Northeast Ohio Agri-Culture Newsletter

Your Weekly Agriculture Update for Ashtabula and Trumbull Counties

October 23, 2018

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Hello, Northeast Ohio Counties!

Harvest continues to roll on in NE Ohio! Traveling throughout the region this past week, I would say we are close to 65% done with soybeans, and about 20% on corn. I have heard good reports from most local farmers with slightly better than average beans, and corn yields all over the place depending on planting date.

Grain is not all that is being harvested this time of year – you can still find many grapes and apples to pick! Some late season apple varieties are just now beginning to come into season. Stockpile now for holiday pies!

Lee Beers
Extension Educator
Ag & Natural Resources
**Brief Break from Wet Weather Continues before More Wet Weather Returns**

By Jim Noel, NOAA


We have had a few weeks of colder and drier overall weather after the very warm start to October. We expect dry weather through this Thursday except for a few lake effect showers in northeast Ohio about the middle of the week.

Then the pattern will change. Temperatures will likely remain chilly for the rest of the month but we will gradually wet up again. This week will be the best conditions for harvest or any planting of wheat still needed. We expect some showers to return from Friday into early next week with a more potent system later next week. There could be a few snowflakes mixed in this weekend but with marginal temperatures and the warm Lake Erie, it should be mainly rain showers.

Also, northeast Ohio remains somewhat protected from a hard freeze right now with a warm Lake Erie and preferred northwest winds.

The outlook for November calls for near normal temperatures and above normal precipitation.

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Looking further ahead, a minor El Nino is forecast for this winter but confidence in the details is rather low. This leads to low to moderate confidence in the outlooks. Right now winter is shaping up to be near normal temperatures and slightly below normal.
precipitation. Looking into next spring for planting season it looks like below normal temperatures and above normal rainfall.

For the next two weeks, rainfall will increase to to 1-2 inches. Normal is 1-1.25 inches for two weeks on average, see attached NOAA/NWS/Ohio River Center Rainfall map. You can see this map updated all the time by visiting the OHRFC briefing pages at https://www.weather.gov/ohrfc/Briefings. The briefing pages include our flood, drought and seasonal briefings.

Properly Winterizing Sprayers Can Help Mitigate Costly Problems Next Spring
By Erdal Ozkan

This is a busy time of year for many farmers, but taking time to winterize your sprayer now can payoff in avoiding problems next spring. Without proper winterizing before the temperature falls below freezing, you could end up with a pump that is cracked and/or not working at its full capacity. Here are some important things you need to do with your sprayer this time of the year.

Rinsing
Make sure to rinse the whole sprayer thoroughly before storing. Rinsing the sprayer thoroughly after each use reduces likelihood of cross-contamination of products applied next spring. Insufficient rinsing may also result in clogged nozzles. Once the nozzles are clogged, it is extremely difficult to bring them back to their normal operating conditions. Leaving chemical residues in nozzles will usually lead to changes in their flow rates, as well as in their spray patterns resulting in uneven distribution of chemicals on the target.

Depending on the tank, proper rinsing of the interior of the tank can be challenging. Rinsing is easy if the tank is relatively new and equipped with special rinsing nozzles and mechanisms inside the tank. If this is not the case, manual rinsing of the tank interior is more difficult, and poses some safety problems such as inhaling fumes of
leftover chemicals during the rinsing process. To avoid these problems, either replace the tank with one that has the interior rinse nozzles, or install an interior tank rinse system in your existing tank.

For effective rinsing of all the sprayer components, circulate clean water through the whole sprayer for several minutes with the nozzles off, then flush the rinsate through the nozzles. Rinsing should be done in the field, or on a concrete chemical mixing/loading pad with a sump to recover rinse water. Dispose of the rinsate according to on the directions on the labels of the pesticides in the tank. Always check the label for specific instructions.

Most labels recommend following procedure: If rinsing is done on a concrete rinse pad with a sump, put the rinsate collected in the sump back in the tank, dilute it with water and spray it in the field where there is no potential for the rinsate to reach ditches and other water bodies nearby. If the rinsing is done in the field, make sure you are not flushing out the rinsate in the system in one area. It is best to further dilute the rinse water in the tank and, spray it on the field on areas where there is no potential for the rinsate to reach ditches and other water bodies nearby.

Cleaning
Rinsing the system with water as explained above may not be sufficient to get rid of chemicals from the sprayer. This may lead to cross-contamination problems. Residues of some pesticides left in the sprayer may cause serious problems when a spray mixture containing these residual materials is applied on a crop that is highly sensitive to that pesticide. To avoid such problems, it is best to clean and rinse the entire spraying system with cleaning solution. A mixture of 1 to 100 of household ammonia to water should be adequate for cleaning the tank, but you may first need to clean the tank with a mixture containing detergent if tank was not cleaned right after the last spraying job was done.

Some chemicals require specific rinsing solution. The University of Missouri has a publication listing commonly used pesticides and the specific rinsing solutions required of each, available online here: [http://extension.missouri.edu/p/G4852](http://extension.missouri.edu/p/G4852). Always check the product label to find out the most recent recommendations on cleaning agents.

Cleaning the outside of the sprayer components deserves equal attention. Remove compacted deposits with a bristle brush. Then flush the exterior parts of the equipment with water. A high pressure washer can be used, if available. Wash the exterior of the equipment either in the field away from ditches and water sources nearby, or a specially constructed concrete rinse pad with a sump. Again, the rinsate should be disposed of according to the label recommendations. Most labels recommend the following practice: put the rinsate collected in the sump back in the tank, dilute it with water and spray it in the
field where there is no potential for the rinsate to reach ditches and other water bodies nearby.

**Winterizing**

To prevent freezing, check one more time to make sure there is no liquid left inside any of the sprayer parts. The pump, the heart of a sprayer, requires special care. After draining the water, add a small amount of oil, and rotate the pump four or five revolutions by hand to completely coat interior surfaces. Make sure that this oil is not going to damage rubber rollers in a roller pump or rubber parts in a diaphragm pump. Check the operator's manual. If oil is not recommended, pouring one tablespoon of radiator rust inhibitor in the inlet and outlet part of the pump also keeps the pump from corroding. Another alternative is to put automotive antifreeze with rust inhibitor in the pump and other sprayer parts. This also protects against corrosion and prevents freezing in case all the water is not drained. To prevent corrosion, remove nozzle tips and strainers, dry them, and store them in a dry place. Putting them in a can of light oil such as diesel fuel or kerosene is another option.

**Storage**

Find ways to protect your sprayer against the harmful effects of snow, rain, sun, and strong winds. Moisture in the air, whether from snow, rain, or soil, rusts metal parts of unprotected equipment of any kind. While the sun usually helps reduce moisture in the air, it also
causes damage. Ultraviolet light softens and weakens rubber materials such as hoses and tires, and degrades some tank materials. The best protection from the environment is to store sprayers in a dry building. If storing in a building is not possible, try covering the sprayer with some material that will protect it from sun, rain and snow. When storing trailer-type sprayers, put blocks under the frame or axle and reduce tire pressure during storage.

Finally, check the condition of all sprayer parts one more time before leaving the sprayer behind. Identify the parts that may need to be worked on, or replaced. Check the tank and hoses to make sure there are no signs of cracks. Check the painted parts of the sprayer for scratched spots. Touch up these areas with paint to eliminate corrosion. Don’t forget to cover openings so that birds don’t make a nest somewhere in your sprayer, and insects, dirt, and other foreign material cannot get into the system.

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New App Helps Farmers Know When to Spray or Spread

COLUMBUS, Ohio — A new app from The Ohio State University will help farmers save both money and the environment.

The Field Application Resource Monitor (FARM) uses advanced weather forecasting to advise farmers on when to apply fertilizers and pesticides so that they aren’t washed away by rain. According to Aaron Wilson, climate specialist for Ohio State’s College of Food, Agricultural, and Environmental Sciences (CFAES) and project manager of FARM, it is much more than just a fancy weather app.

“The app allows you to specify the location of your field in high resolution,” said Wilson. This means that the app can actually give specific forecasts for an area as small as 1.5 miles wide—allowing for incredibly accurate and detailed forecasts.

“It then provides guidance on the best time to apply fertilizers and manures based on the precipitation forecast” Wilson continued.

Beyond the high resolution forecasts, FARM has another unique feature: historic forecasts. According to Elizabeth Hawkins, an OSU Extension agronomist based in Clinton County, FARM’s database of forecasts for specific locations is “its most unique feature.” “This feature gives farmers the ability to look back at the forecasts that were available when they applied the fertilizer,” said Hawkins. “That information is usually quite hard to find.”
In the event that a forecast is wrong, historical forecasts may provide documentation that farmers were operating under proper procedures and working in accordance with forecasts that were accurate at the time.

For example, the Western Lake Erie Basin Partnership sets laws that prohibit farmers from applying fertilizers or pesticides if the forecast calls for over a 50 percent chance of rain. If the forecast calls for a 20 percent chance of rain and a farmer decides to apply fertilizer only for the rain to fall, the farmer can cite the app conditions for the day.

FARM users can also set up accounts and receive detailed emails notifying them of real-time precipitation alerts and forecasts. As the app expands, Wilson anticipates adding phone alerts that will further streamline the process of keeping farmers in the know.

“This equips farmers with the tools to help them make decisions,” Wilson said.

The app can be viewed on most computers and mobile devices. “It’s very accessible. It’s very easy for anyone to use, and it’s very intuitive,” said Hawkins.

The app provides both economic and enviromental advantages.

When warned about precipitation that exceeds good management practices, farmers can avoid using fertilizer and pesticides that are doomed to wash away, saving both time and money. Washed-away fertilizer also makes it difficult for farmers to anticipate how much more fertilizer needs to be added.

“If the fertilizer is washed away, that is one input they have lost,” Hawkins said. If farmers don’t know how much fertilizer and pesticide is actually acting upon their crops, then it’s difficult to predict growth.

The app offers a significant environmental benefit as well by helping prevent fertilizers and pesticides from washing into Ohio waterways.

“If you have too much phosphorus washing into rivers and eventually Lake Erie, you have a greater potential for harmful algal blooms,” Wilson said. “This is detrimental to the waterways farmers depend on.”

It’s no secret that farmers and the environment have a mutual codependence on each other. FARM gives farmers a distinct opportunity to look after the environment in a way that also saves them time and money.

For more information about FARM, visit farm.bpcrc.osu.edu.
The archenemy of ag tires is stubble. Brad Harris, manager of the field engineering group at Firestone, says corn and cotton stubble inflict the worst wear on agricultural tires.

Downtime because of a cut tire is costly, too. Harris, who farms in Ohio, says Firestone has calculated that downtime during the season’s optimal planting window (assuming an idle tractor hooked to a 16-row planter) may cost $570 per hour because of yield loss.

Firestone offered DTN/The Progressive Farmer a tour of its Firestone Farm Tire Test Center, at Columbiana, Ohio, about an hour northwest of Pittsburg. The 300-acre farm is where Harvey Firestone grew up and is the location today where engineers validate tire designs and test materials used to manufacture agricultural tires.

Newly designed tires go to Columbiana to die—on purpose. New designs are cut, sliced, blown up and generally abused in any number of ways. Firestone’s test center can replicate five years of heavy use in three to four months.

"Before a tire ends up on your farm, it’s got to go through the Firestone farm first," Harris says. "We don’t want customers to go down in the middle of the field," especially when tire replacement costs $2,000 to $5,000.

The Firestone test center sports more than a few ways to test tires. A pair of circular tracks paved with various surfaces tests tires mounted onto an overloaded and driverless tractor—the
tractor tethered to the center of the circle. Track tests may run 1,600 hours to simulate extreme wear and tear.

The drum test applies loads up to 50,000 pounds on tires while exposing them to clouds of rubber-aging ozone to simulate damage from sunlight. Plunger tests evaluate material strength and resistance to puncture.

LASER VIEWER. One building houses a large, heavy steel cylinder in which tires are examined in a vacuum by lasers measuring minute variances in shape and wear not visible to the human eye.

Firestone’s one-of-a-kind “Mean Machine” is a 30-ton beast that can exert 34,000 pounds of drawbar pull, enough to stop a tractor in its tracks. Loaded with an array of diagnostics equipment, the Mean Machine mimics traction, drawbar pull, tire slip, rim slip, strength and durability.

Stubble is a production-crippling hazard for tires. Today’s corn, cotton and soybean plants are engineered to be strong and to stand up against wind, insect and disease damage.

Tires face two hazards from stubble. First is stubble piercing, when stubble punctures the tire, causing air loss. Second is stubble erosion. That occurs, as the name implies, over time. The stubble gradually wears through the tire treads to expose the radial cords.

There are ways to fend off stubble damage, Harris explains. Driving at an angle to the row, not directly down the row, is one. Another is tread design. Firestone manufactures tires with a “stubble deflector” tread design—the tread pattern pushes the stubble aside similar to a cowcatcher on a train.

DON’T GUESS. A second tire killer is improper inflation. Inflation pressure must match load. “Guessing is wrong,” Harris says. A $10 to $15 air pressure gauge can save many tires. Low pressure, without consideration for load, will rapidly damage the sidewall of a tire.

Air pressure changes by environment—for example, a slippery and muddy field versus a dry road surface with the tires turning at speeds up to 40 mph. High-clearance sprayers run on 17-inch tires inflated to 64 psi to carry 60,000 pounds. Larger planters will transfer 10,000 pounds to the rear of the tractor going from field to road.

“We need to know two things: tire size and the axle load,” Harris says. “Then, we can use inflation tables or the Firestone Tire Pressure Calculator [firestoneag.com]. Type in those numbers, and you’ll get the correct minimum inflation pressure to carry load.”
Sometimes, the operator will need several inflation calculations for the same piece of equipment because of changes in use and configuration, Harris says. For example, carrying a three-point tillage tool. Running a tractor on duals all year, or not. These change air pressure requirements. “In all those cases, we need to know how many tires and what those axle loads are,” Harris says.

Firestone offers seven ideas for extending the life of agricultural tires.
1. Check tire pressure with a calibrated gauge. Set the inflation pressure using a pressure calculator such as Firestone’s Tire Pressure Calculator. Inscribe the correct inflation pressure in permanent marker near the inflation valve. Check tire pressures daily during the planting, growing and harvest seasons.
2. Check the sidewalls for cracks, cuts and other damage. Unlike a human cut, a tire doesn’t heal itself. If you see cords, it is time for a new tire.
3. Consider replacing a tire if there is less than 20% of the tread left. Worn tires slip and lose efficiency.
4. Complete a thorough tire check in the off-season. A 15- to 30-minute check in the winter can prevent costly downtime during the planting season.
5. Check ground contact area to make sure there is no gap between the tire lugs and the ground.
6. Check valve stems for cracks, corrosion and debris. Make sure valve caps are clean and intact.
7. Check all nuts and bolts to ensure they are torqued correctly.
Harris added an eighth tip. During work seasons, check the pressure of your tires daily.

**Hope For Ohio to be Held on November 3**

Hope for Ohio is a FREE event for teens, parents, teachers and 4-H and FFA advisers. This event will help participants to see warning signs, explain peer-to-peer drug prevention tactics and provide tools to address our community’s opioid epidemic.

The East Region Event will be held on November 3, 2018 at FFA Camp Muskingum (3266 Dyewood Rd. SW, Carrollton, OH 44615). Registration begins at 9:30 a.m. and the program will run from 10 a.m. to 3 p.m.

Featured speakers are: Wayne Campbell, founder of Tyler’s Light, whose son Tyler died of a heroin overdose after becoming addicted to prescription painkillers. Dave Kohout, from Talk is Cheap, focusing on building character and instilling hope in the lives of young people and a panel discussion with Erik Frederickson.
Cost of attendance is FREE. All pre-registered participants receive a t-shirt.

To register email mmulligan@ofbf.org.

If you have any questions or would like to discuss transportation possibilities please call the county Farm Bureau office at 440.426.2195.

Livestock Mortality Composting Program Scheduled for December 14 in Canfield, OH

While it’s likely not the most popular dinner table topic, a plan for dealing with mortality is something that needs addressed if you raise livestock. Composting is a viable option for various types of farms, and actually allows producers to recycle on-farm nutrients. While livestock mortality composting is similar in goal to backyard composting, it follows a different methodology and requires a more specific approach. These differences, along with facility design, area selection, operation and management will be covered in class. In Ohio, certification is required to compost livestock mortalities legally.

OSU Extension Mahoning County will be hosting Rory Lewandowski on December 14, 208 from 12P.M. to 2P.M. at the Extension office in Canfield, OH to lead the discussion. Upon completion of the program, all participants will be certified in livestock mortality composting. Cost for this program is $25/person, and registration includes lunch, LMC Book, handouts, and other materials. To register see flyer at the end of the newsletter. For more information call 330-533-5538.

Become certified! Certified Crop Adviser (CCA) exam registration now open

The Certified Crop Adviser (CCA) and Certified Professional Agronomist (CPAg) programs of the American Society of Agronomy are the benchmarks of professionalism. When you become certified, you join more than 13,000 of your peers in the largest, most recognized agriculturally-oriented certification program in North America. This program’s professional standards are widely respected by industry, academia, and government and are referenced in statutes. Get the recognition, opportunities, and respect you deserve. Exam registration is now open for the February 1, 2019 exam.

Northeast Ohio Agriculture  
OHIO STATE UNIVERSITY EXTENSION  
Ashtabula and Trumbull Counties
2018 Ashtabula County Beef Banquet Tickets
OSU Extension and the Ashtabula County Cattlemen’s Association will be holding the 29th Ashtabula County Beef Banquet on Saturday, October 27 at the Lenox Community Center beginning at 7:00 p.m. Banquet activities will include a prime rib dinner; business meeting; election of two members to the Ashtabula County Cattlemen’s board of directors; entertainment; door prizes; and fine fellowship.

Tickets for the banquet can be purchased from the Directors of the Cattlemen’s Association. Directors are: Bart Kanicki, Pierpont Township; David Nye, Hartsgrove Township; Zach Ward, Austinburg Township; Dr. Bryan Elliott, Cherry Valley Township and Garret Love, Linesville, PA. Tickets are $25 per person. Call the Ashtabula County Extension office at 440-576-9008 for more information. Pre-reservations should be made by October 19, 2018. A program flyer can be found at: http://go.osu.edu/ne-events

Upcoming Events

Ashtabula County Beef Banquet
October 27, 2018

Trumbull County Farmer Lunch
December 4, 2018 – Farm Tax Update
January 8, 2019 – Beef Quality Assurance
March 5, 2019 – Climate Impacts for Ohio Agriculture
April 4, 2019 – Tillage and Soil Health

Ashtabula County Dairy Banquet
March 26, 2019

Pesticide Applicator Training Dates
Lake County “Early Bird” – November 8, 2018
Trumbull County – January 16, 2019
Geauga County – February 1, 2019
Ashtabula County – February 28, 2019

Northeast Ohio Agriculture

OHIO STATE UNIVERSITY EXTENSION
Ashtabula and Trumbull Counties
Hope for Ohio is for teens, parents, teachers and 4-H and FFA advisers. This event will help participants to see warning signs, explain peer-to-peer drug prevention tactics and provide tools to address our community’s opioid epidemic.

**Nov. 3**

FFA Camp Muskingum

3266 Dyewood Rd. SW | Carrollton, OH 44615

Registration: 9:30 a.m. | Program 10 a.m. to 3 p.m.

**FEATURING**

Wayne Campbell, founder of Tyler’s Light, whose son Tyler died of a heroin overdose after becoming addicted to prescription painkillers.

Dave Kohout, from Talk is Cheap, focusing on building character and instilling hope in the lives of young people.

Panel discussion with Erik Frederickson

**By the numbers**

The toll of the epidemic has contributed to the first decline in U.S. life expectancy since 1993. The US drug overdose mortality rate is 17.7 deaths per 100k ages 15-64; Ohio’s is 39.5.

**IN OUR COUNTIES**

Jefferson County 44.2 | Harrison County 22.5 | Carroll County 19.1 | Tuscarawas County 17.7

Carroll County alone saw a 76 percent increase in fatal drug and alcohol overdoses in the first six months of 2018 over the first half of 2017 according to the Carroll County Sheriff’s Department.

To register, email mmulligan@ofbf.org or scan the QR code.

All preregistered participants receive a T-shirt.

Scan to register!