

**COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES****May 19 Issue (Edition #95)**

Fertilizer Certification Session Tonight  
The Ag Law Harvest  
Make Your Best Hay  
Perennial Weeds Can Indicate Soil  
Health Problems in Pastures  
One More Reason for Higher Prices  
Another Toxic Poisonous Weed –  
Cressleaf Groundsel  
CFAES Ag Weather System 2021 Near-  
Surface Air and Soil  
Temperatures/Moisture  
Get Your Victory Garden Seeds

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Hello Coshocton County! This week has been perfect for our Coshocton County farmers. A lot of corn and soybean acres continue to be planted and I see a lot of nice hay has been dropped to be baled later this week. A great week of weather at the perfect time.

Even though you might not want to leave the field tonight—we are offering a fertilizer certification session starting at 7:00 p.m. tonight in Sugarcreek for anyone who needs to obtain their fertilizer certification.

The level of cressleaf groundsel continues to climb around the county. It is easy to notice it right now. If it is in your hayfields it will be well worth the effort to hand pull or spot spray it. If you see it in a neighboring soybean or corn field which has not been planted—be mindful to scout your hayfields and pastures as the seeds disperse pretty easy. Best control options are in the fall. Scout now and make a plan for the fall. More information can be found in today's newsletter.

Sincerely,

*David L. Marrison*

Coshocton County OSU Extension ANR Educator



**THE OHIO STATE UNIVERSITY**

COLLEGE OF FOOD, AGRICULTURAL,  
AND ENVIRONMENTAL SCIENCES

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[go.osu.edu/cfaesdiversity](http://go.osu.edu/cfaesdiversity).

## **Fertilizer Certification Session Tonight**

The OSU Extension offices in Tuscarawas and Coshocton Counties will be holding a Fertilizer Certification for NEW Applicators workshop on May 19 beginning at 7:00 p.m. at the Sugarcreek Stockyards located at 102 Buckeye Street in Sugarcreek, Ohio.

If you apply fertilizer to more than 50 acres of crops grown primarily for sale, then the Ohio Department of Agriculture requires you to obtain a Fertilizer Certificate. This class will review laws, water quality, soil sampling & analysis, and nitrogen and phosphorus management. Attendance will allow you to receive your fertilizer certification.

There is no cost to attend however pre-registration required. Please call 330-339-2337 to register. All current health guidelines will be followed per the Ohio State University. See the attached flyer for more details



## **The Ag Law Harvest**

By: Jeffrey K. Lewis, OSU Ag Law Program

Source: <https://farmoffice.osu.edu/blog/fri-05142021-939am/ag-law-harvest>

In this week's edition we explore landmark court rulings, pending lawsuits, and newly enacted laws that affect agriculture and the environment from around the country.

**USDA announces \$92.2 million in grants under the Local Agriculture Market Program.** The USDA [announced](#) last week that it will be funding Local Agriculture Market Program (LAMP) grants through the Farmers Market program as part of the USDA's Pandemic Assistance for Producers Initiative. Through these grants, the USDA hopes to support the development and growth of direct producer-to-consumer marketing and boost local and regional food markets. \$76.9 million will be focused on projects that support direct-to-consumer markets like farmers markets and community supported agriculture. \$15.3 million will fund public-private partnerships that will build and strengthen local and regional food markets. All applications must be submitted electronically through [www.grants.gov](http://www.grants.gov). More information can be found on the following webpages: [Farmers Market Promotion Program](#), [Local Food Promotion Program](#), or [Regional Food System Partnerships](#).

**Mexico Supreme Court Rules in favor of U.S. Potato Growers.** On April 28, 2021, Mexico's highest court [overturned](#) a lower court's decision preventing the Mexican government from implementing regulations to allow for the importation of U.S. potatoes. The ruling comes after nearly a decade of legal battles between Mexican potato growers and their government. Beginning in 2003, Mexico restricted U.S. potato imports but then lifted the restrictions in 2014, allowing U.S. potatoes full access to the Mexican market. Shortly after lifting the restrictions, the National Confederation of Potato Growers of Mexico (CONPAPA) sued its government claiming that Mexican regulators have no authority to determine if agricultural imports can enter the country. Since the filing of the lawsuit, the U.S. has been bound by the 2003 restrictions on U.S. potatoes entering the Mexican market. Mexico's Supreme Court ultimately rejected CONPAPA's argument and ruled that the Mexican government does have the authority to issue regulations about the importation of agricultural and food products, including U.S. potatoes. Mexico represents the third largest export market for U.S. potatoes, making this a landmark decision for U.S. potato farmers.

**Indiana enacts new wetlands law.** Indiana governor, Eric Holcomb, has approved a [new controversial wetlands law](#). The new law amends the requirements for permits and restoration costs for "wetland activity" in



a state regulated wetland (federally protected wetlands are excluded). Under Senate Bill 389, permits are no longer required to conduct activity in Class I wetlands, some Class II wetlands, and certain farmland. In Indiana, Class I wetlands are either: (a) at least 50% disturbed or affected by human activity; or (b) support only minimal wildlife or hydrological function. Class III wetlands are minimally disturbed by human activity and can support more than minimal wildlife or hydrologic function. Class II wetlands fall somewhere in the middle. Supporters of the law argue that the changes will reduce the cost to landowners and farmers for conducting activity in wetlands that only provide nominal environmental benefits. Opponents of the law argue otherwise. Some environmental groups believe that wetlands, whether they can support more than minimal wildlife or not, provide profound economic benefit by reducing the cost to citizens for water storage and water purification. Additionally, environmental groups argue that the subsequent loss of wetlands from this law will greatly increase flooding and erosion and reduce Indiana's diverse wildlife. Some even suggest that this law is nothing more than a subsidy for the building and housing development industry. Senate Bill 389 became law on April 29, 2021, and has a retroactive effective date of January 1, 2021.

**USDA being sued for promotion of meat and dairy industry.** Three physicians have [filed a lawsuit](#) against the USDA in a federal court in California. The doctors, part of the Physicians Committee for Responsible Medicine (PCRM), [argue](#) that some of the USDA's new [2020-2025 Dietary Guidelines for Americans](#), issued last December, contradict current scientific and medical knowledge. PCRM believes that the USDA is acting out of its interests in the dairy and meat industry rather than the health interests of U.S. residents. For example, PCRM argues that the USDA's statement suggesting that more individuals would benefit by increasing their intake of dairy contradicts scientific evidence that increased dairy intake can increase the chances of prostate cancer and that 1 in 4 Americans is lactose intolerant. PCRM seeks a court order requiring the USDA to delete dairy promotions, avoid equating protein with meat, and eliminate deceptive language hiding the ill effects of consuming meat and dairy products. In an email to the [Washington Post](#), a spokesperson for the USDA, claims that the dietary guidelines are just that – guidelines. The USDA argues that the dietary guidelines are meant to help provide guidance based on the best available science and research and provide many alternatives for people based on an individual's preferences and needs.

**Sesame added to the list of major allergens.** On April 23, 2021, President Biden signed into law the [Food Allergy Safety, Treatment, Education and Research \(FASTER\) Act](#). The law requires that sesame be added to the list of major allergens and be disclosed on food labels. Up until this law was enacted, sesame was allowed to be labeled as a "natural flavor" or a "natural spice." With the new law, sesame, in any form, must be labeled as an allergen on packaged foods. Food manufacturers have until 2023 to add sesame allergen statements to their labels. This is the first time since 2006 that a new allergen has been added to the Food Allergen and Consumer Protection Act (FALCPA). Sesame joins peanuts, tree nuts, fish, shellfish, soy, dairy, eggs, and wheat as the FDA's list of allergens that require specific labeling.

**Florida passes updated Right to Farm Law.** Florida Governor, Ron DeSantis, signed into law Florida's new and improved [Right to Farm Act](#). The new law adds agritourism to the definition of "farm operations" so that agritourism is also protected under Florida's Right to Farm Law. Additionally, Florida lawmakers have expanded the protection given to farmers under the new law by defining the term nuisance. Under Florida's Right to Farm Law, nuisance is defined as "any interference with the reasonable use and enjoyment of land, including, but not limited to, noise, smoke, odors, dust, fumes, particle emissions, or vibrations." Florida's definition of nuisance also includes all claims brought in negligence, trespass, personal injury, strict liability, or other tort, so long as the claim could meet the definition of nuisance. This protects farmers from individuals disguising their nuisance claim as a trespass claim. The importance of defining nuisance to include claims such as trespass can best be demonstrated by an ongoing [federal lawsuit](#) in North Carolina. In that case, Murphy-Brown, LLC and Smithfield Foods, Inc. are being sued for having ownership in a hog farm that caused odors, dust, feces, urine, and flies to "trespass" onto neighboring properties. [North Carolina's Right to Farm Law](#) only protects farmers from nuisance claims, not trespass claims. Although Murphy-Brown and Smithfield argue that the neighbors are disguising their nuisance claim as a trespass claim, the federal judge is allowing the case to move forward. The judge found that farmers are protected from nuisance claims, not trespass claims and even if the trespass could also be considered a nuisance, the neighbors to the hog farm are entitled to seek compensation for the alleged trespass.

## ***Make Your Best Hay***

By: Mike Rankin, Hay and Forage Grower managing editor

(Previously published in [Hay & Forage Grower: May 11, 2021](#))

Source: <https://u.osu.edu/sheep/2021/05/11/make-your-best-hay/>

There's never been a haymaker who couldn't improve on their craft. The opportunities to enhance forage yield, quality, and persistence are nearly endless. Whether you've already started cutting or are still waiting, Amanda Grev offers this bevy of suggestions in the University of Maryland's Agronomy News to improve this year's hay quality ledger.

### Harvest at the correct maturity stage

"The single most important factor affecting forage quality is the stage of maturity at the time of harvest," notes the extension pasture and forage specialist. "This is especially true in the spring when forages are growing and maturing rapidly."

Target the onset of cutting at the boot stage for grasses or late bud to early bloom for legumes. For legume-grass mixtures, base your cut-time decision on the maturity of the grass, which usually mature earlier than legumes in the spring.

### Cut early, wide, and high

In humid regions, maximize curing time by mowing in mid- to late-morning after the dew has dried off. This will allow for more drying time before sunset. Grev notes that maximizing exposure to sunlight and wind will result in faster dry down and reduced plant respiration during hours of darkness.

"When mowing, set the mower to make as wide of a swath as possible, ideally at least 70% of the cut width," Grev writes. "Maximizing the swath width shortens the wilting time by exposing a larger portion of the forage to direct sunlight, which leads to faster drying and preserves more digestible dry matter."

She also recommends paying attention to cutting height and avoid cutting hayfields too close. For alfalfa, leave 2 to 3 inches of residual. Cool-season grasses generally require no less than a 4-inch cutting height.

"Not only will this result in improved stand persistence, earlier regrowth, and sooner subsequent cuttings, but the stubble will help to elevate the swath and promote airflow and rapid drying," Grev explains.

### Monitor moisture

Ted or rake forage above 40% moisture; this helps to reduce leaf loss, especially for legumes. Make sure rakes are properly adjusted to avoid picking up soil. Using rakes that handle the hay gently or slowing the speed of the rake are also ways to further minimize leaf loss and maintain forage quality.

Bale hay at 15% to 18% moisture to inhibit mold growth and reduce heating. Hay that is too wet — above 20% moisture — is prone to excessive heating and is subject to having high concentrations of heat-damaged, indigestible protein. Hay that is excessively dry will have greater leaf loss, which reduces forage quality.

### Time cuttings

"Appropriate timing includes not only harvesting at the ideal forage maturity but also timing your cutting schedule for optimal growth based on seasonal weather conditions," Grev notes. "For example, completing the first cutting in a timely manner allows time for adequate regrowth and a good second cutting prior to the onset of the hot summer months. A nitrogen application (for grasses) following first harvest can help with this by stimulating forage regrowth."

Grev recommends allowing cool-season hayfields to go into the summer with at least 5 to 6 inches of regrowth. Doing so will provide shade to the plant crown and moderate the soil surface temperature, reducing soil



moisture losses. Fall hay cuttings need to be scheduled to allow stands enough time to regrow and replenish root carbohydrate reserves prior to winter dormancy.

#### Feed the crop

Quality forage can't be achieved without a sound soil fertility program. Grev suggests that a sound forage system entails providing adequate nutrients to the crop while also monitoring soil pH, soil compaction, nutrient removal rates, and overall nutrient status.

"High-yielding cuttings of hay remove substantial amounts of nutrients from fields, making a balanced fertility program essential for optimizing hay production," Grev says. "Take the time to soil test and apply nutrients and lime according to soil test results. Avoid using "complete" fertilizers like 10-10-10, which commonly overapply phosphorus and underapply potassium."

#### Keep it covered

Finally, Grev cautions to preserve forage yield and quality during storage. Store hay off the ground and preferably under cover. Weathering losses are largely the result of hay bales wicking moisture from the ground.

### ***Perennial Weeds Can Indicate Soil Health Problems in Pastures***

By: Dean Kreager, OSU Extension Educator ANR, Licking County

(Previously published in [Farm and Dairy: May 6, 2021](#))

Source: <https://u.osu.edu/sheep/2021/05/11/perennial-weeds-can-indicate-soil-health-problems-in-pastures/>

If plants could talk, we could learn a lot, and our jobs as stewards of the land would be much easier. When we go to the doctor because we are sick, we do not sit quietly and expect the doctor to know how we feel and then tell us how to get better. We need to provide information that will help with the diagnosis.

But since plants cannot talk, our job is difficult when we try to locate the source of a problem, such as low productivity or an infestation of weeds. Recently, one of my colleagues, Ed Brown, suggested a method of taking stock of what is growing in your pasture. Knowing what plants are growing in your pastures is an important first step in listening to what the pasture is telling you. Varieties of plants or changes in these populations from year to year can provide important clues.

#### Indicators

Indicator plants are plants that can provide suggestions of issues in the soil. Often, perennial weeds can be our best indicator plants. These plants are living in a condition that has allowed them to survive for multiple years. Annual plants only need conditions that allow them to make it through one growing season, but their ability to come back for multiple years can also suggest problems.

Identifying and inventorying these plants can be an additional tool to use when managing your pasture. While I would not suggest that these plants take the place of soil testing, they could hint that a soil test is needed to interpret what the indicator plants are telling us. By testing soil and continuously monitoring the stock of plants present, we can document actual improvements over time.

Much of the information on indicator plants dates back many years, but there continue to be studies from universities that support many of the old findings.

#### Examples

Here are some examples of indicator plants, though there are many more. Broadleaf plantain may indicate compacted soil with low fertility. Broomsedge is often an indicator of low phosphorous, which may be due to low pH. Burdock can indicate low calcium and high potassium.

Curly dock often indicates wet or compacted soils, as well as low calcium and extremely high magnesium, phosphorous and potassium. Knapweed does well with low calcium and very low phosphorous. Oxeye daisy likes low phosphorus, high potassium and high magnesium. Common mullein often indicates low

pH rocky soils. Redroot pigweed can indicate too much iron or too little manganese, but it may also indicate high potassium and manganese and low phosphorous and calcium, and is often an indicator of fertile soil.

### Managing weeds

Usually, our goal is to find a way to remove weeds from our pastures. They typically reduce productivity and compete against the desired forages. But research has shown that simply removing those weeds without addressing why they grew there in the first place will only provide a short-term solution, as the weeds will likely return.

Taking stock of weeds and listening to what they are telling us about soil conditions can be an additional tool in our toolbox. We do our best to provide a good representative soil sample to learn about the fertility status on our pastures. These samples are great for providing averages.

But maybe, for example, we did not pull a sample from a particular area, and we realize that area is covered with broomsedge. Going back and taking a soil sample in that area could be valuable in both getting rid of the weed problem and improving fertility.

Pick up a good weed identification guide and do not be afraid to contact your local extension educator for assistance with identification. There are also several university-based guides for assistance with what these weeds may be telling you. Listening to those indicator plants is one more tool for managing your pastures.

## ***One More Reason for Higher Prices***

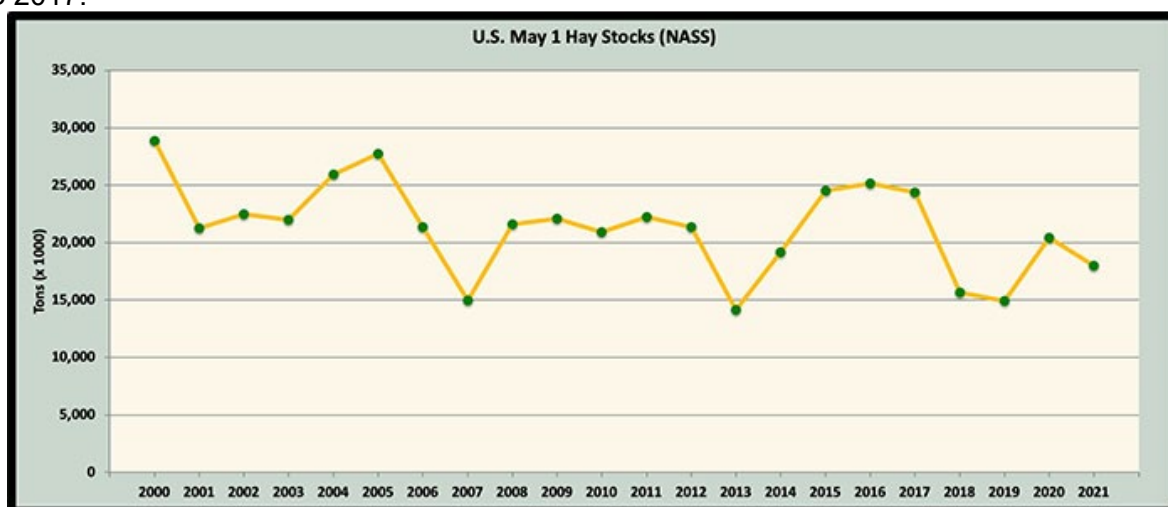
By [Mike Rankin](#)

Source: <https://www.hayandforage.com/article-3523-One-more-reason-for-higher-hay-prices.html>

The U.S. haymow is about 12% emptier today than it was one year ago.

Based on USDA's Crop Production report released last week, May 1 hay stocks dropped by almost 2.5 million tons. This follows a 37% boost in May stocks from 2019 to 2020 after nearly hitting an all-time low in 2019. Hay stocks currently stand at just over 18 million tons. This past December, year-over-year hay stocks declined only slightly from 2019.

At 18 million tons, May 1 hay stocks are still above 2018 and 2019 stocks but are far below the hay inventories of 2015 to 2017.





Many of our largest hay-producing states, especially in the West, had significant year-over-year May 1 stock declines (see table below). According to The Hoyt Report, Western states had their lowest May 1 stocks since 2014. States with some of the largest declines include:

Arizona: down 56%  
California: down 48%  
Colorado: down 44%

Utah: down 43%  
Texas: down 38%  
Kansas: down 36%

On the flip side, there were also some major hay-producing states with significant inventory gains. Most of these were Southeastern states. This group included:

Alabama: up 150%  
Wisconsin: up 84%  
Georgia: up 71%

Virginia: up 55%  
Kentucky: up 52%

### Hay disappearance

Hay disappearance (primarily feeding) between December 1, 2020, and May 1, 2021, totaled just over 66 million tons. This was about 2 million tons higher than the past two years (see graph).

A [new normal has developed](#) in terms of hay that moves out of the barn from December to May.

Prior to 2012, disappearance from hay barns was always in the 80 to 85 million tons range. Since 2012, it's been rare to have a year where disappearance exceeded 70 million tons. During the past three years, hay feeding has been under 67 million tons. In other words, about 10 to 15 million fewer tons are being consumed from December through May, and that's been occurring for the past 10 years.

### Moving forward

So, where does this leave us from a hay market perspective in the short to mid-term? What we know is that hay prices in most regions are currently at least \$10 to \$15 per ton higher than one year ago. That matches up with the lower May 1 hay stocks. In some states such as California, hay prices are \$25 to \$30 per ton higher than a year ago.

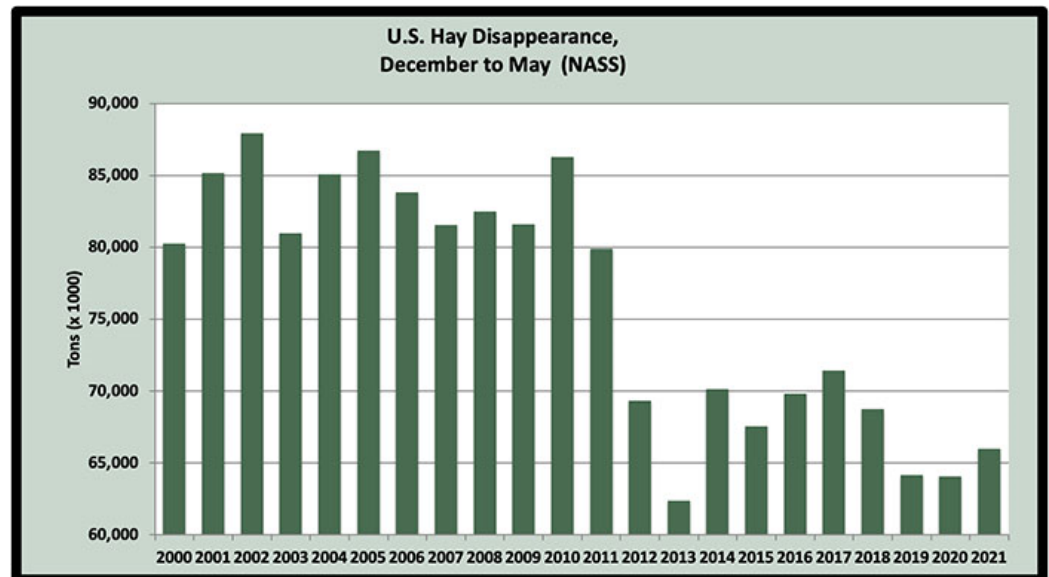
Drought currently looms heavy or already exists in many U.S. regions. This situation could improve or get worse and will ultimately have a big impact on the direction of hay prices.

State	December 1		May 1		Percent change	Disappearance
	2019	2020	2020	2021	May to May	December to May
	1,000 tons				%	1,000 tons
Alabama	1,100	1,800	120	300	150%	1,500
Arizona	280	300	45	20	-56%	280
Arkansas	2,000	1,800	340	240	-29%	1,560
California	1,350	1,640	420	220	-48%	1,420
Colorado	2,000	1,700	410	230	-44%	1,470
Connecticut	43	30	8	6	-25%	24
Delaware	16	10	2	2	0%	8
Florida	540	520	80	60	-25%	460
Georgia	1,110	1,210	170	290	71%	920
Idaho	2,400	2,500	490	410	-16%	2,090
Illinois	750	1,000	220	270	23%	730
Indiana	730	800	140	150	7%	650
Iowa	2,180	2,430	510	430	-16%	2,000
Kansas	5,300	5,000	1,420	910	-36%	4,090
Kentucky	3,000	3,825	625	950	52%	2,875
Louisiana	660	660	120	160	33%	500
Maine	115	150	30	21	-30%	129
Maryland	315	290	60	57	-5%	233
Massachusetts	55	60	8	9	13%	51
Michigan	930	900	220	190	-14%	710
Minnesota	1,690	2,240	360	400	11%	1,840
Mississippi	960	1,050	130	170	31%	880
Missouri	6,900	6,000	1,410	1,000	-29%	5,000
Montana	5,100	4,800	1,040	970	-7%	3,830
Nebraska	4,200	4,200	1,380	1,000	-28%	3,200
Nevada	935	400	80	90	13%	310
New Hampshire	30	36	7	5	-29%	31
New Jersey	70	90	29	10	-66%	80
New Mexico	330	210	50	40	-20%	170
New York	1,600	1,000	350	290	-17%	710
North Carolina	1,300	1,120	180	190	6%	930
North Dakota	4,200	3,700	1,290	950	-26%	2,750
Ohio	1,250	1,300	220	210	-5%	1,090
Oklahoma	4,200	4,100	1,350	1,150	-15%	2,950
Oregon	1,900	1,600	400	290	-28%	1,310
Pennsylvania	1,650	1,410	350	275	-21%	1,135
Rhode Island	4	4	1	1	0%	3
South Carolina	360	400	75	125	67%	275
South Dakota	6,250	5,800	2,350	2,200	-6%	3,600
Tennessee	2,900	2,930	425	570	34%	2,360
Texas	5,600	6,400	1,950	1,200	-38%	5,200
Utah	1,300	1,250	300	170	-43%	1,080
Vermont	165	145	36	35	-3%	110
Virginia	1,800	2,050	310	480	55%	1,570
Washington	1,050	1,100	160	220	38%	880
West Virginia	660	770	95	145	53%	625
Wisconsin	1,770	1,790	310	570	84%	1,220
Wyoming	1,440	1,500	350	325	-7%	1,175
<b>United States</b>	<b>84,488</b>	<b>84,020</b>	<b>20,426</b>	<b>18,006</b>	<b>-12%</b>	<b>66,014</b>

Source: USDA Crop Production report

Historically high commodity prices also provide reason for stronger hay prices in 2021. Many livestock feeders will look to good-quality hay to replace energy and protein previously supplied by corn and soybeans. Milk prices are projected to improve in 2021, but some of that income will be offset by higher feed prices.

Export volumes during the first quarter of the year have been slightly better than 2020. This will help set the tone for prices in the West.



It's reasonable to expect that hay prices in 2021 will revert to 2019 levels or higher. There are few indicators that point to weaker prices, although a strong hay production year might temper the upside. Finally, let's not forget the two hay market mantras that hold true every year. First, high-quality hay always sells for a premium price and costs no more to make than poor-quality hay.

Second, hay markets are first and foremost a regional phenomenon. Local weather conditions and predominant enterprise types (dairy, beef, or equine) will ultimately dictate the demand and price of hay.

### ***Another Toxic Poisonous Weed – Cressleaf Groundsel***

By: [Dean Kreager](#), Licking County Agriculture and Natural Resources Educator

Source: <https://u.osu.edu/beef/2021/05/19/another-toxic-poisonous-weed-cressleaf-groundsel/>

Cressleaf groundsel is included on Ohio's noxious weed list due to its poisonous characteristics. This weed has been showing up everywhere this spring. The yellow flowers may be attractive but it is toxic to livestock especially if it is made in hay where the animals can't eat around it. Click on this link for a 12 minute video on managing this noxious weed: [Managing Cressleaf groundsel in hayfields](#) located at: <https://youtu.be/obo-VO6MFTM>





## CFAES Ag Weather System 2021 Near-Surface Air and Soil Temperatures/Moisture

By: Aaron Wilson and Greg Labarge, OSU Extension

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/14-2021/cfaes-ag-weather-system-2021-near-surface-air-and-soil>

Though still below average, air temperatures this past week were certainly warmer than the previous week, especially over the weekend. Soil temperatures rebounded nicely as well, with 2-inch and 4-inch temperatures now running close to 60°F for most of our CFAES Ag Weather System stations (Fig. 1). In fact, temperatures are now averaging about 65°F at Western and Piketon. Additional warming is expected this week as air temperatures are likely to reach the mid to upper 80s statewide.

The recent active weather took a break this past week, with much less rain falling across the state. Figure 2 shows that most of Ohio received less than 0.10", with many areas reporting no measurable precipitation through 8am Monday May 17, 2021. The warming soil temperatures and dry weather allowed soils to reach acceptable planting conditions once again, with a lot of activity occurring over the weekend. NASA soil moisture depicts dry conditions over the far northwestern counties and developing dryness across the southern tier of counties in Ohio (Fig. 2 – right). This follows a significant reduction in last week's [U.S. Drought Monitor](#), which currently only depicts 8% of the state with abnormally dry conditions (down from 59% the previous week), and no moderate drought conditions remain in Ohio. However, with a fairly dry forecast over the next 7 days and temperatures in the 80s, strong evaporation will ensue, and soils are likely to dry rapidly this week.

### CFAES Near-surface Air and Soil Temperatures

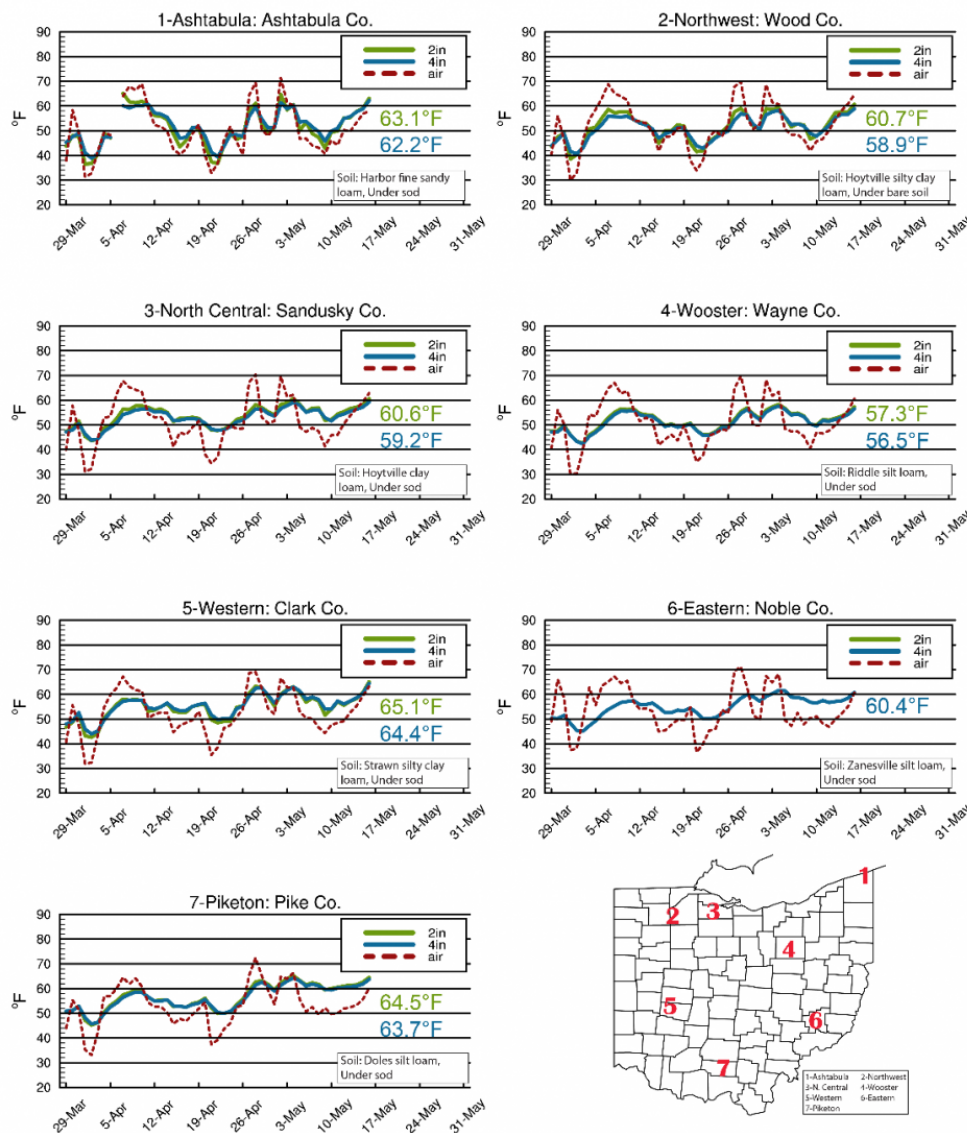


Figure 1: Daily average air temperature (dashed red), two-inch (green) and four-inch (blue) soil temperatures for spring 2021. Current daily average soil temperatures are noted for each location. Soil type and location of measurements (under sod or bare soil) are provided in the lower right corner of each panel. A map of all locations is in the bottom right. Data provided by The College of Food, Agricultural, and Environmental Sciences (CFAES) Agricultural Research Stations located throughout the state.

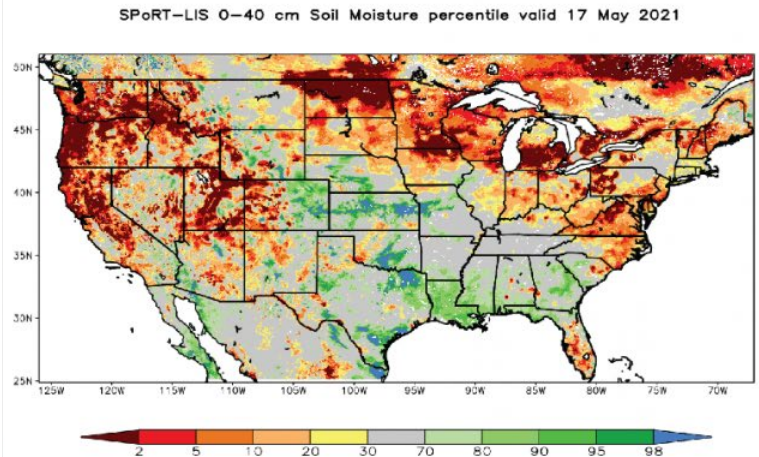
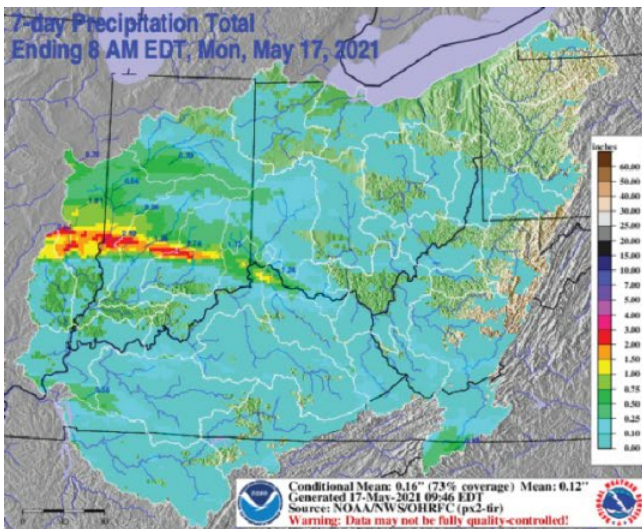


Figure 2: (Left) Precipitation estimates for the last 7 days ending on 5/17/2021. Figure provided by the NWS Ohio River Forecast Center (<https://www.weather.gov/ohrfc/>). (Right) Soil Moisture (%) for 0-40 cm depth as of 5/17/2021 according to NASA's SPoRT-LIS (<https://weather.msfc.nasa.gov/sport/modeling/lis.html>).

For more complete weather records for CFAES research stations, including temperature, precipitation, growing degree days, and other useful weather observations, please visit <https://www.oardc.ohio-state.edu/weather1/>.

### ***Get Your Victory Garden Seeds***

Collaborating with the Ohio Department of Agriculture (ODA), OSU Extension and the Coshocton County Master Gardener Volunteers received 300 seed samples (containing radishes, cucumbers and sunflowers). We still have a few remaining packets which can be picked up at the Coshocton County Extension office on Monday, Wednesday, and Friday from 8:00 to 5:00 p.m. The Extension office is located at: 724 South 7th Street, Room 110 in Coshocton, Ohio.

***“An unintentional life accepts everything and does nothing. An intentional life embraces only the things that will add to the mission of significance.”***

***John C. Maxwell***





# TRI-STATE FERTILIZER RECOMMENDATIONS

for Corn, Soybean, Wheat, and Alfalfa



OHIO STATE UNIVERSITY EXTENSION – TUSCARAWAS COUNTY

## Fertilizer Certification for NEW Applicators

Do you apply fertilizer to more than 50 acres of land? If so, the Ohio Department of Agriculture requires you to obtain a Fertilizer Certificate. This class will review laws, water quality, soil sampling & analysis, and nitrogen and phosphorus management.

**Wednesday, May 19, TIME: 7:00P.M.**

**LOCATION:** Sugarcreek Stockyards, 102 Buckeye St, Sugarcreek

**COST:** None

**Pre-registration required.** Please call 330-339-2337.

If calling after business hours, please press 1 (Michelle Moon) to leave a message.

All current health guidelines will be followed per the Ohio State University. A facial covering must be worn at all times and the current social distancing practice of 6 feet per person will be maintained. Please stay home if you are not feeling well or if someone in your family is ill. You are welcome to bring your own drink and/or snack.

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