

# NORTHEAST OHIO AGRICULTURE NEWSLETTER

Your Weekly Agriculture Update for  
Ashtabula and Trumbull Counties

July 30, 2019



*Waterhemp has been found in Northern Trumbull County*

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## ***Hello Northeast Ohio Counties!***

Well, it's here – waterhemp. If you haven't scouted your soybean fields yet, do it now. This weed can be resistant to just about any herbicide, and you do not want this going to seed in your fields. Waterhemp is in the pigweed family, but it can be distinguished from the others by the lack of hairs and lance shaped leaves. See the Iowa State ID guide at the end of this newsletter. If you need help identifying suspected weeds please call the Extension office. Waterhemp is already wreaking havoc in western Ohio, and we do not want the same situation in NE Ohio. We're here to help so give us a call.

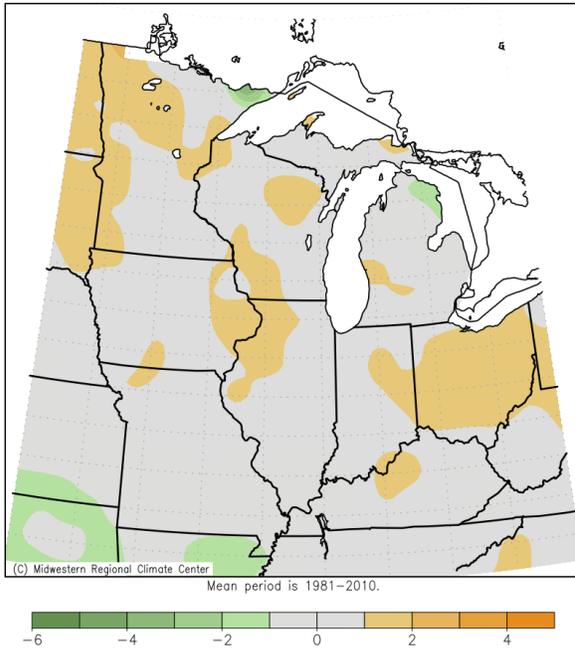
Lee Beers  
Trumbull County  
Extension Educator

Andrew Holden  
Ashtabula County  
Extension Educator

# A more normal pattern ahead into August

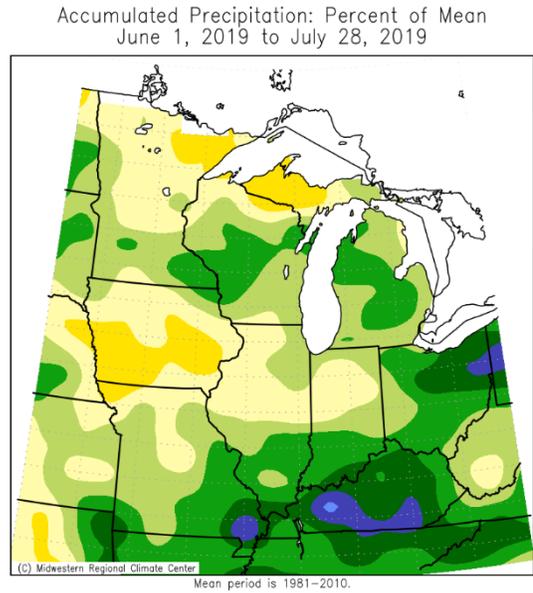
By: Jim NoJune and July together for Ohio will go down as 1-2 degrees warmer than normal and rainfall will go down on average as 100-175% of normal. However, details and timing matter. Looking at July only, rainfall will go down as 75-100 percent of normal over the southwest part of the state while the northern and east will down down as 100-150% of normal.

Average Temperature (°F): Departure from Mean  
June 1, 2019 to July 27, 2019



Midwestern Regional Climate Center  
cli-MATE: MRCC Application Tools Environment  
Generated at: 7/29/2019 8:34:54 AM CDT

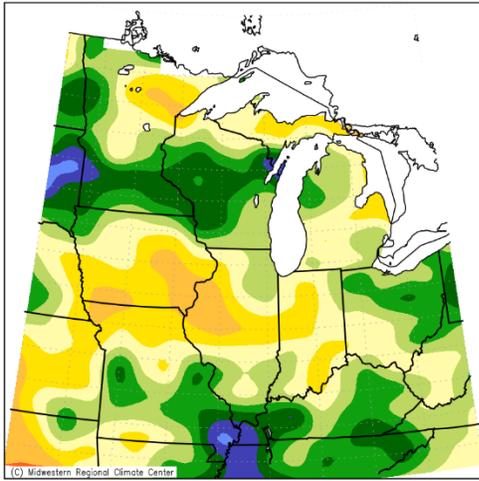
Average Temperature: Departure from  
Mean June 1, 2019 - July 27, 2019



Midwestern Regional Climate Center  
cli-MATE: MRCC Application Tools Environment  
Generated at: 7/29/2019 8:33:54 AM CDT

Over the next two weeks rainfall will be at or slightly below normal in the 1-2 inch range. Rainfall is expected into Tuesday July 30. After that rain event, the next will not occur until about August 6 or 7. The good news is temperatures will be close to normal over the next two weeks. There will be a burst of above normal temperatures this coming weekend though.

Accumulated Precipitation: Percent of Mean  
July 1, 2019 to July 28, 2019



### NOAA/Climate Prediction Center 6-10 Day Temperature Outlook

<https://www.cpc.ncep.noaa.gov/products/predictions/610day/610temp.new.gif>

### NOAA/Climate Prediction Center 6-10 Day Rainfall Outlook

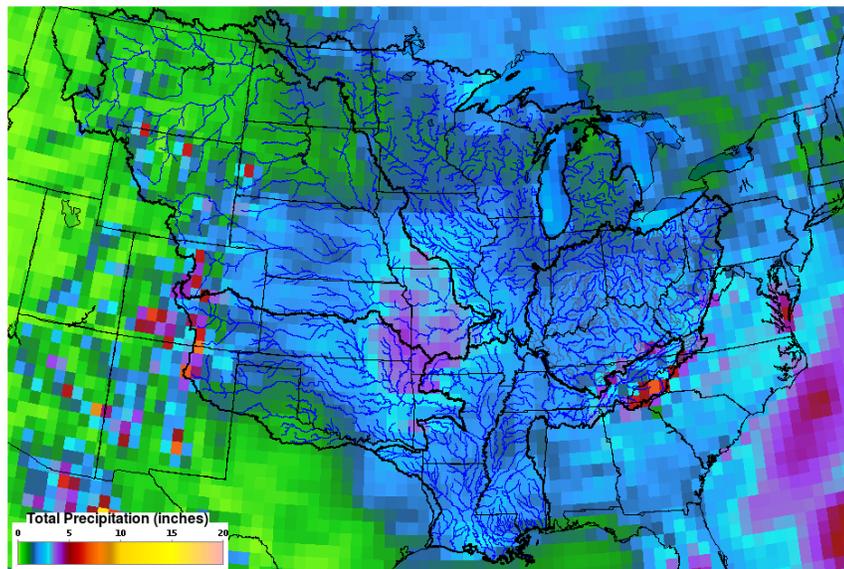
<https://www.cpc.ncep.noaa.gov/products/predictions/610day/610prcp.new.gif>

Two week rainfall totals are expected in the 1-2 inch range as attached graphic shows.

The outlook for August is near normal temperatures and precipitation.



**NAEFS 16-day Ensemble Mean Total QPF from 07/29/19 00Z**  
Creation date/time: Mon Jul 29 09:50 GMT 2019



For individual location specifics visit <https://water.weather.gov>

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# ***Expect cornfields pollinating well into August***

By: Peter Thomison

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-24/expect-cornfields-pollinating-well-august>

According to the National Agricultural Statistics Service for the week ending July 28, 2019, 32% of the state's corn was silking compared to 75% for the 5-year average. Given the wide range in corn planting dates this year, most corn will not achieve tasselling and silking until we are well into August. The pollination period, the flowering stage in corn, is the most critical period in the development of a corn plant from the standpoint of grain yield determination. Stress conditions (such as hail damage and drought) have the greatest impact on yield potential during the reproductive stage. The following are key steps in the corn pollination process.

Most corn hybrids tassel and silk about the same time although some variability exists among hybrids and environments. On a typical midsummer day, peak pollen shed occurs in the morning between 9:00 and 11:00 a.m. followed by a second round of pollen shed late in the afternoon. Pollen may be shed before the tassel fully emerges. Pollen shed begins in the middle of the central spike of the tassel and spreads out later over the whole tassel with the lower branches last to shed pollen. Pollen grains are borne in anthers, each of which contains a large number of pollen grains. The anthers open and the pollen grains pour out in early to mid morning after dew has dried off the tassels (see figure). Pollen is light and is often carried considerable distances by the wind. However, most of it settles within 20 to 50 feet.

Pollen shed is not a continuous process. It stops when the tassel is too wet or too dry and begins again when temperature conditions are favorable. Pollen stands little chance of being washed off the silks during a rainstorm as little to none is shed when the tassel is wet. In addition, silks are covered with fine, sticky hairs, which serve to catch and anchor pollen grains.

Under favorable conditions, pollen grain remains viable for only 18 to 24 hours. However, the pollen grain starts growth of the pollen tube down the silk channel within minutes of coming in contact with a silk and the pollen tube grows the length of the silk and enters the female flower (ovule) in 12 to 28 hours. A well-developed ear shoot should have 750 to 1,000 ovules (potential kernels) each producing a silk. The silks from near the base of the ear emerge first and those from the tip appear last. Under good conditions, all silks will emerge and be ready for pollination within 3 to 5 days and this usually provides adequate time for all silks to be pollinated before pollen shed ceases.

Pollen of a given plant rarely fertilizes all the silks of the same plant. Under field conditions, 97% or more of the kernels produced by each plant may be pollinated by

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other plants in the field. The amount of pollen is rarely a cause of poor kernel set. Each tassel contains as many as 2 million or more pollen grains, which translates to at least 2,000 pollen grains produced for each silk of the ear shoot. Shortages of pollen are a problem under conditions of extreme heat and drought; they may also occur in fields characterized by uneven emergence in later emerging plants. As noted above, poor kernel set is more often associated with poor timing of pollen shed with silk emergence – with silks emerging after pollen shed (poor “nick”). However, modern hybrids rarely exhibit this problem unless they experience extreme drought stress. Some of the new drought tolerant hybrids have shorter “anthesis silking intervals”, i.e. pollen shedding and silk emergence are more closely synchronized than hybrids more susceptible to drought. This shorter anthesis silking interval mitigates the impact of drought stress during pollination.



*Pollen grains are dispersed by the anthers that hang from the tassel during pollination. Anthers emerge from the flowers in each spikelet of the tassel.*

P. Thomison, Ohio State Univ. HCS, 2016

## ***Mid-season diseases and management***

By: Anne Dorrance

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-24/mid-season-diseases-and-management>

The rains last week around Wayne County (5+ inches) provided for saturated soil conditions. Cultivars with low resistance to *Phytophthora sojae* are now developing Phytophthora stem rot. These fields were planted the first week of June and the stands

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were good but are now beginning to thin out. This has been the pattern, it takes 1 to 2 weeks for above ground symptoms to develop on cultivars with resistance packages that are no longer effective. *Phytophthora sojae* has one host, soybean, and can adapt to some of the types of resistance that is bred into soybeans to manage this pathogen. Scout fields of soybeans 1 to 2 weeks after a rain to look for symptoms. If you find a plant or two, probably don't worry but if you easily find dozens of plants and the canopy is thinning due to loss in stand – look at the resistance package of the soybean. It is time for something new.



*Phytophthora stem rot in soybean*

Another thing is that plants that were planted in this first week of June were in flower. For those of you that have whitemold annually, there is an app developed by colleagues at University of Wisconsin. Sporecaster is the name (<https://ipcm.wisc.edu/apps/sporecaster/>). Just to be clear, this has not been validated under Ohio conditions. Last year, it was only 50% correct in predicting. This year is going to be very strange as we don't know what the late planting and all of the rain will impact whitemold, but if you try it – keep notes and go back and check to see if whitemold does develop. Most important, what is the resistance rating for the variety? The higher the resistance, the less likely that white mold above the yield loss levels will develop.

Frogeye leaf spot reports were low the last two weeks. For those fields now hitting the R2 growth stage, it is time to scout. For fields of soybean, known to be susceptible to this leaf spot, the fungicide timing is R3. There are lots of very effective materials available. We have begun our surveys for leaves with frogeye leaf spot to determine if the fungicides are still effective. If you would like to participate we would greatly appreciate the samples.

## ***My first cutting is just ‘cow hay’ – now what?***

By: Dr. Jimmy Henning, Forage Extension Specialist, University of Kentucky (First published in May 30 issue, The Farmer's Pride)

Source: <http://u.osu.edu/beef/2019/07/24/my-first-cutting-is-just-cow-hay-now-what/>

*Late cut or rain damaged first cuttings can still be part of a sound feeding program for your beef cows. Don't let a less-than-perfect first cutting stop the conversation on hay testing, feeding and forage management.*

Late cut hay is a fact of life in Kentucky. There are worse things. Drought, for example. It is no failure if some first cuttings of hay are late. Or rain damaged for that matter. The list of things that have to 'get done' in May never ends for the part-time, diversified farmers that form the bulk of the beef cattle producers in Kentucky.

Farmers face a never-ending set of 'what to do first' decisions. Something has to be second, or third. So late cuttings of hay happen. The real mistake is to let a less-than-perfect first cutting stop the conversation hay management because a farmer thinks we in Extension are disappointed. Frankly, it is amazing that anybody in Kentucky gets a good first cutting of hay in the barn.

### **Next steps if you think your first cutting is just ‘cow hay’**

The first thing to do is to get a representative core sample and send it to a certified lab for analysis. It is best but not absolutely necessary if it goes through the sweat before taking the sample. Next, store the hay inside if possible, but at least get it off the ground (on rock, pallets and so on). If you are going to have more than one cutting or hay from other fields, store so this lot of hay can be accessed and fed as needed.

Once the results are back, do some planning with the UK Beef Cow Supplementation Tool (<http://forage-supplement-tool.ca.uky.edu/>). This very simple tool will let you determine what you need to feed with your 'cow hay' to meet nutritional needs. Knowing your needs early can let you work with your supplier to secure best pricing.

This supplement tool calculates an intake figure from the total fiber in the hay, but you need to make sure actual consumption matches or exceeds the estimates from the tool. You may need to get some current weights for hay bales so you can back calculate intake from hay disappearance. Don't forget to take into account the waste that happens, even if this is only a guess.

The tool also cannot take into account changing energy needs with weather. As a guide, every 10 degree drop below the 'thermo-neutral' temperature increases energy needs by 5%. And the thermo-neutral temperature is greatly affected by whether the hair on the cow is wet. The thermo-neutral temperature for cows with dry hair coats is 18 F, but

55 F when that hair is wet. So the energy needs for cows when it is 35 F and raining is 10% higher than that predicted by the tool (55 – 35 is 20 and each 10 degree change means 5% more energy). Thinking back, we had a lot of 35 F and rainy days last winter, and cows lost a lot of condition.

Another thing to remember is that the summer is far from over, and other cuttings may be more timely. Hope springs eternal in a farmer. It has too.

Another idea – Make some serious plans to stockpile tall fescue. A well-managed (not overgrazed) field of tall fescue that is rested from mid-summer into the fall and fertilized with 60 lb of N in mid-August can provide better quality feed for cattle than any hay you will likely produce this summer. Grazing stockpiled fescue will lessen days where hay is necessary. Strip grazing the stockpiled fescue will make this high quality forage last longer (due to less waste) and quite possibly reduce mud caused from bale feeding later in the winter.

Remember, just because you made ‘cow hay’ does not mean the forage conversation is over. Not by a long shot.

*Happy Foraging.*

## ***Late Summer Establishment of Perennial Forages***

By: Rory Lewandowski, CCA, Mark Sulc

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-23/late-summer-establishment-perennial-forages>

We are quickly approaching the second good opportunity of the year for establishing perennial forage stands, which is in the month of August. Most of us were not able to establish forages this spring, and many existing stands were damaged by the winter followed by the heavy rainfall this year. It is time to make preparations and be ready to plant perennial forage stands in the next few weeks.



Typically, the main risk with late summer forage seedings is sufficient moisture for seed germination and plant establishment. However, many parts of Ohio have adequate soil moisture from recent rains, and the outlook for the first half of August is for normal precipitation levels. Prepare now and be ready to take advantage of planting ahead of storm fronts as they occur in late July and early August.

Advantages to late summer forage establishment include the following: forage seedlings are not competing with the flush of annual spring and summer weed emergence/growth, soil borne root rot and damping off disease organisms that thrive in cool, wet soils are usually not an issue, and there may be fewer competing farm tasks than in the spring.

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A very important consideration for seeding forages that is especially relevant this year is herbicide carryover restrictions. This will certainly be an issue to check on acres where corn and soybean herbicides were applied earlier this year in anticipation of planting, but rains prevented those crops from being planted. Before you consider establishing perennial forages on those prevented plant acres, please be aware that many grain crop herbicides have long rotation interval restrictions that will not allow safe planting of forages this year. The 2019 Ohio, Indiana, Illinois Weed Control Guide provides a summary table of herbicide rotation intervals for alfalfa and clovers (see <http://go.osu.edu/herbrotationintervals>). Forage grasses are not included in that table, but any restrictions will be stated on the herbicide labels. So, be sure to double-check your herbicide application history against the rotation restrictions stated on the labels for the forages you want to establish.

No-till seeding in August is an excellent choice to conserve soil moisture for good germination. Make sure that the field surface is relatively level and smooth if you plan to no-till seed because you will have to live with any field roughness for several years of harvesting operations. Sclerotinia crown and stem rot is a concern with no-till seedings of alfalfa in late summer and especially where clover has been present in the past. This pathogen causes white mold on alfalfa seedlings. They become infected during cooler rainy spells in late October and November, the disease develops during the winter, and seedlings literally "melt away" in winter and early spring. It can be devastating where the pathogen is present. No-till is especially risky where clover has been present because the sclerotia germinate from a shallow depth. Early August plantings dramatically improve the alfalfa's ability to resist the infection. Late August seedings are very susceptible, with mid-August plantings being intermediate.

In a no-till situation, minimize competition from existing weeds by applying a burndown application of glyphosate before planting. Using no-till when herbicide-resistant weeds are present, such as marehail in a previous wheat field, creates a very difficult situation with no effective control options, so tillage is probably a better choice in those situations.

Post-emergence herbicide options exist for alfalfa to control late summer and fall emerging winter annual broadleaf weeds. A mid- to late fall application of Butyrac (2,4-DB), bromoxynil, Pursuit or Raptor are the primary herbicide options for winter annual broadleaf weeds. Fall application is much more effective than a spring application for control of these weeds especially if wild radish/wild turnip are in the weed mix. Pursuit and Raptor can control winter annual grasses in the fall in pure legume stands but not with a mixed alfalfa/grass planting. Consult the 2019 Ohio, Indiana, Illinois Weed Control Guide and always read the specific product label for guidelines on timing and rates before applying any product.

For conventional tillage seeding prepare a firm seedbed to ensure good seed-to-soil contact. Be aware that too much tillage depletes soil moisture and increases the risk of soil crusting. Follow the "footprint guide" that soil should be firm enough for a footprint to sink no deeper than one-half inch. Tilled seedbeds do not need a pre-plant herbicide.

Finally, keep in mind the following factors to increase establishment success.

- **Soil fertility and pH:** The recommended soil pH for alfalfa is 6.5 to 6.8. Forage grasses and clovers should have a pH of 6.0 or above. The minimum or critical soil phosphorus level for forage legumes is 25 ppm Bray P1 or 34 ppm Mehlich-3 and for grasses it is 15 ppm Bray P1 and 20 ppm Mehlich-3. The critical soil potassium level is somewhere between 100 and 125 ppm for many of our soils.
- **Seed selection:** Be sure to use high quality seed of adapted, tested varieties and use fresh inoculum of the proper Rhizobium bacteria for legume seeds. "Common" seed (variety not stated) is usually lower yielding and not as persistent, and from our trials the savings in seed cost is lost within the first year or two through lower forage yields.
- **Planting date:** According to the 15<sup>th</sup> edition of the Ohio Agronomy guide, planting of alfalfa and other legumes should be completed between late July and mid-August in Northern Ohio and between early and late August in Southern Ohio. Most cool-season perennial grasses can be planted a little later. Check the Ohio Agronomy Guide (see <http://go.osu.edu/forage-seeding-dates>).
- **Planter calibration:** If coated seed is used, be aware that coatings can account for up to one-third of the weight of the seed. This affects the number of seeds planted in planters set to plant seed on a weight basis. Seed coatings can also dramatically alter how the seed flows through the drill, so calibrate the drill or planter with the seed going into the field.
- **Seed placement:** The recommended seeding depth for forages is one-quarter to one-half inch deep. It is better to err on the side of planting shallow rather than too deep.

Do not harvest a new perennial forage stand this fall. The ONLY exception to this rule is perennial and Italian ryegrass plantings. Mow or harvest these grasses to a two and a half to three-inch stubble in late November to improve winter survival. Do not cut any other species, especially legumes.

## ***Budget bill brings changes to Ohio's Right to Farm Law***

By: Peggy Kirk Hall, Associate Professor, Agricultural & Resource Law

Source: <https://farmoffice.osu.edu/blog/thu-07252019-1150am/budget-bill-brings-changes-ohio%E2%80%99s-right-farm-law>

The funny thing about a "budget bill" is that it's not all about the budget. Many laws that are not related to the budget are created or revised within a budget bill. That's the case with Ohio's HB 166, the "budget bill" signed on August 18 by Governor Dewine. In the

midst of the bill's 2,602 pages are revisions to an important law for agricultural landowners—the "Right to Farm" Law.

Ohio's Right to Farm Law, also referred to as the "Agricultural District Program," provides immunity from a civil nuisance claim made by those who move near an existing farm. To receive the immunity under the old law, the land must be enrolled as an "agricultural district" with the county auditor, agricultural activities have to be in place first, i.e., before the complaining party obtained its property interest, and the agricultural activities must not be in conflict with laws that apply to them or must be conducted according to generally accepted agricultural practices. The immunity comes in the form of an affirmative defense that a farmer can raise if sued for nuisance due to agricultural activities such as noise, odors, dust, and other potential interferences with neighbors. If the landowner can prove that the activities are covered by the Right to Farm law, the law requires dismissal of the nuisance lawsuit. For years, we've been encouraging farmers to enroll land in this program to protect themselves from those who move out near a farm and then complain that the farming activities are a nuisance.

The new revisions to the law in the budget bill change the requirements for the land and agricultural activities that can receive Right to Farm immunity. In addition to protecting agricultural activities on land that is enrolled with the county auditor as agricultural district land, the law will now also protect the following from nuisance claims:

- Agricultural activities on land devoted exclusively to agricultural use in accordance with section 5713.30 of the Revised Code, which is Ohio's Current Agricultural Use Valuation Program (CAUV), and
- Agricultural activities conducted by a person pursuant to a lease agreement, written or otherwise.

These two provisions significantly expand the geographic scope of the Right to Farm law. A landowner may not have to take the step to actively enroll and re-enroll land in the agricultural district program in order to obtain Right to Farm immunity. Instead, the agricultural activities are automatically covered by the Right to Farm law if the land is enrolled in Ohio's CAUV property tax reduction program or is under a lease agreement, presumably a farmland lease, whether that lease is in writing or is verbal. This means that any land in Ohio that is actively being used for commercial agricultural production will likely qualify for the Right to Farm law's nuisance protection.

The budget bill also added new language to the Right to Farm law that clarifies that "agricultural activities" means "common agricultural practices." The law specifically includes the following as "common agricultural practices:"

- The cultivation of crops or changing crop rotation;
- Raising of livestock or changing the species of livestock raised;
- Entering into and operating under a livestock contract;
- The storage and application of commercial fertilizer;
- The storage and application of manure;

- The storage and application of pesticides and other chemicals commonly used in agriculture;
- A change in corporate structure or ownership;
- An expansion, contraction, or change in operations;
- Any agricultural practice that is acceptable by local custom.

This new language answers a question that we've long heard from farmers: if I expand my farming operation or change it from the farming activities that I, my parents or grandparents have always done, will I still have Right to Farm protection? We couldn't answer this question with assurance because the law is unclear about whether it would also protect such changes. Under the new law, the answer is clear: transitions to new or expanded agricultural activities will also receive Right to Farm immunity. The law also states that certain practices, such as storing and applying fertilizers, pesticides, chemicals and manure, are "common agricultural practices."

The final change to the Right to Farm law concerns a provision that addresses farmers suing other farmers for nuisance. Under the old law, Right to Farm immunity does not apply if the plaintiff who brings the nuisance law suit is also involved in agricultural production. That is, farmers don't receive Right to Farm protection from nuisance claims by other farmers. The new law removes this provision. Under the revised law, farmers will be able to raise the Right to Farm law as an affirmative defense if sued for nuisance by another agricultural producer.

Many lawmakers who were focused on understanding and negotiating the financial provisions in Ohio's recent budget bill may have missed the inclusion of changes to our Right to Farm law in the bill. Even so, with the passage of the budget bill, the legislature significantly expanded the reach of the Right to Farm Law and agricultural activities in Ohio now have broad protections from nuisance lawsuits.

Find the changes to Ohio's Right to Farm Law--Ohio Revised Code 929.04, on pages 308 and 309 of HB 177, which is available on [this page](#).

## ***No pigweed left behind - late-season scouting for Palmer amaranth and waterhemp***

By: Mark Loux

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-24/no-pigweed-left-behind-late-season-scouting-palmer-amaranth-and>

If you don't already have to deal with waterhemp or Palmer amaranth, you don't want it. Ask anyone who does. Neither one of these weeds is easy to manage, both can cause substantial increases in the cost of herbicide programs, which have to be constantly changed to account for the multiple resistance that will develop over time (not "can",

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“will”). The trend across the country is for Palmer and waterhemp to develop resistance to any new herbicide sites of action that are used in POST treatments within about three cycles of use. Preventing new infestations of these weeds should be of high priority for Ohio growers. When not adequately controlled, Palmer amaranth can take over a field faster than any other annual weed we deal with, and waterhemp is a close second. Taking the time to find and remove any Palmer and waterhemp plants from fields in late-season before they produce seed will go a long way toward maintaining the profitability of Ohio farm operations. There is information on Palmer amaranth and waterhemp identification on most university websites, including ours – [u.osu.edu/osuweeds/](http://u.osu.edu/osuweeds/) (go to “weeds” and then “Palmer amaranth”). An excellent brief video on identification can be found there, along with an ID fact sheet. The dead giveaway for Palmer amaranth as we move into late summer is the long seedhead, and those on female seed-bearing plants are extremely rough to the touch. We recommend the following as we progress from now through crop harvest:

- Take some time now into late summer to scout fields, even if it's from the road or field edge with a pair of binoculars. This would be a good time to have a friend with a drone that provides real-time video, or your own personal satellite. Scouting from the road is applicable mostly to soybean fields, since corn will often hide weed infestations. Scout field borders and adjacent roadsides, areas that flood or receive manure application, and also CREP/wildlife area seedings. The latter can become infested due to contaminated seed produced in states where Palmer amaranth and waterhemp are endemic and not considered noxious. Reminder - ODA will test any seed used for these purposes for the presence of Palmer amaranth.

- Walk into the field to check out any weeds that could be Palmer amaranth, waterhemp, or are otherwise mysterious. If you need help with identification, send photos to us or pull plants and take them to someone who can identify them. Palmer and waterhemp are considerably different in appearance than giant ragweed and marestalk, the other two most common late-season offenders.

- Where the presence of Palmer amaranth or waterhemp is confirmed, check to see whether plants have mature seed (in Palmer infestations these are the rough female seedheads), by shaking/crushing parts of the seedhead into your hand or other surface that will provide contrast. Mature seed will be small and very dark. Plants without mature seed should be cut off just below the soil surface, and ideally removed from the field and burned or composted. Plants with mature seed should be cut off and bagged (at least the seedheads) and removed from the field, or removed via any other method that prevents seed dispersal through the field.

- If the Palmer amaranth or waterhemp population is too dense to remove from the field, some decisions need to be made about whether or how to mow or harvest. Harvesting through patches or infested fields will result in further spread throughout the field and

also contamination of the combine with weed seed that can then be dispersed in other fields. So consider: 1) not harvesting areas of the field infested with Palmer amaranth or waterhemp, and instead mowing several times to prevent seed production, and 2) harvesting the infested field(s) after all other fields have been harvested, and cleaning the combine thoroughly before further use. This also applies to any infestations that are discovered while harvesting. At least one equipment manufacturer has a good video about how to most thoroughly clean a combine.

- Feel free to contact OSU weed science for help with identification or management of Palmer amaranth and waterhemp. Mark Loux – [loux.1@osu.edu](mailto:loux.1@osu.edu), Bruce Ackley – [Ackley.19@osu.edu](mailto:Ackley.19@osu.edu). Also – let us know if you would like any of the “no pigweed left behind” magnets and we will get some to you.

## ***Western Bean Cutworm: Peak time to scout for egg masses***

By: WBC Team

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-24/western-bean-cutworm-peak-time-scout-egg-masses>



*WBC egg mass*

Results from week five of The Ohio State University Western bean cutworm (WBC) monitoring network has resulted in an overall increase of moths captured across Ohio. Meaning, last week (July 22 – 28) marks our peak week in adult WBC flight to date. A total of 26 counties monitored 79 traps across Ohio and resulted in a 2842 WBC adults (up from 2001 total last week) and a statewide average of 36.0 moths/trap (up from 25.3 average last week) (Figure 1). Since 2016, peak adult WBC emergence has typically occurred during the second or third week in July; however, with the cooler temperatures and increased rainfall the 2019 WBC peak week was delayed (Figure 2). If your county is averaging over 7 moths per week, now is the time we recommend scouting for WBC egg masses. [You can view our scouting video here.](#)

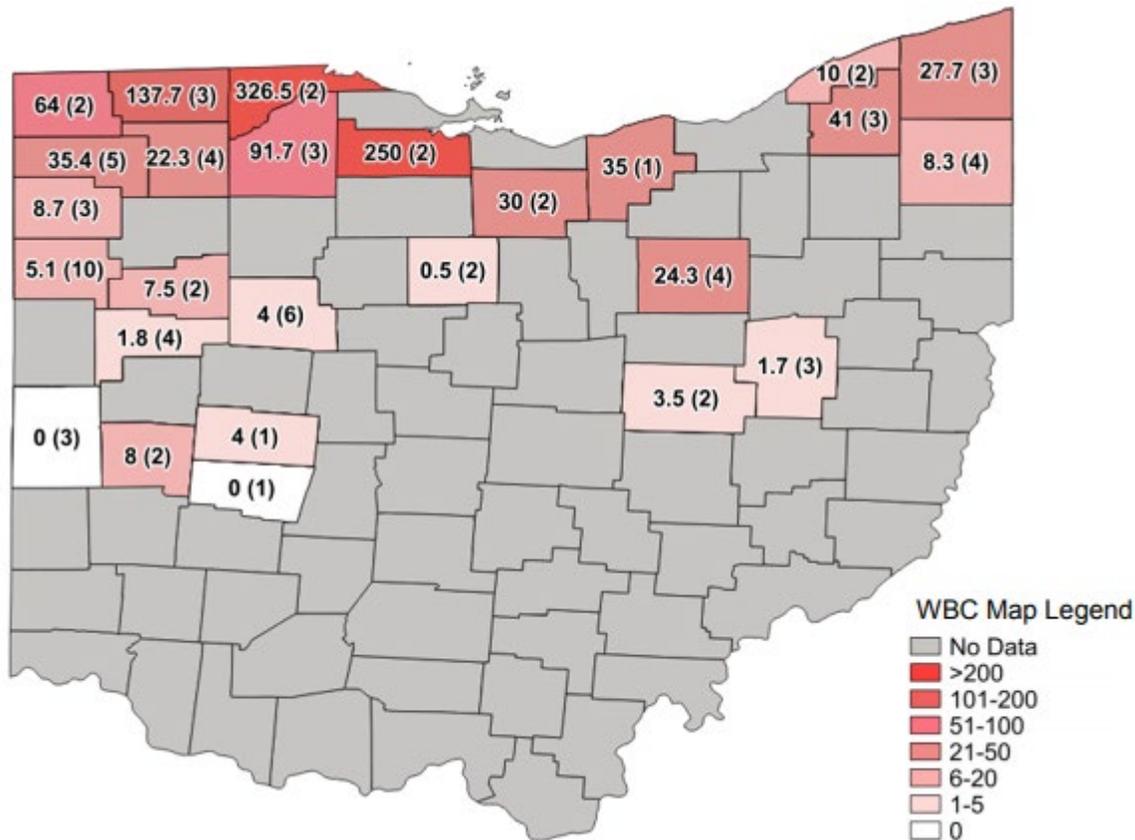


Figure 1. Average Western bean cutworm adult per trap followed by total number of traps in the county in parentheses for week ending July 28, 2019.

## Japanese Beetles and Other Defoliators

By: Kelley Tilmon, Andy Michel

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2019-24/japanese-beetles-and-other-defoliators>

We have been hearing reports of increasing numbers of Japanese beetles in corn and soybean, and sporadic infestations of various caterpillars in soybean. Japanese beetles are large with a shiny copper and green color. Foliage feeding in corn is almost never economic, though economic damage from silk clipping is possible (though rare). Consider a rescue treatment when silks are clipped to less than ½ inch and, fewer than 50% of the plants have been pollinated, and the beetles are still numerous and feeding in the field.

Japanese beetles will also feed on soybean foliage. While the damage might look startling, it is very rare that this reaches economic levels from Japanese beetle. A rescue treatment is advised when defoliation levels reach 30% in pre-bloom stages, and 20% in bloom to pod fill. These defoliation levels apply to the plant as a whole, not just

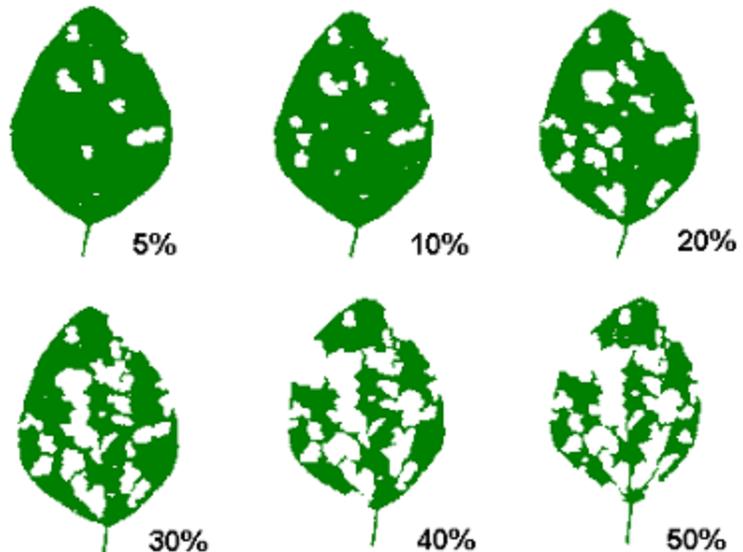
Northeast Ohio Agriculture

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certain leaves. Damage is often worst at the top of the canopy but on closer examination most of the plant is relatively unharmed. Make your decision based on the average condition of whole plants, not a scan of the top canopy. Also, defoliation tends to be worse on field edges, so make your assessment based on the field as a whole, including interior.



This same defoliation threshold can also be used for general defoliation from other of leaf-feeding insect in soybean, including various caterpillar species, grasshoppers, and Mexican bean beetles. A visual guide to defoliation is useful because it is very easy to over-estimate defoliation in soybean. If there are other foliage-feeding insects present in soybean the same percent defoliation guidelines can be used for all of them collectively.

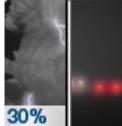


For more information about Japanese beetle and other defoliating insects visit our factsheet at:

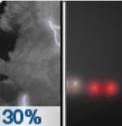
[https://aginsects.osu.edu/sites/aginsects/files/imce/ENT\\_39\\_14.pdf](https://aginsects.osu.edu/sites/aginsects/files/imce/ENT_39_14.pdf)

# Extended Forecast from NOAA, Weather.gov

## Cortland, OH

This Afternoon	Tonight	Wednesday	Wednesday Night	Thursday	Thursday Night	Friday	Friday Night	Saturday
 70%	 30%	 20%						
T-storms Likely	Chance T-storms then Patchy Fog	Slight Chance T-storms and Areas Fog	Partly Cloudy	Mostly Sunny	Mostly Clear	Sunny	Mostly Clear	Sunny
High: 79 °F	Low: 62 °F	High: 81 °F	Low: 58 °F	High: 81 °F	Low: 60 °F	High: 83 °F	Low: 62 °F	High: 83 °F

## Jefferson, OH

This Afternoon	Tonight	Wednesday	Wednesday Night	Thursday	Thursday Night	Friday	Friday Night	Saturday
 70%	 30%	 20%						
T-storms Likely	Chance T-storms then Patchy Fog	Slight Chance T-storms and Areas Fog	Partly Cloudy	Mostly Sunny	Mostly Clear	Sunny	Mostly Clear	Sunny
High: 79 °F	Low: 62 °F	High: 81 °F	Low: 58 °F	High: 81 °F	Low: 60 °F	High: 83 °F	Low: 62 °F	High: 83 °F

*Upcoming Events:*

**Ohio Manure Science Review 2019**

August 7 – 877 Strasburg Bolivar Road NW, Strasburg, Ohio

**Making Quality Hay Workshop**

August 24, 2019



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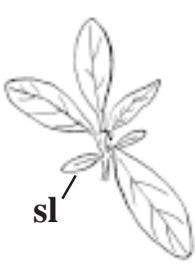
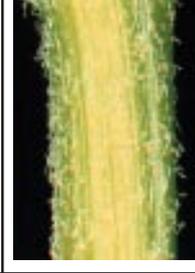
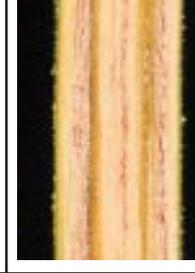
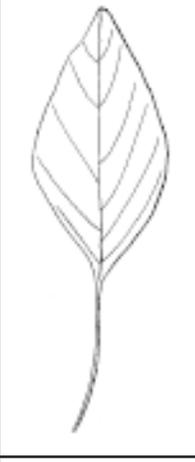
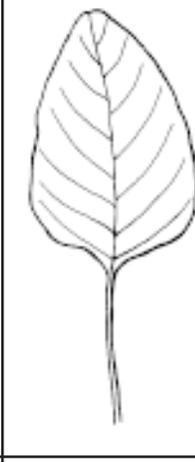
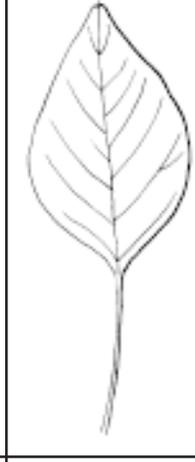
**ashtabula.osu.edu**

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information: <http://go.osu.edu/cfaesdiversity>.

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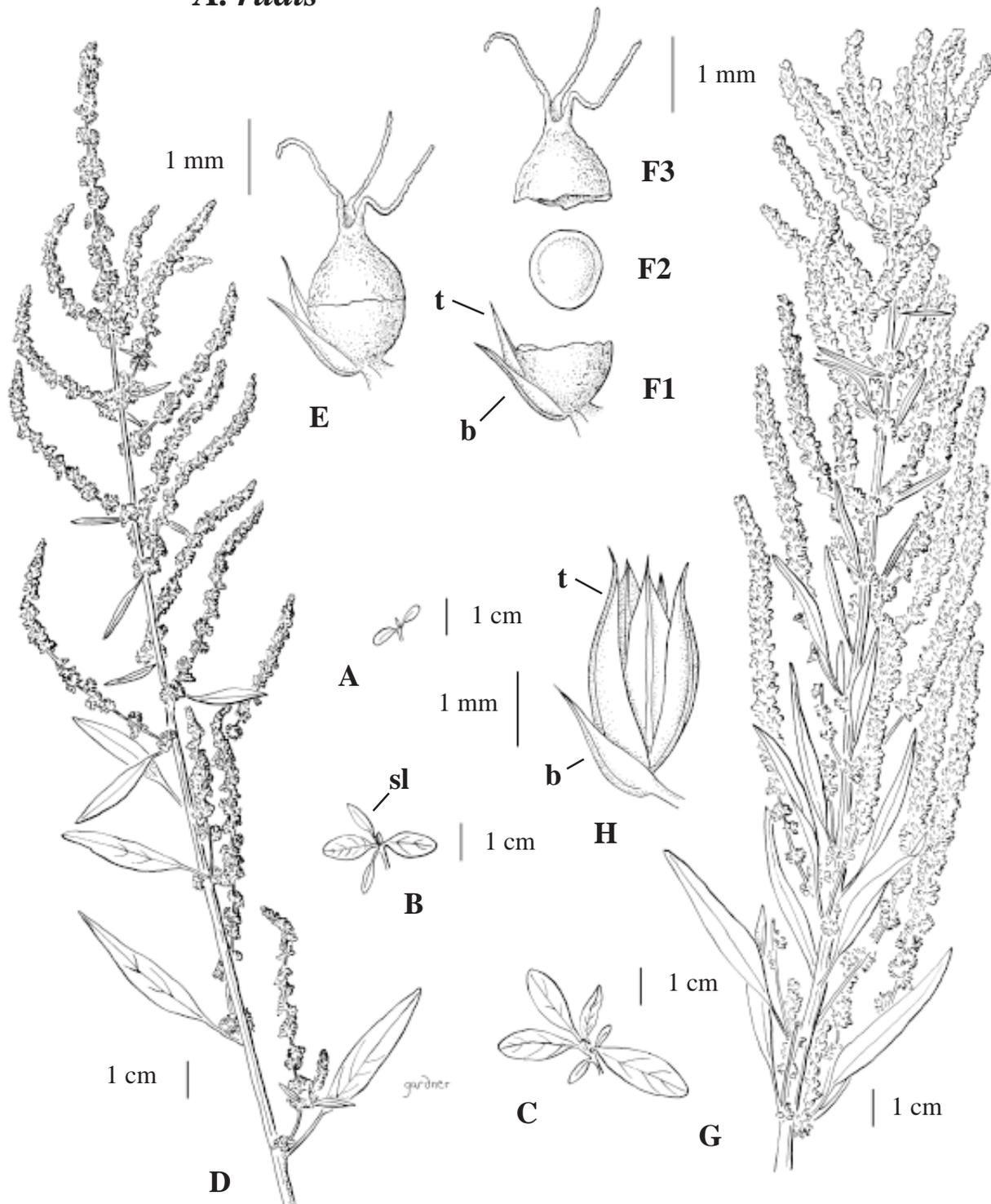
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# Pigweed and waterhemp identification table

	Common Waterhemp	Redroot Pigweed	Smooth Pigweed	Powell Amaranth	Palmer Amaranth
Seedling shape					
Stem hairs					
Leaf shapes					
Separate male and female plants	Yes	No	No	No	Yes
Seedhead shape	smooth, long, slender	prickly, short, stout	slightly prickly, long, slender	prickly, very long, thick	very prickly, very long, thick

# Common Waterhemp

*A. rudis*



**Figure 2.** A-C. Seedlings: A. Seed leaf stage. B. Two-leaf stage (sl—seed leaf). C. Four-leaf stage. D. Seedhead (female plant). E. Female flower. F. Female flower, exploded view: F1. Flower and bract; F2. Seed; F3. Seed cap. G. Flowering male plant. H. Male flower. (b—bract; t—tepal)



Common waterhemp in cornfield, Wapello County, Iowa



Seedlings.



Female seedhead.



Male flowers.

## Common Waterhemp (*Amaranthus rudis*, AMATA)

**U.S. Distribution:** Texas to Ohio.

### Descriptions

**Seedlings:** Seed leaves are oar-shaped. First true leaves are lance-shaped with a slight notch at the tip. Seedlings are very smooth and the plants remain smooth.

**Adults:** Common waterhemp plants are slender and willowy plants with many branches. Plants vary greatly in size, from knee high to eight feet tall. Stems and leaves are often brightly colored, varying from deep red or pink to emerald green; stems, leaves, and seedhead all may be differently colored on a single individual. Stems and leaves are very smooth and hairless with a bright, glossy appearance. Leaves are long and narrow. Seedheads are long, slender and smooth. Male and female plants are found in approximately equal numbers.

### Technical Characters

**Pistillate flowers:** Bracts short, 0.5-2.5 mm. Tepals usually 1, but often absent. Stigmas 3. Fruit opening when mature, the seed falling free (dehiscent) or not (indehiscent).

**Staminate flowers:** Bracts short, 0.9-2.8 mm. Tepals 5, all midribs short, extending 0-0.6 mm beyond the tepal blade apex.

### Management

Common waterhemp can be difficult to manage. Many biotypes are ALS herbicide resistant; there are also reports of triazine resistant biotypes. In addition, this species germinates later in the growing season and continues to germinate late in the growing season. Late germinating plants may only grow to a few inches but will flower and set viable seed. Narrow row soybean culture and rotary hoeing are not completely effective common waterhemp controls, but late cultivation, when row spacing is appropriate, or narrow row culture can minimize the impact of late emerging common waterhemp.

# Mental Health First Aid®

[www.mentalhealthfirstaid.org](http://www.mentalhealthfirstaid.org)

8 hour certification will be earned at each training

## Interested in taking a Mental Health First Aid Training?

Classes for adults who work with youth will be offered through OSU Extension:

**Community Event: August 20 8:00 a.m. – 4:30 p.m.**

**Buckeye Schools Educator Training: August 22 8:00 a.m.**

**Edgewood High School 2428 Blake Rd, Ashtabula, OH 44004**

Register at: <http://go.osu.edu/mentalhealthtraining>

Sometimes, first aid isn't

a **bandage**,

or **CPR**,

or the **Heimlich**,

or calling **911**.

Sometimes, first aid is **YOU!**

Someone you know could be experiencing a mental health challenge or crisis. You can help them.

You are more likely to encounter someone — friend, family member, student, neighbor, or member of the community — in an emotional or mental crisis than someone having a heart attack. Mental Health First Aid teaches a 5-step action plan to offer initial help to young people showing signs of a mental illness or in a crisis and connect them with the appropriate professional, peer, social, or self help care.

Anyone, ages 18 and over, can take the 8-hour Mental Health First Aid® or Youth Mental Health First Aid course and receive a 3 year certification from the National Council for Behavioral Health.

Sometimes, the best first aid is you. Take the course, save a life, and strengthen your community.



**For more information call Ashtabula County OSU Extension at 440-576-9008**

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*Assess for risk of suicide or harm*

*Listen nonjudgmentally*

*Give reassurance and information*

*Encourage appropriate professional help*

*Encourage self-help and other support strategies*



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