

Auglaize County OSU Extension Weekly Agriculture Newsletter – May 20, 2020

Scouting and Latest Information



Rows of corn!!



Soybean field

Hello!! Good afternoon! I pray you are well.

Thank you to those individuals that participated in the ninth Auglaize County Farm Talk meeting on Tuesday. We had 13 people participate. Every Tuesday from 8:30 to 9:30 AM we will be hosting a virtual meeting via Zoom that can also act as a simple conference call for those of you not able to get online to view live. The meeting will be set up to discuss key, timely information for your operation and to open the floor for questions and sharing of information. You may propose topics for the next meeting at anytime during the week by e-mailing or calling me. **At this time weather is the only topic on the schedule for next week.** Please join us every Tuesday for Auglaize County Farm Talk.

If you want to contact Brigitte Moneymaker you may contact her at moneymaker.4@osu.edu or 434-962-3525.

If you are a buyer or seller of hay or straw, let me know and I can keep a list to share with others.
List of individuals searching for hay or straw: None

List of individuals selling hay or straw:

1. About 200 3' X 3' wheat straw bales for sale. This same individual is willing to sell his winter cover crops as forage to anyone interested.
2. At least 500 small square wheat straw bales for sale.

Call the OSU Extension office at 701-541-0043 or e-mail me at stachler.1@osu.edu to get the contact information.

Joke: Why did the cow jump over the moon??

Agricultural Fun Fact: Farming accounts for about 1% of the U.S. gross domestic product!

Rain fell 6 straight days this past week!! Rainfall on Thursday, May 14th ranged from a 0.1" near Minster-Ft. Recovery and Sommers roads to 0.48" near Valley and Idle roads. Rainfall on Friday ranged from 0.1" near St. Rt. 117 and St. Rt. 67 roads to 1.0" near Kossuth. Rainfall on Saturday ranged from 0" at seven locations to 0.18" near Tri-Township and Lock Two roads. Rainfall on Sunday ranged from 0" near Kettlersville and Santa Fe-New Knoxville roads to 0.38" near Brown and Pusheta roads. Rainfall on Monday ranged from 1.19" near Shelby-Fyrburg and Santa Fe-New Knoxville roads to 2.6" near Bloody Bridge. Rainfall on Tuesday ranged from 0.25" near Harris and St. Rt. 29 roads to 1.02" near Shelby-Fryburg and Santa Fe-New Knoxville roads. Rainfall for the week ranged from 2.52" near Valley and Idle roads to 4.2" near St. Rt. 66 and Vogel roads. Rainfall for the week averaged 3.38", 3.18" more than last week. The average rainfall for the month so far is 3.69". Rainfall is forecasted at least at 18% for each day for the next week.

The average high temperature now is 73 degrees F, three degrees more than last week. Temperatures were above normal for 4 days of the week and below normal for 3 days of the week. The range in high temperature for the week was 61 to 79 degrees F. The average high temperature for the week was 71.1 degrees F, which is 15.1 degrees F warmer than last week(!) and only 1.9 degrees F below the current normal high temperature! Temperatures for the next 7 days will almost all be above normal with some way above normal. Hurray!! Finally!

Wheat



Boot stage wheat (Feekes 10)



Wheat field

Wheat development slightly increased this past last week. The most advanced stage now is boot stage (Feekes 10). The wheat ranged from last ligule visible to boot stage in all fields on Sunday with only about 25% in the boot stage. This means the wheat is getting close to flowering. The wheat crop improved a little this past week. The current rating of the wheat crop is: 4% excellent, 44% good, 48% fair, 4% poor, and 0% very poor. Last week's rating was 5% excellent, 33% good, 52% fair, 10% poor, and 0% very poor. The only leaf disease I can still find is *Septoria tritici* leaf blotch. Wheat will be flowering by early next week in some fields as it takes about 5 days after head emergence before flowering begins. Therefore scout fields closely and look at the weather to determine if and when you should spray a fungicide for *Fusarium* head blight (scab). See my article below for more information!

Alfalfa



Maximum height of alfalfa in a field



Alfalfa field

Alfalfa grew some this past week compared to the week before. Alfalfa is now up to 18" in some fields with an average height of about 16". Alfalfa weevil are still present!! The alfalfa will be short for first cutting.

Corn



Freeze damaged corn and some giant ragweed



More freeze damaged corn

Corn condition looked fine as of Sunday, other than the frozen corn shown above. It is still taking greater than 2 weeks for the corn to emerge! Emerged stands are non-uniform. We made some good planting progress again this week. I'm estimating that 80% of the corn is planted in the county. Last year at this time only 3% was planted. At this time 62% of corn should be planted in Ohio, so we are ahead of schedule. Now we will have to wait and see what will need to be replanted due to saturated conditions.

Soybean



The first emerged soybeans

Soybean planting progress quite well again for last week, despite the short week. My estimate is that 75% of the soybeans have been planted in the county. Last year at this time less than 1% was planted. At least 35% of the Ohio soybean crop should be planted by now, so we are way ahead of schedule. Soybeans are emerging non-uniformly as well. As of Sunday the germinating and emerged seedlings looked fine, but the copious amounts of rain this week could change things.

My estimate is that 44% of the soybeans have been planted in the county as of Sunday. We are making good progress. At this time last year no soybeans had been planted! We should be at 9% planted now in Ohio, so we are way ahead of planting history. I have seen only one field of soybeans emerged so far.

Weeds



Giant ragweed with no burndown



Cressleaf groundsel, shepherd's-purse, & field pennycress



Canada thistle with no burndown

Weeds are getting larger and more numerous. Weeds are emerging as corn is emerging if no preemergence herbicide was applied. Remember cressleaf groundsel is a poisonous plant to animals and humans.

Insects/other



Alfalfa weevil and damage



Alfalfa weevil damage

Alfalfa weevil damage is still occurring. It has gotten worse. The field with the most damage has at least 75% of plants damaged. All other fields showed at least 20% of plants with damage. Scout fields to know what to do. Watch for armyworm and cutworm moths, both are at higher levels than a year ago to our south.

There were NO changes to the XtendiMAX

(<http://www.xtendimaxapplicationrequirements.com/Pages/default.aspx>), **Engenia** (<https://agro.basf.us/campaigns/engenia/tankmixselector/>), **FeXapan** (<https://www.corteva.us/products-and-solutions/crop-protection/fexapan/tank-mix-partners.html>), and **Tavium** (<http://www.syngenta-us.com/herbicides/tavium-tank-mixes>) **labels this week.** The Engenia label still has the most approved products compared to XtendiMAX and FeXapan. No new herbicide was added to the XtendiMAX label this past week, which totals 252 herbicides. No new adjuvant was added the XtendiMAX label, now totaling 442. No new nozzles were added to the XtendiMAX label, which totals 44. No new Drift Reducing Adjuvant (DRA's) were added to the XtendiMAX label this week, making a total of 107 DRA's. No nutritional products were removed from the XtendiMAX label which totals 259. No new products were added to the Insecticides, Fungicides, Insecticides plus Fungicides, Plant Growth Regulator and Other group on the XtendiMAX label which totals 115. No new adjuvants were added to the Engenia label, which now totals 600. No new herbicides were added to the Engenia label, which brings the total herbicide count to 204. No new products were added to the Other category (growth regulators and fungicides) on the Engenia label, which totals 37. No new insecticides were added to the Engenia label which currently has 49 products. No

new Drift Reducing Adjuvants (DRA's) were added to the Engenia label, which totals 131. No new nozzles were added to the Engenia label, which totals 31. No new nutritional products were added to the Engenia label which totals 231 products. No new products was added to the pH Modifier group of the Engenia label which totals 17 products. The FeXapan label has many of same the products and nozzles as the XtendiMAX label, but NOT all are the same, so check the FeXapan label carefully. The FeXapan website has changed drastically! They now have DRA's listed for each product type that must be mixed with FeXapan. There are some products that need no DRA added! There are 13 glyphosate formulations, 229 herbicides, 41 insecticides, 17 fungicides, 96 DRA's, 317 adjuvants, 204 nutritionals, 30 plant growth regulators, 18 other products, and 46 nozzles that have been approved for the FeXapan label. There are 47 herbicides, 101 DRA's, 316 adjuvants, 96 nutritionals, 16, insecticides, 7 fungicides, 8 other products, and 41 nozzles approved for use with Tavium.

Enlist One and **Enlist Duo** for Enlist soybeans and corn also have approved tank-mix partners and nozzles like the dicamba products. The list of approved tank-mixtures for both of these products has been updated. Please follow these labels online at <https://www.enlist.com/en/herbicides.html> . There are 48 nozzles, 143 herbicides, 19 glyphosate formulations, 9 glufosinate formulations, 11 Dry AMS products, 85 insecticides, 30 fungicides, 21 plant growth regulators, 645 other products, and 315 fertilizers / nutrients labeled with Enlist One. There are 23 nozzles, 74 herbicides, 48 insecticides, 17 fungicides, 22 plant growth regulators, 8 Dry AMS products, 512 Other products, and 168 fertilizers / nutrients labeled with Enlist Duo.

Other information about the Enlist products include the following:

1. Enlist Duo rate is 4.75 pts/A which only has 1.0 lbs ae/A of glyphosate which is really not enough. You would think you could just add more glyphosate, but you CAN NOT add more glyphosate with Enlist Duo.
2. Enlist One can be mixes with ANY rate of glyphosate, glufosinate and 192 other herbicides.
3. Never use Ensit One alone on Enlist crops and always apply Enlist One at 2 pts/A/
4. You CAN NOT add glufosinate with Enlist Duo!
5. When adding a postemergence grass soybean herbicide like quizalofop, clethodim, sethoxydim, or fluazifop to Enlist One add 33% higher rate of these products to reduce the antagonism with grasses OR apply the postemergence grass herbicides 7 days after the Enlist One.

Upcoming Meetings

1. **Auglaize County Ag Talk.** Every Tuesday from 8:30 to 9:30 AM we will have a virtual agricultural meeting. The third Tuesday will be the Ag Breakfast. Next week's topic is Weather by Aaron Wilson and more. The link to get onto the meeting is as follows: <https://osu.zoom.us/j/2119847503> If you just want to call in the phone number and meeting code are as follows: 646-876-9923 2119847503#
2. **The OSU Farm Office is Open.** The OSU Extension Farm Office Team will open our offices online and offer biweekly live office hours on Thursdays from **9:00-10:30 am EST**. Each office session is limited to 500 people and if you miss our office hours, we'll post recordings on farmoffice.osu.edu the following day. **Register at <https://go.osu.edu/farmofficelive>.**
3. **All OSU Extension face to face meetings have been cancelled or postponed through July 6th.** Meetings after this date will go on as planned at least until further notice.

Answer to joke: The farmer had cold hands!!

Will Fusarium Head Blight (Scab) be a Problem and What to Do?



Wheat growth is progressing steadily in the county, but is a little behind last year. The range in wheat stage as of Sunday was last ligule visible (Feekes stage 9) to boot stage (head nearly ready to emerge – Feekes stage 10). Last year it was boot to head emergence. Most of the wheat is almost at the boot stage. On average it takes five days from full head emergence to flowering (anthers become visible) with flowering occurring for about five days. This means wheat could begin flowering in the county as early as the beginning of next week to the end of next week. Flowering begins in the middle of the head.

Fusarium graminearum is the fungus that causes Fusarium head blight (scab). It survives on corn, wheat, and grass residue producing spores during warm wet humid conditions which are blown through the air over long distances or splashed up onto the florets. The fungus infects wheat during the flowering stage. A two to three day period of high humidity and precipitation during flowering is ideal for infection of wheat. Optimum temperatures for infection range from 75 degrees Fahrenheit to 85 degrees Fahrenheit, although infection can occur at temperatures of 56 degree Fahrenheit. Head scab causes floret sterility, poor test weights due to shriveled kernels, and yield loss. In addition, the pathogen produces a mycotoxin called vomitoxin which is harmful to humans and animals. Vomitoxin levels exceeding one and five parts per million is unfit for human and animal consumption, respectively.

The current forecast for the next 10 days calls for rain at least a 25% chance of rain 9 of the next 10 days and warmer temperatures. This will allow the *Fusarium* fungus to grow and sporulate, likely causing infection of wheat! The current (May 20th) head blight risk assessment model (<http://www.wheatscab.psu.edu/>) predicts a low risk of Fusarium head blight for the county. Therefore a fungicide application is not warranted today.

All varieties susceptible to *Fusarium* head blight should be sprayed at a minimum in my opinion. There currently are no significant levels of leaf diseases in most fields to help increase the need for a fungicide application. Depending upon the exact amount of rain, there may be a need to apply a fungicide to moderately susceptible and resistant varieties. Some previous research shows that for the greatest reduction of vomitoxin a fungicide application to a moderately resistant variety has been beneficial. You may want to talk with your retailer about aerial application if we stay wet.

If you would like to conduct a research trial to determine the need for a fungicide application, please contact me soon to organize a trial. This would be valuable information.

Caramba and Prosaro have been the only two fungicides providing the greatest control of *Fusarium* head blight and reducing the amount of vomitoxin. Now there is a new fungicide called Miravis Ace. This fungicide has a different mode of action than Caramba and Prosaro. Apply these fungicides starting when 50% of the heads have anthers exposed in the middle part of the head. Applications made during flowering provides the most effective control although applications made within four to six days after flowering can still reduce *Fusarium* head blight and vomitoxin. Do not apply before flowering.

In 2015 with all the rain we had, a fungicide application improved yield by 15 bushels per acre and reduced dockage by \$1.00 per bushel.

The greatest yield and the lowest vomitoxin levels are usually achieved when the most resistant wheat variety is planted and an effective fungicide is applied timely. For more information regarding *Fusarium* head blight and the *Fusarium* head blight risk assessment tool, visit the following web pages:

<http://ohioline.osu.edu/factsheet/plpath-cer-06> ; <http://ohioline.osu.edu/factsheet/plpath-cer-03>

C.O.R.N. Newsletter

<https://agcrops.osu.edu/newsletter/corn-newsletter>

Warmer Weather, Finally!



As recently as last Wednesday and Thursday (May 13-14), some locations across Ohio had morning lows dipping down to near or below freezing (Figure 1). This follows numerous frost and freeze events since mid-April that led to reports of damage to vegetables, tree fruit, and certain grape varieties, and some minor leaf-tip damage to wheat and alfalfa. For more information on recent climate conditions, check out the weekly Hydro-Climate Assessment from the [State Climate Office of Ohio](#).

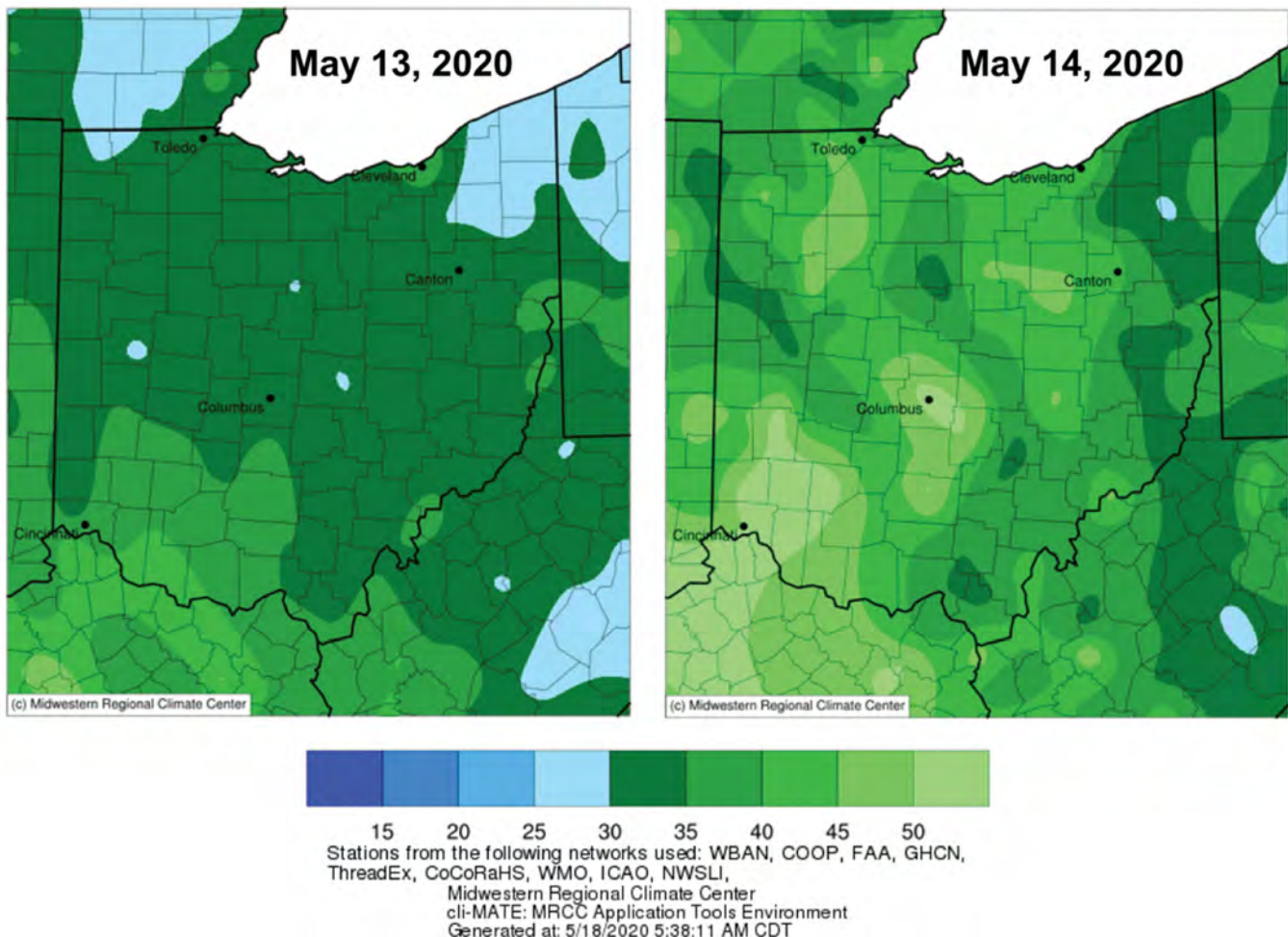


Figure 1: Morning lows on left) May 13, 2020 and right) May 14, 2020. Figures courtesy of the Midwest Regional Climate Center (<https://mrcc.illinois.edu>).

But it seems as though we have turned a corner on this cool weather; after all, June is fast approaching and there is still some work to be done. Will the weather cooperate?

Unfortunately, we have a slow-moving system and weak cold front this week that is already providing a focal point for numerous showers and storms across the state. Tropical Storm Arthur, moving up the U.S. east coast, is slowing the progression of this system, with expected lingering showers throughout the week across the region. Heavy rain and some flooding are possible, especially over portions of western and southern Ohio, where 2-4 inches of rain are expected with locally heavier amounts (Figure 2). This is well above the 1 inch per week we typically see this time of year. Lighter amounts are forecast for northeast Ohio.

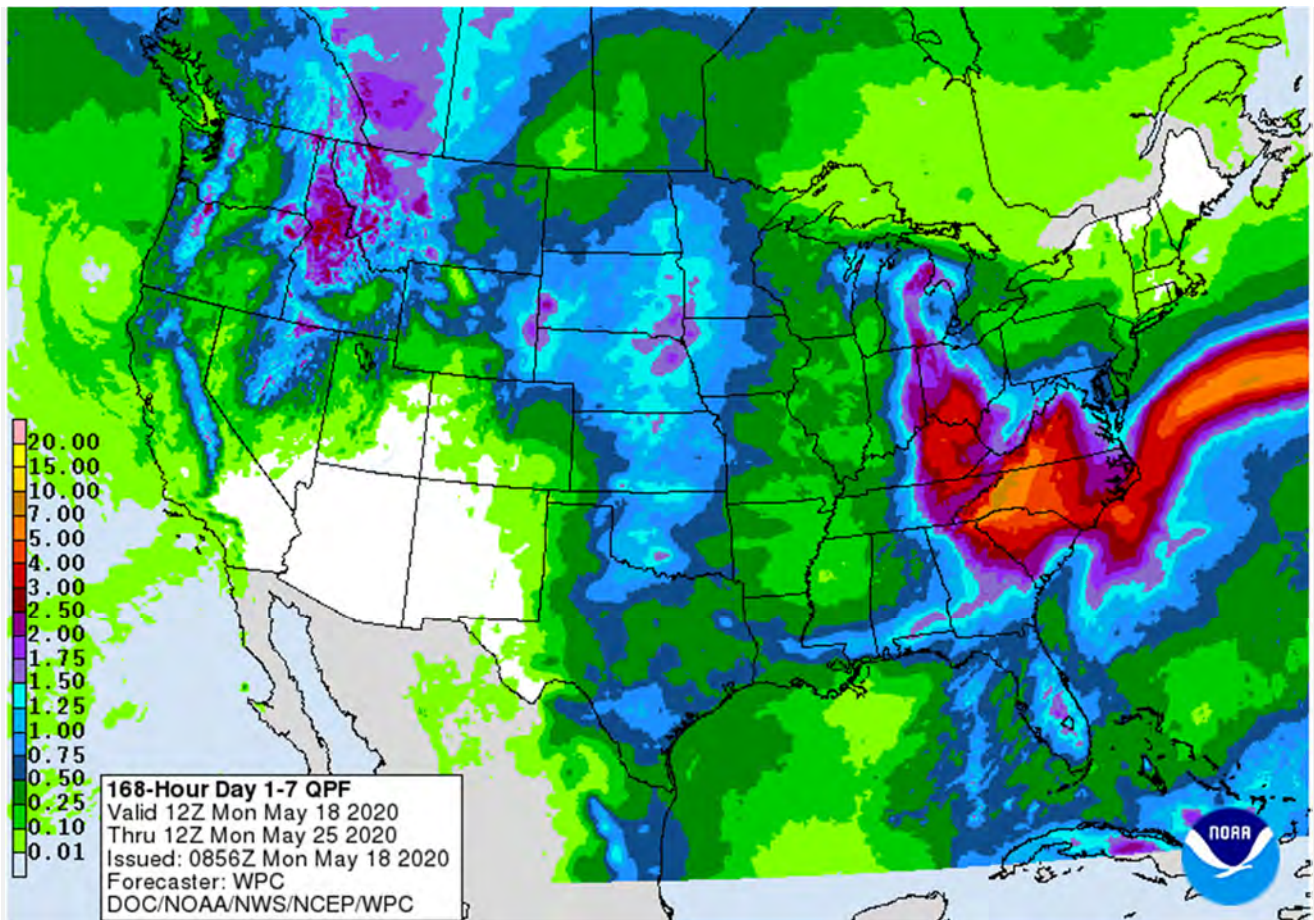


Figure 2: Forecast precipitation for the next 7 days. Valid from 8am Monday May 18, 2020 through 8 am Monday May 25, 2020. Figure from the Weather Prediction Center <https://www.wpc.ncep.noaa.gov/>).

Temperatures are likely to cool a bit behind the cold front on Tuesday and Wednesday, with highs below average in the 50s and 60s. A moderating trend in temperatures is likely by the weekend, with highs returning to the 70s and 80s. This may also bring some scattered thunderstorm activity.

The latest [NOAA/NWS/Climate Prediction Center](#) outlook for the 6-10 day period (May 24-28) shows a strong likelihood for **above average** temperatures with slightly elevated probability for above average precipitation (Figure 3). Normal highs during the period should be in the low to mid-70s (north to south) with overnight lows in the upper 40s to mid-50s and about 0.9-1.10" of precipitation per week. The [16-Day Rainfall Outlook from NOAA/NWS/Ohio River Forecast Center](#) reflects well above average precipitation over the next couple of weeks, largely a reflection of this week's wet weather.

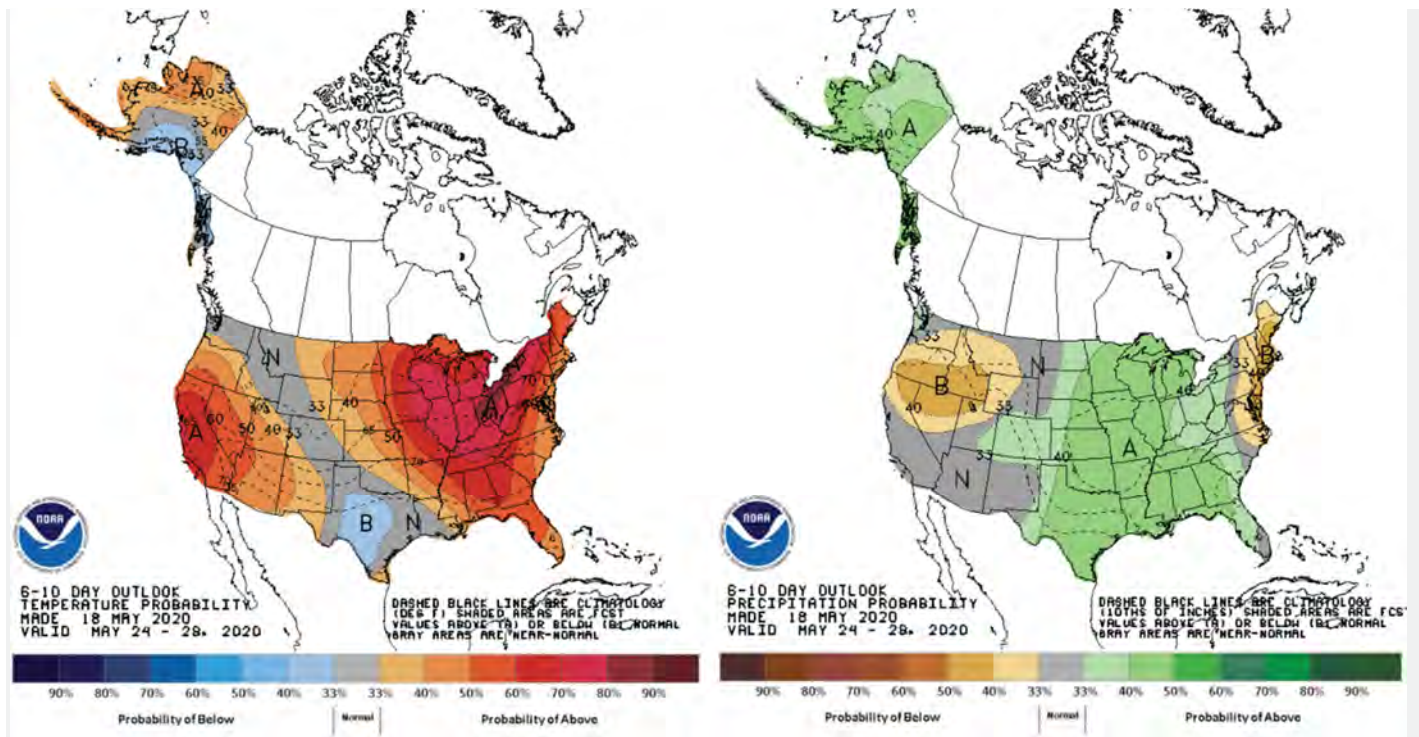


Figure 3: Climate Prediction Center 6-10 Day Outlook valid for May 24-28, 2020 for left) temperatures and right) precipitation. Colors represent the probability of below, normal, or above normal conditions.

Author(s):
[Aaron Wilson](#)

Scab Risk Low, but Keep Your Eyes on Leaf Diseases



According to the FHB forecasting system, the risk for head scab continues to be low across the state of Ohio, for wheat flowering (or barley heading) today, May 18. In spite of the wet weather we have had, it has been very cold over the last week to 10 days. Cold temperatures between heading and flowering usually reduce the risk for scab, as the disease develops best under warm, wet, or humid conditions. However, you must continue to be vigilant as the crop in the northern half of the state approach heading and anthesis. If it continues to rain and stays wet and humid over the next few weeks, the risk for scab and vomitoxin will increase as the temperature increases. Be prepared to treat fields with Prosaro, Caramba, or Miravis Ace. Click on this link for more details on fungicide application for head scab

control: <https://agcrops.osu.edu/newsletter/corn-newsletter/2020-13/managing-head-scab-fungicides-qa>

While scab is not yet a concern, either because it is too early, or because it has been too cold, current conditions do favor leaf diseases such as Septoria leaf spot and powdery mildew. Both have been reported on the lower leaves of susceptible varieties, and will continue to spread up the plant if it stays cool and wet. In addition, persistent rainfall and warmer temperatures over the next few weeks will not only increase the risk for scab, but will also increase the spread and severity of other diseases such as Stagonospora leaf and glume blotch. All of these diseases can reduce grain yield and quality, if flag leaves and heads are severely damaged before grain fill is complete. Continue to walk fields and look for leaf diseases. If the variety is susceptible, an early fungicide application may be needed to keep leaf diseases in check. Otherwise, an application (of Prosaro, Caramba or Miravis Ace) at or shortly after flowering (at or shortly after heading in barley) for scab control will also provide effective control of leaf diseases.

Author(s):

[Pierce Paul](#)

Field Estimations of Alfalfa Fiber Content



Ohio has seen its 5th warmest winter on record but spring temperatures across the state have consistently been 2-6° F below long-term averages. Climatic variations every year make it difficult to know the exact date to determine harvest of our first alfalfa crop. Research has shown % Neutral Detergent Fiber (NDF) can vary up to 10 units on the same calendar day from one year to the next, therefore making harvest decisions based on calendar date is unreliable. Many producers also base harvest decisions primarily on alfalfa maturity. Variable weather conditions affect the rate of bud and flower development in alfalfa, thus relying solely on maturity can be misleading.

The best method to determine alfalfa (NDF) is by traditional wet chemistry analysis; however, these traditional methods for determining %NDF are often too time consuming when a rapid estimation of NDF is needed for making harvest decisions. In the spring, average alfalfa NDF increases about 5 percentage units each week.

Years ago, the University of Wisconsin developed a method to estimate %NDF in the field. This method is referred to as PEAQ, Predicative Equations for Alfalfa Quality. This method uses alfalfa height and maturity to estimate NDF of a standing alfalfa crop. Instructions on how to estimate NDF in pure alfalfa stands can be found here: <https://forages.osu.edu/sites/forages/files/imce/Estimate%20Alfalfa%20NDF.pdf> Here is a short video describing the method:

PEAQ was developed for clean pure alfalfa stands. Using this method to estimate NDF of weedy alfalfa or grass-alfalfa stands, will be inaccurate. Cornell University has developed a method to estimate forage NDF for grass-alfalfa mixtures. This method is described

here <http://blogs.cornell.edu/ccefieldcropnews/2016/05/10/new-alfalfa-grass-ndf-estimation-tool-for-smart-phones/>.

Ohio's cold spring affected alfalfa development across the state. Alfalfa NDF is approximately 4.3 to 10 percentage units behind where development was last year. Over the next few weeks we will be monitoring and reporting alfalfa %NDF across the state.

Even though it is typical to see alfalfa jump 5 NDF units in a week's time during spring development, the last two weeks across Ohio has shown a change of only 0.8 to 3.4 units of NDF. Below are NDF estimates from last two weeks.

Table 1. Alfalfa Average % NDF for Three Counties in Ohio (Second Week of May)

Date	Location	Average % NDF	Stage
5/13/20	Clark County	30.9	Vegetative
5/7/20	Pike County	31.2	Vegetative
5/13/20	Stark County	30.3	Vegetative

Table 2. Alfalfa Average %NDF for Five Counties in Ohio (Third Week of May)

Date	Location	Average % NDF	Stage
5/17/20	Auglaize	29.6	Vegetative
5/18/20	Clark County	34.3	Vegetative/ Early bud
5/18/20	Licking	34	Vegetative
5/15/20	Pike County	32	Vegetative

5/18/20	Stark County	31.3	Vegetative
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Warmer weather and moisture will continue to move alfalfa NDF along quickly. Alfalfa producers in southern regions of Ohio should start thinking about harvesting alfalfa stands soon if the goal is to hit a forage NDF of 40% for high quality alf

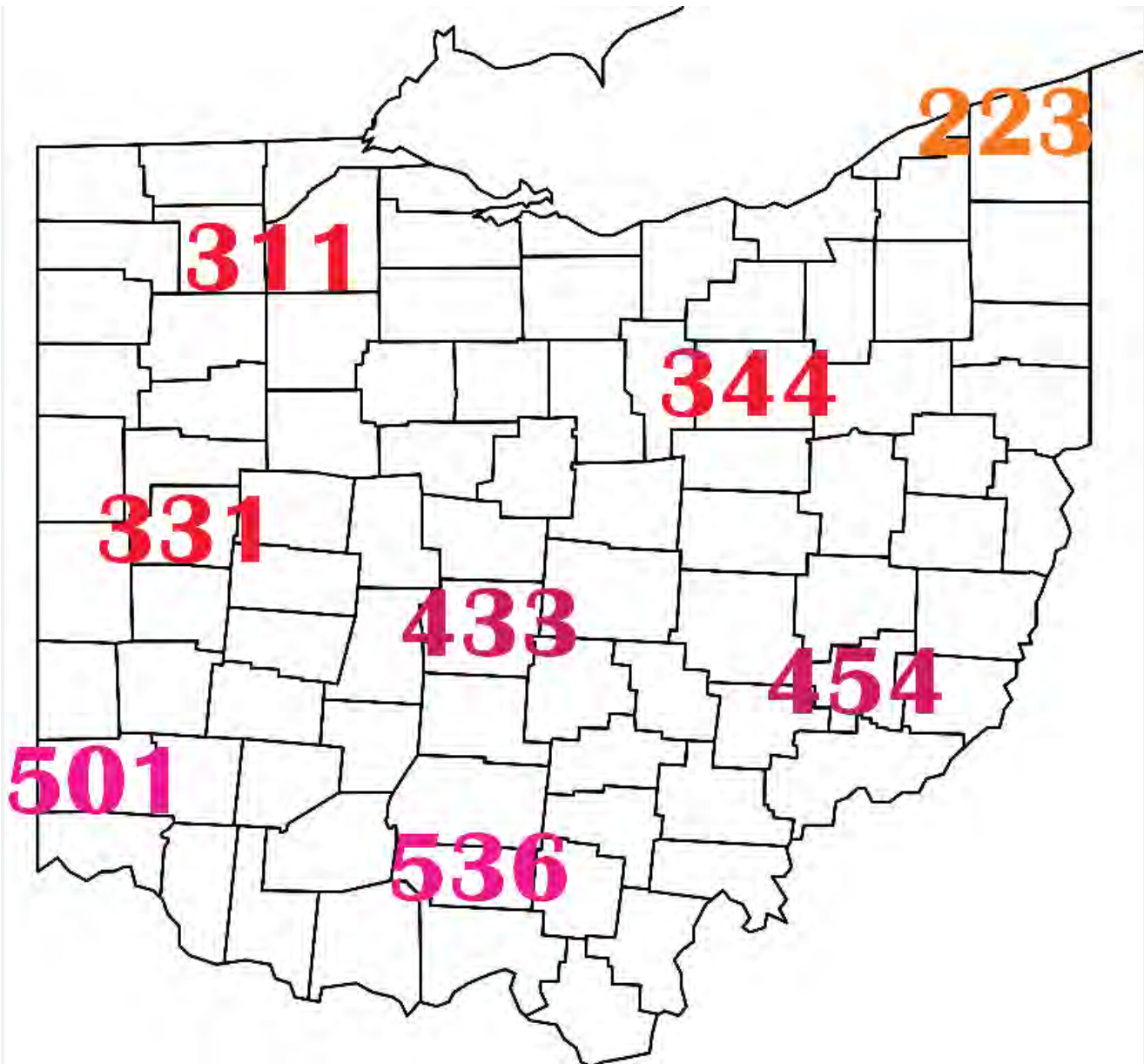
Author(s):

[Angela Arnold](#), [Mark Sulc](#), [Jeff Stachler](#), [Will Hamman](#), [Dean Kreager](#)

Alfalfa Weevil Update



Peak alfalfa weevil feeding damage occurs between 325 and 575 heat units (based on accumulation of heat units from January 1 with a base of 48°F). All monitored locations are now in or close to this range except Ashtabula. We recommend alfalfa weevil scouting as regular part of your program. For more details on alfalfa weevil scouting and thresholds please see our April 13 article <https://agcrops.osu.edu/newsletter/corn-newsletter/2020-09/alfalfa-weevil-%E2%80%93-it%E2%80%99s-closer-you-think>



Accumulated growing degree days (base 48°F sine calculation method) for January 1-May 17, 2020 at several CFAES Ag Weather System (<https://www.oardc.ohio-state.edu/weather1/>) locations and additional NOAA stations around Ohio.

Author(s):

Return to Land is a measure calculated to assist in land rental and purchase decision making. The measure is calculated by starting with total receipts or revenue from the crop and subtracting all expenses except the land expense. Returns to Land for Ohio corn (Total receipts minus total costs except land cost) are projected to range from -\$48 to \$72 per acre in 2020 depending on land production capabilities. Returns to land for Ohio soybeans are expected to range from \$65 to \$214 per acre depending on land production capabilities. Returns to land for wheat (not including straw or double-crop returns) are projected to range from \$70 per acre to \$173 per acre.

Total costs projected for trend line corn production in Ohio are estimated to be \$759 per acre. This includes all variable costs as well as fixed costs (or overhead if you prefer) including machinery, labor, management and land costs. Fixed machinery costs of \$75 per acre include depreciation, interest, insurance and housing. A land charge of \$187 per acre is based on data from the Western Ohio Cropland Values and Cash Rents Survey Summary. Labor and management costs combined are calculated at \$67 per acre. Details of budget assumptions and numbers can be found in footnotes included in each budget.

Total costs projected for trend line soybean production in Ohio are estimated to be \$517 per acre. (Fixed machinery costs: \$59 per acre, land charge: \$187 per acre, labor and management costs combined: \$46 per acre.)

Total costs projected for trend line wheat production in Ohio are estimated to be \$452 per acre. (Fixed machinery costs: \$34 per acre, land charge: \$187 per acre, labor and management costs combined: \$41 per acre.)

Current budget analyses indicates favorable returns for soybeans compared to corn but crop price change and harvest yields may change this outcome. These projections are based on OSU Extension Ohio Crop Enterprise Budgets. Newly updated Enterprise Budgets for 2020 have been completed and posted to the **Farm Office** website: <https://farmoffice.osu.edu/farm-management-tools/farm-budgets>

Author(s):

[Barry Ward](#)

Other Articles

CFAP Direct Support sign up begins May 26

By: Peggy Kirk Hall, Associate Professor, Agricultural & Resource Law Wednesday, May 20th, 2020



We've been anxiously waiting for details on additional financial support to farmers through the Coronavirus Food Assistance Program (CFAP). Those details finally arrived yesterday, when the USDA announced its Final Rule for CFAP's Direct Support to Farmers and Ranchers Program, which will allocate \$16 billion in funding from the Coronavirus Aid, Relief, and Economic Security (CARES) Act and the Commodity Credit Corporation.

The Farm Office team has digested the Final Rule and written an explanation in our latest news bulletin here: [Sign up for USDA-CFAP Direct Support to Begin May 26, 2020](#). The news bulletin provides details on:

- Eligibility requirements for producers
- Eligible commodities
- Payment limitations
- Application and timeline
- Payment calculations, including examples of how to calculate payments

The Farm Office team will also host a **webinar** about Ohio's CFAP sign up process soon. Be sure to check back with this blog and our [Farm Office Live](#) page for further information about the webinar. The Final Rule and additional information on CFAP are available on [USDA's CFAP website](#).

The Ag Law Harvest

By: Peggy Kirk Hall, Associate Professor, Agricultural & Resource Law Tuesday, May 19th, 2020
Written by Ellen Essman and Peggy Kirk Hall

Source: <https://farmoffice.osu.edu/blog/tue-05192020-1057am/ag-law-harvest>

Many people are still working from home, but that hasn't stopped legal activity in Washington, D.C. Bills have been proposed, federal rules are being finalized, and new lawsuits are in process. Here's our gathering of the latest ag law news.

SBA posts Paycheck Protection Program (PPP) loan forgiveness application. We've been waiting to hear more about how and to what extent the SBA will forgive loans made under the CARES Act's PPP that many farm businesses have utilized. The SBA recently posted the forgiveness application and instructions for applicants [here](#). But there are still unanswered questions for agricultural applicants as well as talk in Congress about changing some of the forgiveness provisions, suggesting that loan recipients should sit tight rather than apply now. Watch for our future blog post and a discussion on the forgiveness provisions in our next [Farm Office Live webinar](#).

House passes another COVID-19 relief bill. All predictions are that the bill will go nowhere in the Senate, but that didn't stop the House from passing a \$3 trillion COVID-19 relief package on May 15. The "HEROES Act" includes a number of provisions for agriculture, including an additional \$16.5 billion in direct payments to producers of commodities, specialty crops and livestock, as well as funds for local agriculture markets, livestock depopulation losses, meat processing plants, expanded CRP, dairy production, other supply chain disruptions, and biofuel producers (discussed below). Read the bill [here](#).

Proposed bipartisan bill designed to open cash market for cattle. Last week, Republican Senator Chuck Grassley and Democratic Senator Jon Tester introduced a bill that "would require large-scale meatpackers to increase the proportion of negotiable transactions that are cash, or 'spot,' to 50 percent of their total cattle purchases." The senators hope this change would bring up formula prices and allow livestock producers to better negotiate prices and increase their profits. In addition, the sponsors claim the bill would provide more certainty to a sector hard hit by coronavirus. Livestock groups aren't all in agreement about the proposal. You can read the bill [here](#), Senator Grassley's press release [here](#) and Senator Tester's news release [here](#).

New Senate and House bills want to reform the U.S. food system. Representative Ro Khanna from California has introduced the House [companion bill](#) to the Senate's [Farm System Reform Act](#) first introduced by Senator Cory Booker in January. The proposal intends to address underlying problems in the food system. The bill places an immediate moratorium on the creation or expansion of large concentrated animal feeding operations and requires such operations to cease by January 1, 2040. The proposal also claims to strengthen the Packers and Stockyards Act and requires country of origin labeling on beef, pork,

and dairy products. The bill would also create new protections for livestock growers contracted by large meat companies, provide money for farmers to transition away from operating animal feeding facilities, strengthen the term “Product of the United States” to mean “derived from 1 or more animals exclusively born, raised, and slaughtered” in the U.S., and, similar to the Grassley/Tester bill above, require an increased percentage of meatpacker purchases to be “spot” transactions.

Lawmakers ask Trump to reimburse livestock producers through FEMA. In another move that seeks to help livestock producers affected by the pandemic, a bipartisan group of U.S. Representatives sent a letter to Donald Trump imploring him to issue national guidance to allow expenses of livestock depopulation and disposal to be reimbursed under FEMA's Public Assistance Program Category B. The lawmakers reason that FEMA has "been a valued Federal partner in responding to animal losses due to natural disasters," and that the COVID-19 epidemic should be treated "no differently." You can read the letter [here](#).

More battling over biofuels. Attorneys General from Wyoming, Utah, Louisiana, Oklahoma, Texas, Arkansas and West Virginia have sent a request to EPA Administrator Andrew Wheeler to waive the Renewable Fuel Standard (RFS) because of COVID-19 impacts on the fuel economy. The letter states that reducing the national quantity of renewable fuel required would alleviate the regulatory cost of purchasing tradable credits for refiners, who use the credits to comply with biofuel-blending targets. Meanwhile, 70 mayors from across the U.S. wrote a [letter](#) urging the opposite, and criticizing any decisions not to uphold the RFS due to the impact that decision would have on local economies, farmers, workers, and families who depend on the biofuels industry. The House is also weighing in on the issue. In its recently passed [HEROES Act](#), the House proposes a 45 cents per gallon direct payment to biofuel producers for fuels produced between Jan 1 and May 1, 2020 and a similar payment for those forced out of production during that time.

New USDA rule for genetically engineered crops. A final rule concerning genetically engineered organisms is set to be published this week. In the rule, USDA amends biotechnology regulations under the Plant Protection Act. Importantly, the new rule would exempt plants from regulation by the Animal and Plant Health Inspection Service (APHIS) if the plants are genetically engineered but the same outcome could have occurred using conventional breeding. For instance, gene deletions and simple genetic transfers from one compatible plant relative to another would be exempted. If new varieties of plants use a plant-trait mechanism of action combination that has been analyzed by APHIS, such plants would be exempt. You can read a draft of the final rule [here](#).

Trump's new WOTUS rule attacked from both sides of the spectrum. A few weeks ago, we [wrote about](#) the Trump Administration's new “waters of the United States” or WOTUS rule. Well, it didn't take too long for those who oppose the rule to make their voices heard. The New Mexico Cattle Growers Association (NMCGA) sued the administration, claiming that the new rule is still too strict and leaves cattle ranchers questioning whether waters on their land will be regulated. In their [complaint](#), NMCGA argues

that the new definition violates the Constitution, the Clean Water Act, and Supreme Court precedent. On the other side, the Natural Resources Defense Council (NRDC), along with other conservation groups, [sued](#) the administration, but argued that the new rule does not do enough to protect water and defines “WOTUS” too narrowly. Here we go again—will WOTUS ever truly be settled?

The Farm Office is Open! Join us for analysis of these and other legal and economic issues facing farmers in the Farm Office Team’s next session of “**Farm Office Live**” on **Thursday, May 28 at 9:00 a.m.** Go to [this link](#) to register in advance or to watch past recordings.

Intensive farming increases risk of epidemics

Date: May 4, 2020

Source: University of Bath

Source: <https://www.sciencedaily.com/releases/2020/05/200504155200.htm>

Overuse of antibiotics, high animal numbers and low genetic diversity caused by intensive farming techniques increase the likelihood of pathogens becoming a major public health risk, according to new research led by UK scientists.

An international team of researchers led by the Universities of Bath and Sheffield, investigated the evolution of *Campylobacter jejuni*, a bacterium carried by cattle which is the leading cause of gastroenteritis in high income countries.

Campylobacter facts:

- Causes bloody diarrhea in humans
- Transferred to humans from eating contaminated meat and poultry
- Although not as dangerous as typhoid, cholera or *E.coli*, it causes serious illness in patients with underlying health issues and can cause lasting damage.
- Around 1 in 7 people suffer from an infection at some point in their life
- Causes three times more cases than *E.coli*, Salmonella and listeria combined
- Carried in the faeces of chickens, pigs, cattle and wild animals
- Campylobacter is estimated to be present in the faeces of 20% cattle worldwide
- The bug is very resistant to antibiotics due to their use in farming

The researchers, publishing in the journal *Proceedings of the National Academy of Sciences*, studied the genetic evolution of the pathogen and found that cattle-specific strains of the bacterium emerged at the same time as a dramatic rise in cattle numbers in the 20th Century.

The authors of the study suggest that changes in cattle diet, anatomy and physiology triggered gene transfer between general and cattle-specific strains with significant gene gain and loss. This helped the bacterium to cross the species barrier and infect humans, triggering a major public health problem.

Combine this with the increased movement of animals globally, intensive farming practices have provided the perfect environment in which to spread globally through trade networks.

Professor Sam Sheppard from the Milner Centre for Evolution at the University of Bath, said: "There are an estimated 1.5 billion cattle on Earth, each producing around 30 kg of manure each day; if roughly 20 per cent of these are carrying *Campylobacter*, that amounts to a huge potential public health risk.

"Over the past few decades, there have been several viruses and pathogenic bacteria that have switched species from wild animals to humans: HIV started in monkeys; H5N1 came from birds; now Covid-19 is suspected to have come from bats.

"Our work shows that environmental change and increased contact with farm animals has caused bacterial infections to cross over to humans too.

"I think this is a wake-up call to be more responsible about farming methods, so we can reduce the risk of outbreaks of problematic pathogens in the future."

Professor Dave Kelly from the Department of Molecular Biology and Biotechnology at the University of Sheffield said: "Human pathogens carried in animals are an increasing threat and our findings highlight how their adaptability can allow them to switch hosts and exploit intensive farming practices."

The researchers hope that their study can help scientists predict potential problems in the future so they can be prevented before they turn into another epidemic.

University of Bath. "Intensive farming increases risk of epidemics." ScienceDaily. ScienceDaily, 4 May 2020. <www.sciencedaily.com/releases/2020/05/200504155200.htm>.

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