OHIO STATE UNIVERSITY EXTENSION

NORTHEAST OHIO AGRI-CULTURE NEWSLETTER

Your Weekly Agriculture Update for
Ashtabula, Portage and Trumbull Counties

May 18, 2021

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Hello Northeast Ohio Counties!

We’re back onto a dry spell for the next few days. The cold damp soil has certainly caused some issues in our beans. We’ve seen seed corn maggot, PPO herbicide damage, frost damage, yellow corn, and lots of crusting. If you are seeing any issues, please give one of us a call and we will be happy to come visit and help diagnose the issues.

Have a great week and stay safe!

Lee Beers
Trumbull County Extension Educator

Andrew Holden
Ashtabula County Extension Educator

Angie Arnold
Portage County Extension Educator
OSU Extension Trumbull County is Hiring!

Applications are currently being accepted for a ANR/4-H Program Assistant in Trumbull County. This position is .75FTE and will provide program support for the Agriculture and Natural Resources (ANR) and 4-H Youth Development program areas in Trumbull County. To apply please visit https://osu.wd1.myworkdayjobs.com/en-US/OSUCareers/job/Satellite-Campus/Program-Assistant-ANR-4-H_R15142-1.

Job duties include: Under the direction of the ANR Extension Educator provide guidance and support to the Master Gardener Volunteers through database management, educational support, coordinating events, and overseeing activities. Assist ANR Extension Educator with questions related to homeowner horticulture, plant diagnostics, soil test reports, etc. Support 4-H Extension Educator with youth development programs including Camp Whitewood, activities related to fair, and 4-H member and volunteer enrollment management (4-H Online). In addition, assist the Educators with program communications through creating and/or editing content (ie. email, e-newsletters, press releases, etc.). This is a two year term appointment.

25% - Under the guidance and direction of the ANR Educator assist with answer questions from homeowners related to plant disease, soil test reports, and other ANR related activities (ie. scouting, e-newsletters, press releases)

50% - Assist in planning, conducting and managing the county Master Gardener Program including the online database.

25% - Under the guidance and direction of the 4-H Youth Development Extension Educator, planning, implementing, and supporting 4-H programs including resident camping programs for Camp Whitewood, STEM Day Camp, fair related activities and events, and 4-H enrollment management (via 4-H Online).

Required qualifications
Bachelor's degree or an equivalent combination of education and experience; excellent organizational, interpersonal, and communication skills; experience with Microsoft office systems; ability to work occasional evenings and weekends to attend meetings, events, and programs as needed.

Desired qualifications
Experience with technology (ie. creating digital content, social media, website management). Experience in the areas of youth development, agriculture, horticulture, and/or natural resources. Above average communication and problem-solving skills. Can work both independently and as a member of a team.

Application Deadline 05/25/2021
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.

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.

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.

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/.

The Ag Law Harvest
By: Jeffrey K. Lewis, Attorney and Research Specialist, Agricultural & Resource Law
Source: https://farmoffice.osu.edu/blog/fri-05142021-939am/ag-law-harvest

It’s time for another Ag Law Harvest and 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

Northeast Ohio 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. 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.

**Benefits of Wheat in Corn-Soybean Crop Rotations**

By: Adityarup "Rup" Chakravorty  

The United States grows a lot of corn and soybeans. Some researchers think it’s a good idea to add wheat into that mix.

A new study shows including winter wheat once every 4 years in rotations with corn and soybean can have many benefits. The research was recently published in *Agronomy Journal*.

In 2019, farmers across the U.S. harvested corn from 81.5 million acres of farmland. That’s just smaller than the areas of Nebraska and Iowa combined.

More than half the corn harvested in the U.S. came from just four states in the Northern Corn Belt – Iowa, Nebraska, Illinois, and Minnesota.

The Northern Corn Belt also extends into Canada. The province of Ontario produced more than 350 million bushels of corn in 2020.

Across most of the Northern Corn Belt, farmers typically rotate between growing corn and soybean. But occasionally growing wheat could help those farmers.
“Corn and soybean yields were higher when crop rotations included wheat,” said Ken Janovicek, member of the American Society of Agronomy and lead author of the new study.

For the study, researchers grew winter wheat once every three or four years with corn and soybean.

They found that longer-term corn-soybean rotations that contain winter wheat can be more profitable. “The greatest yield increases occurred in rotations that included winter wheat once in four years,” said Janovicek.

Farmers tend to focus on corn and soybean because these crops typically have higher financial returns than wheat.

But the study made a key financial discovery. “The increase in corn and soybean yields when these crops are grown in rotation with wheat more than offset the lower sale returns associated with winter wheat,” said Janovicek.

“Farmers would need to continue to grow wheat every 4-5 years,” says Janovicek. “The increased corn and soybean yields associated with including wheat in rotations disappear over time if wheat is dropped from rotations.”

Rotating wheat with corn and soybean crops also has other benefits.

For example, soils tend to be healthier and have better structure when crop rotations include small grains or forages in addition to corn and soybean.

Good soil health and structure can have far-reaching consequences.

“Inferior soil structure increases soil erosion and runoff risk,” says Janovicek. “In turn, that increases the risk of surface water pollution.”

“On the other hand, good soil structure and health may increase water availability for crops,” says Janovicek.
As global climate changes, water availability may become unreliable. Limited water could even limit crop yields. Improving soil structure by including winter wheat in crop rotations could help address both these issues.

“We will probably see even greater benefits of more complex crop rotations in the future,” says Janovicek.

In fact, the researchers observed the highest increases in corn and soybean yields in the later years of the study.

The crop rotation studies were carried out in two study sites in Ontario, Canada. At one of the sites near Elora, Ontario, the trial has been ongoing for more than 36 years.

The researchers observed continued increase in soybean yields over time when winter wheat was included in rotations throughout the trial. However, the largest yield increase was recorded in the past 2 years.

Janovicek and colleagues are exploring more ways farmers can benefit economically from wheat crops.

For example, “When markets exist, straw sales can increase revenue associated with wheat,” says Janovicek.

Wheat straw was baled at the Elora trial. Removing the wheat straw did not reduce subsequent corn or soybean yields. “That demonstrates that retention of straw is not needed to obtain greater corn and soybean yields when in rotation with wheat,” says Janovicek.

Ken Janovicek is a researcher at the University of Guelph. This work was supported by Grain Farmers of Ontario and the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) through the Ontario Agri-Food Innovation Alliance.
Early Season Cucurbit Pests – Cucumber Beetles & Bacterial Wilt

Source: https://u.osu.edu/vegnetnews/2021/05/07/early-season-cucurbit-pests-cucumber-beetles-bacterial-wilt/

In the next 2-3 weeks, pumpkin, squash, melon and cucumber growers looking for an early crop will start direct seeding in the field or preparing seed flats for later transplanting out in the field. One of the perennial pest’s growers run into is the striped cucumber beetle which can attack seedling plants and chew them nearly to the ground. In addition to the physical damage the beetles can inflict, there is also a chance that some can transmit bacterial wilt to the plant which will prevent it from setting mature fruit.

A variety of control measures and tactics to manage cucumber beetles and bacterial wilt are reviewed in this recent video (https://youtu.be/RSzTT_gbma4) which includes methods to limit the impact of these early season treatments on pollinators.

Here is a quick review of the recommended options:

1. Plant fungicide only treated seed, scout fields frequently and treat with a foliar insecticide if the cucumber beetle threshold per plant is exceeded. Typically we think of 0.5 beetles per plant at the cotyledon stage or 1-2 beetles per plant at 1-4 leaf stage as general thresholds.

2. Plant systemic insecticide treated seed (FarMore FI400) to control cucumber beetles for 2-3 weeks in the field after seedling emergence.

3. Sow trays with fungicide only treated seeds in a greenhouse or high tunnel, then treat transplants with systemic insecticides on benchtop just prior to transplanting.
or drench transplants in the field using treated water. If using this technique do NOT use FarMore FL400 treated seed as it will not control cucumber beetles when transplanted but additional insecticide residue will be present in the pollen and nectar.

4. Use systemic insecticide products in-furrow at planting time; this technique will produce the highest amounts of insecticide in the pollen and nectar of any of the options outlined above so use the lowest effective rate.

For more information on all the recommended foliar and systemic insecticides for cucurbit insect pests, consult the Midwest Vegetable Control Guide (https://mwveguide.org/guide).

**One more reason for higher hay prices**

By Mike Rankin  
Source: [https://www.hayandforage.com/article-3523-One-more-reason-for-higher-hay-prices.html](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 stocks on farms: December 1, May 1, and disappearance

<table>
<thead>
<tr>
<th>State</th>
<th>December 1</th>
<th>May 1</th>
<th>Percent change (May to May)</th>
<th>Disappearance (December to May)</th>
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<td>2019</td>
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<td>2021</td>
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<td>1,800</td>
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<td>1,500</td>
<td>350 325</td>
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</tbody>
</table>

United States: 84,488, 84,020, 20,426, 18,006, -12%, 66,014

Source: USDA Crop Production report

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### Hay disappearance

Northeast Ohio Agriculture

OHIO STATE UNIVERSITY EXTENSION

Ashtabula, Portage and Trumbull Counties
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.
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.

Wheat Disease Risk and Fungicide Application Programs

By: Pierce Paul
Source: https://agcrops.osu.edu/newsletter/corn-newsletter/14-2021/wheat-disease-risk-and-fungicide-application-programs

Additional Authors: Martian Luis and Maira Duffeck

Wheat is now between boot and anthesis (flowering) across the state. In most of the fields that we have visited over the last two weeks, the crop looks excellent, with very little or no disease symptoms on the flag leaf or even the two leaves below the flag leaf. In southern Ohio where the crop is at anthesis or will reach anthesis this week, the risk for head scab is very low (http://www.wheatscab.psu.edu/). This is largely because of the cool weather conditions we have experienced over the last several days. Head scab and most of our economically important diseases usually develop best under warm, wet, or humid conditions. Cool conditions have prevented or slowed down the development of diseases such as Stagonospora leaf and glume blotch.

However, as conditions warm up and wheat in the central and northern portions of the state reach anthesis over the next two weeks, the risk for head scab will likely increase, and with it comes the risk of grain contamination with vomitoxin. The fact that several corn fields across the state were affected by Gibberella ear rot last
season could increase the risk for head scab and vomitoxin in wheat, especially if the variety is susceptible and conditions become warm and stay wet during and shortly after anthesis. Remember, Gibberella ear rot and head scab are caused by the same fungus. Even if wheat is planted into a field that did not have Gibberella ear rot last year, spores can still be blown in from fields with infested corn stubble and infect heads in wheat fields.

**Priority should be given to a fungicide application program for head scab and vomitoxin control.** Fungicides such as Prosaro, Caramba, and Miravis Ace as most effective against head scab and vomitoxin when applied at or shortly after anthesis. **In addition, applying these fungicides at anthesis (flowering) will also provide very good control of late-season diseases such Stagonospora and rust.** In a year such as this during which early-season conditions were not favorable for foliar disease development, a single application of Prosaro, Caramba, or Miravis Ace at anthesis should be sufficient to suppress head scab and vomitoxin and control foliar diseases. However, the opposite is not true. **Applying these fungicides at or before heading will not provide adequate control of head scab and vomitoxin.**
Hello Ashtabula County! Planting was all but halted the last couple weeks as the weather took a turn for cool and damp. This week, the dry spell we are experiencing finally allows our local farms to get crops in the ground. In addition to row crops, many of or local greenhouses are now open with beautiful flowers and vegetables to plant in your gardens. Visiting your local greenhouse is a great way to shop local and to get high quality plants. Today, I want to share some information on broadband internet access in rural areas and how a new federal program aims to help struggling families pay for internet services.

Households that are struggling to afford internet service may be eligible for a $50 a month discount and up to $100 dollars to assist in the purchase of a new device to access the internet with. Having internet access means having the ability to access opportunities from jobs to online schooling to gathering information. According to the U.S. Census Bureau’s 2018 survey, an average of 78 percent of American households subscribe to the internet. That number is 13 percent less in households that are located in both rural and lower-income counties. There are many causes for the disparity in internet service. The combination of households with low incomes and the high cost of internet in rural areas is the major contributor. In efforts to increase internet access in rural and low-income areas the Federal Communication Commission (FCC) has announced a new program to assist in paying for services.

The program is called the Emergency Broadband Benefit and applications to receive it are now being taken. To be eligible for the program the FCC states that, “A household is eligible if a member of the household meets one of the criteria below:

- Has an income that is at or below 135% of the Federal Poverty Guidelines or participates in certain assistance programs, such as SNAP, Medicaid, or Lifeline.
- Approved to receive benefits under the free and reduced-price school lunch program or the school breakfast program, including through the USDA Community Eligibility Provision in the 2019-2020 or 2020-2021 school year.
- Received a Federal Pell Grant during the current award year;
- Experienced a substantial loss of income due to job loss or furlough since February 29, 2020 and the household had a total income in 2020 at or below $99,000 for single filers and $198,000 for joint filers; or
- Meets the eligibility criteria for a participating provider’s existing low-income or COVID-19 program.”

If you or anyone in your household meets at least one of these criteria your house is eligible. To apply for the benefit, you can call your preferred current or
prospected broadband provider and ask about the program. Here in NE Ohio participating providers include Windstream, Comcast (Xfinity), and CenturyLink as well as mobile internet providers like AT&T, Verizon, T-Mobile, Boost Mobile, and Sprint. There are many providers that are participating in Ohio so call yours even if it was not just listed. Those interested in applying can also visit www.GetEmergencyBroadband.org or call 833-511-0311 for a mail-in application.

FCC Program: https://www.fcc.gov/broadbandbenefit

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CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu
OVERVIEW OF PROGRAM:

Why and who should attend
With an ever growing population and concerns over food security, there is a need for a workforce of talented young scientists who are able to think critically about the issues associated with providing safe, economical, and aesthetically pleasing food and fiber. This one of a kind STEM camp will engage students in the various careers in science, engineering and technology in the food, fuel, and fiber industry that will be needed to face our world's challenges. Through hands-on tours and activities in state-of-the-art laboratories, campers will get a unique look at what careers in STEM can entail. Days will be filled with learning from the top agricultural science companies and researchers at Ohio State and Central State Universities. Campers will have the opportunity to network with leaders in the industry while gaining a new perspective on the variety of careers available to them in Ohio related to food, fuel, and fiber production. At the end of each day, counselors will lead the students in leadership development activities and programs to show them how to prepare for college and their future careers.

This action packed week will be highlighted each day with a field trip to a different agricultural/food business (i.e. Smuckers, Mohican State Park, Select Sires) followed by an interactive, on-campus lab activity (i.e. food science, greenhouses, meat lab). Students will be challenged through various activities to discuss current scientific issues facing Ohio and the world. Daily activities will engage them as they critically think through such issues.

DATES OF WEEKEND CAMPS:
- July 9-11 - Central State University
- July 16-18 - OSU Main Campus
- September 10-12 - University of Findlay

COST FOR CAMPS: Free

APPLICATION DEADLINE:
June 28th

REGISTRATION:
go.osu.edu/exploreagcamp

APPLICATION REQUIREMENTS:
One reference that is not a friend or family member
TENTATIVE AGENDA/PROGRAMMING

Friday
5:00 p.m.    Registration
6:00 p.m.    Dinner
7:00 p.m.    Leadership Activities

Saturday
9:00 a.m.      Tour - Equine facility
12:00 a.m.   Lunch
1:00 p.m.      Tour - Soil Science Lab
3:00 p.m.      Food Science Tour/Activity
5:00 p.m.      Professional Development
6:30 p.m.      Dinner
7:30 p.m.      Evening Activities

Sunday
9:00 a.m.       Dairy Farm Tour
11:30 a.m.     Lunch
12:30 p.m.     Blanchard River Demo Farms
3:00 p.m.       Camp Celebration
4:00 p.m.       Adjournment

**This is sample schedule that is subject to change based on site university**

STUDENT COMMENTS:

“My favorite part of camp was meeting new people and exploring different agricultural jobs.”
-Lauren K

“I liked getting to see every aspect of some ag careers. From hands-on lab to testing to hearing perspective to getting to see equipment. Every part was interesting and gave me a taste of ag careers.”
-Charley P

For additional information, please visit exploreag.com or email mulligan.70@osu.edu