lunch, refreshments and handouts, costs $30 and is due before Jan. 12. Payment at the door is $35 and doesn’t include lunch. Send your name, contact information, which day’s program attending and check or money order (made payable to OSU Extension) to OSU Extension, Holmes County, 75 East Clinton Street, Millersburg, OH 44654.
For more information, go to http://holmes.osu.edu/events/2016-ohio-maple-days (with a link to the brochure and registration form) or call 330-674-3015.
A Very Active El Niño Pattern Setting Up
Published on December 10th, 2015
Source: https://www.morningagclips.com/a-very-active-el-nino-pattern-setting-up/

So far this December has been record warm for the country overall trending the warmest in 120 years, wettest in 6 years, and the least snow in 17 years. This is about to change! As an example, temperatures in the Northeast this weekend are going to surge to record warm levels in the middle 60s (+25 degrees above average) and then plummet to highs in the upper 30s to low 40s by late next week. That’s a huge cool down, but only brings temperatures back to reality and near normal in the Northeast. In the Upper Midwest the trends are even more dramatic with Minneapolis, as an example, going from near 50F (+22F Above Average) to a high of just 18F (10 degrees below average) late next week. Out West in Las Vegas they’ll go from 70F (15 degrees above average) to highs in the middle 40s (12 degrees below average) next week. So it looks like the weather will feel a bit more like Christmas-time across most of the U.S. late next week. A look around the world shows the really cold air is bottled up in Greenland, northern Alaska and northeast Siberia.

Snowfall is going to be heavy in the mountains of the West over the next week, and a moderate snowfall event is possible for the extreme northern Plains. For now, enjoy the record warm weather across most of North America.

A classic El Niño weather pattern next week is likely to bring epic snowfall to the Sierras, Cascades and much of the Rocky Mountains. Some areas are likely to get 4-8 feet, or more, over the next couple weeks. Rainfall is also going to be very heavy from Bakersfield, California (1”+ likely over the next 10 days) to the entire Northwest with widespread 3-5”+ amounts in the lower elevations. As these storms eject out of the West they are a bit tricky to forecast but it does appear the season’s first bigger snow event is possible from the Central U.S. through the Midwest, Ohio Valley and interior Northeast around the 17th – 20th. This will finally break the record long streak without any accumulating snowfall in the Buffalo and Upstate New York areas. South of the snow line the rainfall could be excessive with 2-4” rainfall totals from Houston to Pittsburgh.

The bottom map shows global temperatures for December 17th-23rd period which certainly will feel more like December for the Western half of the country. The cool down in the Northeast will be dramatic from the record warm weather, but still trending a bit above average. So, the chances for a white Christmas are at least increasing for areas from the Midwest to Northeast that haven’t seen a flake yet.

For the latter half of December temperatures will trend a bit more typical for the U.S. but the coolest in 3 years; precipitation will be the greatest in over 25 years with above average national snowfall. To date, the record warm Fall has kept the flu bug almost non-existent with 0% of the country in the Regional or Widespread categories. This time last year 82% of the country was suffering through Regional and Widespread flu conditions so we can thank El Niño and the warmer weather for making us healthier...for now!
Interested in more detailed, local weather information than the default weather app provided by your smartphone? So are we. Here are a few of our current favorites:

1. **Dark Sky.** This paid hyperlocal weather app specializes in “down-to-the-minute rain predictions covering the next hour.” If you’re trying to determine whether the overcast sky outside is either going to leave you drenched or nothing but bluster, this is the app for you. You can even set custom alerts for daytime or nighttime temperatures, chance of precipitation, or wind speed. Another fun feature for weather junkies: “interesting storm” alerts for weather events across the U.S. Downside: This paid app ($3.99) is only available for iPhone.

2. **NOAA High-Def Radar Pro.** Open up this paid app by WeatherSphere and you’ll immediately see the weather radar for the entire U.S. (As I write this, I see the storm cells moving up the East Coast. Looks like a rainy day for me.) You can zoom in on your location, of course, but that’s child’s play for this app. Click on settings, and you’ll discover a world of customization, particularly under “Choose Layers.” Once you’re there, you can add custom layers like lightning strikes, recent wildfires, and the latest data from the U.S. Drought Map. Fun feature: You can bookmark specific locations and add them to your map, which one ag-focused iPhone Appstore reviewer found incredibly helpful. “We have some farmland out of state, where the severe droughts are occurring, and I’ve bookmarked each section of land so I can see exactly which pieces of land get rain (since the city itself getting rain or one piece of land getting rain doesn’t mean another piece a mile away got rain),” this farmland owner wrote. This app is available for purchase on Apple ($1.99) and Android ($2.99) devices.

3. **Mesonet.** Oklahoma farmers and ranchers swear by this free weather app, which focuses on the Sooner State. In addition to the basics (temps, wind, precipitation), Mesonet features numerous map graphics that show soil moisture, soil temperature, current conditions, changes in dewpoint, and more across Oklahoma. Fun feature: the Mesonet ticker, which provides an approachable, friendly overview of weather observations and analysis. This free app is available for download for Apple and Android devices.

4. **WunderMap.** This colorful free app from Weather Underground aggregates the observations, photos and data from “weather enthusiasts” across the country and combines them with trained meteorologists. “After being raised in dry-land cotton country, I can’t stop looking for weather information,” wrote one AppStore reviewer. “I like Underground Weather so much that I bought my own personal weather station in order to contribute.” Like other weather apps, you start with the default map of current conditions (25 degrees in the Red River Valley of Minnesota and North Dakota today—brr). You can focus on specific views using layers like U.S. weather fronts, regional temperatures, precipitation and even webcams. Weather Underground also offers the separate Storm and Weather Underground Forecast apps, which are more targeted offerings based on the rich WunderMap data. Fun feature: the Wunderphotos layer, which features the latest snaps from Weather Underground users and contributors. This free app is available for Apple and Android devices.

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**Private Pesticide Applicator Re-Certification Session & Commercial Fertilizer Application Certification Sessions to be held across Northeast Ohio in 2016**

Does your Private Pesticide Applicator’s License expire on March 31, 2016? If so, OSU Extension in Northeast Ohio has planned four pesticide re-certification sessions for producers. These sessions will be held on January 15 at the Williamsfield Community Center, January 29 at the Geauga County Extension office, February 10 at the Trumbull County Extension office and February 24 at the Perry Community Center.
Each of these sessions will offer 3 credits for pesticide re-certification for CORE and All Categories (1-6). Private Pesticide Applicators are encouraged to choose the session which best fits their schedule the best. Additionally, a special session will be held during the same day and location for private pesticide applicators who would like to complete their Commercial Fertilizer Application Certification. Due to Ohio’s new legislation, any producer who applies commercial fertilizer to 50 or more acres must be certified by no later than September 30, 2017. Attend this session to complete your certification.

The times and locations for each of the sessions are:

**Friday, January 15, 2016 at the Williamsfield Community Center in Williamsfield, Ohio.**
Private Pesticide from 9:00 to 12:00 noon & Fertilizer Applicator Certification from 1:00 to 4:00 p.m.

**Friday, January 29, 2016 at the Geauga County Extension office in Burton, Ohio.**
Private Pesticide from 9:00 to 12:00 noon & Fertilizer Applicator Certification from 1:00 to 4:00 p.m.

**Wednesday, February 10, 2016 at the Trumbull County Extension office in Cortland, Ohio.**
Private Pesticide from 9:00 to 12:00 noon & Fertilizer Applicator Certification from 1:00 to 4:00 p.m.

**Wednesday, February 24, 2016 at the Perry Community Center in Perry, Ohio.**
Private Pesticide from 6:00 to 9:00 p.m.

The registration fee is $35/per person for the private pesticide applicator re-certification. There is no fee for the fertilizer certification session. A hearty farmer’s lunch and refreshments will be provided for attendees for a fee $10/person. Pre-registration is required eight days prior to the session date. An additional late registration fee of $25 per person will be added for any late registration. Make checks payable to OSU Extension and mail to OSU Extension-Geauga County, PO Box 387, Burton, Ohio 44021. More information can be obtained by calling the Geauga County Extension office 440-834-4656.

**Preparation Class for Private Pesticide Applicator License Test to be held on February 4, 2016 in Burton, Ohio**
OSU Extension in Northeast Ohio will be providing a training session to help farmers prepare for the Ohio Department of Agriculture’s Private Pesticide Applicator’s Exam. This class is not required but is a great opportunity for applicators to learn what they will need to study for the test. This class will be held on **Thursday, February 4, 2016** from 1:00 to 4:30 p.m. This session will be held in Burton, Ohio at the Geauga County Extension office. The registration fee for this program is $35/person, which includes all CORE study materials. Call the Geauga County Extension office at 440-834-4656 to register or for more information.

**Private & Commercial Pesticide Applicator Testing to be held by Ohio Department of Agriculture During Winter of 2016**
Are you looking to take obtain your private or commercial pesticide license or wish to add an additional category to your existing license? The Ohio Department of Agriculture will be holding testing sessions during the winter/spring of 2016 in Northeast Ohio. These tests are administered by the Ohio Department of Agriculture and are held at Extension offices in northeast Ohio as a courtesy to producers. Pre-registration is required for each location and can be made by calling the ODA at 614-728-6987 or 1-800-282-1955 (press 3 then 1). Study materials online can be found at: [http://pested.osu.edu/privatestudy.html](http://pested.osu.edu/privatestudy.html)

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<td>Location: OSU Extension Office Basement Meeting Room 39 Wall Street</td>
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Geauga County
Location: Geauga County Extension Office
Patterson Center Basement
P.O. Box 387
14269 Claridon-Troy Road
Burton, OH 44021-0387
For Directions Call 440-834-4656

Dates
February 17 (beginning at 11:00 a.m.)
March 16 (beginning at 11:00 a.m.)
April 20 (beginning at 11:00 a.m.)
May 18 (beginning at 11:00 a.m.)
June 15 (beginning at 11:00 a.m.)

Trumbull County
Location: Trumbull County Extension Office
520 West Main Street, Suite #1
Cortland, OH 44410
For Directions Call 330-638-6783

Date
April 13 (beginning at 10:00 a.m.)

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

Readers can subscribe electronically to this newsletter by sending an e-mail message to: marrison.2@osu.edu. If you would like to opt-out of receiving this newsletter, please e-mail marrison.2@osu.edu with the words: UNSUBSCRIBE
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Northeast Ohio Phosphorus Task Force – 2016 Pilot Study

Return Completed Sheet to: David Marrison @ OSU Extension Ashtabula County, 39 Wall Street, Jefferson, OH 44047
440-576-9008 (phone), 440-576-5821 (fax) or marrison.2@osu.edu

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Northeast Ohio Phosphorus Task Force – 2016 Pilot Study

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Northeast Ohio Phosphorus Task Force – 2016 Pilot Study

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Northeast Ohio Phosphorus Task Force’s Winter Field Condition Study

**Background:**
A newly formed committee is meeting in Ashtabula County titled the Northeast Ohio Phosphorus Task Force. The committee is trying to be proactive in response to Senate Bill 1 which has created new rules for manure and fertilizer application in Northwest Ohio. A concern of our committee is Senate Bill legislation could be made state wide which would severely hamper animal agriculture in Northeast Ohio. Our committee is looking for PROACTIVE research and education measures which our farm community can adopt to help improve water quality in both the Lake Erie and Ohio River watersheds.

**Winter Field Condition Study:**
Our first project is to track two items during the upcoming winter. We are asking farmers to monitor the weather & soil conditions which are present each day from January through the end of March. We are asking for cooperators to track two questions each day; these being: #1: Is your ground snow covered or frozen and #2: Is the top two inches of the soil saturated. According for the new legislation from Senate Bill 1, no manure or fertilizer can be applied (without incorporation) if these conditions exist in Northwest Ohio. We are completing this research to ascertain the percentage of days in our watersheds where it would be acceptable for manure or fertilizer application. Our goal is to have at least one cooperator from each township in Ashtabula, Geauga, Lake or Trumbull County to track this data for us. In the spring time, we will have another collection period for spring time weather. We intend our data collection to be year-long event.

**Definitions:**
Snow covered – when crop ground has any measureable snow accumulation, it is considered snow covered.

Frozen- when the crop ground is frozen in that no water can penetrate move through/down the soil profile.

Soil Saturation- the soil is saturated when it has reached its maximum water content; if any more is added, it will either drain downward or turn the soil into mud. In practical terms, the soil is not conducive to be worked with tillage equipment and planting could not occur.

**Reporting:**
Each cooperator is asked to track the conditions daily. The measurement should occur at about the same time each day.

Please return the tracking sheet to David Marrison at OSU Extension at the end of each month. The results will be reported in aggregate.

Farmers interested in tracking should contact David Marrison at 440-576-9008 or marrison.2@osu.edu so that your name is added to our cooperator list.