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OHIO STATE UNIVERSITY EXTENSION

Morrow County SCARLET & GRAY News

Volume 15 Issue 6 • September/October 2019

What are the Facts?? Information about the OSU Extension – Morrow County Renewal Levy!

On Tuesday, November 5, 2019 there will be a 0.5 mill tax **renewal** levy for 5 years to support OSU Extension - Morrow County which includes services and programming in the areas of 4-H Youth Development, Agriculture and Natural Resources, Family and Consumer Sciences, SNAP-Ed Nutrition Education and Community Development Education for Morrow County Citizens.

Why?

In 2009, OSU Extension - Morrow County only received \$6,250 of an annual budget request from the Morrow County Commissioners. This cut is due to the Morrow County financial crisis and a 1.3-million-dollar county budget shortfall for that year. The Morrow County Commissioners had to make cuts to balance the budget, cutting Extension and other departments was part of the budget balance. In

2009 Extension passed the first levy to support the office and renewed it in 2014. It is up for **renewal** again.

Why can't you get funding from The Ohio State University?

No OSU tuition, athletics or medical center funds help pay for OSU Extension at the county level. Only county, state and federal funds support an OSU Extension office. Ohio State University Extension has an agreement with Ohio county governments in which a county must first support OSU Extension financially before state government and federal funds additionally support the county OSU Extension program. These additional OSU Extension state and federal funds are separate from higher education funding. Currently, 50% of the educator salaries and benefits are paid by state and federal dollars. OSU Extension - Morrow County is your connection to the trusted resources of The Ohio

State University since 1919, but not funding.

What happens if the levy fails?

Programs and services conducted by OSU Extension - Morrow County, including 4-H will be eliminated unless funds are made available from the county. Last year 3,700 youth received educational programming.

Can 4-H members participate in another county program?

Ohio 4-H rules state that youth members are to participate in their county of residence. This is a funding issue, taxpayers in another county do not want to support educational programs for Morrow County youth. It puts the burden on their county commissioners and taxpayer dollars. The same would be for Morrow County taxpayers and their county commissioners, they don't want to pay to help educate another county's youth. The cross-

NOT a new tax!

county line 4-H policy is void when there is no Extension program in the county of residence. In short, no Extension program in a county means all 4-H membership opportunities end for the residents of that county.

Can Morrow County youth take their 4-H projects to the Ohio State Fair?

The Ohio State Fair rules state that youth must be a member of Ohio 4-H or FFA to participate in Jr. Fair Livestock competition. That is also the case for the 4-H horse projects, 4-H small animal projects, and 4-H "still" projects such as clothing, food, fishing etc. If there is no OSU Extension Office in a county there is no 4-H program in that county and no 4-H projects eligible to attend the Ohio State Fair Jr. Division competition. As before, breeding livestock projects could enter and participate in the Ohio State Fair Open Class Divisions.

Will we have a fair if the levy fails?

Yes, Morrow County can have a fair. OSU Extension - Morrow County and the Morrow County Agriculture Society are separate entities and are financed separately. Morrow County youth could have the opportunity to participate in the fair as decided by the Agriculture Society, but not as 4-H members, their 4-H membership and clubs will end if funds are not available to support Extension. Also, no Extension funds pay for the Jr. Fair Coordinators employed by the Sr. Fair Board.

What's it going to cost me?

Information based on Morrow County appraisal of property. For a 0.5 mill levy, homeowners would pay \$15.50 per year, per property valued at \$100,000.

How much will the levy provide in funding to the Extension Office? Although there can be a change year to year based on values and discounts, we have been given an approximate figure of \$315,000.

Isn't this levy just for 4-H?

No, it is for the OSU Extension - Morrow County office which provides leadership to the following program areas:

- 4-H Youth Development
- Agriculture and Natural Resources (including Master Gardeners)
- Family and Consumer Sciences (including SNAP-Ed nutrition education)
- Community Development.

Who will receive the funds collected by the levy?

These funds will not go into the county commissioner's general fund or another county fund/agency. All the funds collected by the levy must go directly to and used by the OSU Extension - Morrow County office.

Has this been done before?

Currently, eleven other counties across the state are successfully funded by county levies. Noble County has been a levy supported county since 1986.

Why should I pay for something extra that my taxes should be paying for?

As you look at your property tax statement, very little of your current taxes go to the general county fund through which Extension was funded before 2009. The county government relies on this little amount of money, sales tax revenue, and investments to run Morrow County. All these annual funds have not met the demand and mandates for these funds.

Why not use an income tax levy?

Current law does not allow us to use income tax levies.

Will my taxes go up each year?

How much you pay each year will depend on the value of your property. But for five years the 0.5 mill amount will stay the same. OSU Extension - Morrow County will need to renew another levy at the end of the five years to continue service.

Continued on Page 2

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U.S. Postage PAID
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THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURE,
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OHIO STATE UNIVERSITY Extension
5362 US Highway 42
Suite 101
Mt. Gilead, OH 43338

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Like us on Facebook: Ohio State University Extension - Morrow County

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OSU EXTENSION-MORROW COUNTY

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OSU Extension Renewal Levy Facts

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Who decides what the levy money is used for?

Morrow County citizens, Morrow County program Extension Educators, and the county Extension Advisory Committee (made up of Morrow County citizens) all work together to decide the needs of Morrow County. The needs of our county as well as research available establish programming and where dollars are to be spent. The more dollars available the more programming Extension can provide to a county.

How has the Extension office changed since the first levy was passed?

As promised in the first levy we have become a full-service office offering all Extension program areas. We hired Educators to meet the programming needs of our county and expanded our educational impact to reach more audiences. We will continue to survey and assess the needs to help our citizens.

How are dollars being used for your new office space?

Three years ago, we moved into the new Ag Credit Agriculture Center. Our OSU Extension office did NOT put any money into constructing this building. Our rent is 40 cents LESS per square foot for our usable space and we have free use of a large education/conference room with additional technology included. While at the Wilhelm Building, we were paying additional dollars to rent spaces for large education programs. That is no longer an issue at the Ag Credit Building.

How is a levy campaign financed?

Money used to support and finance the levy campaign is raised by the levy committee. All costs of the levy campaign are paid with contributions from supporters of OSU Extension - Morrow County only. No taxpayer dollars go into the levy campaign.

How can I help?

You can become involved in the campaign by talking to friends, neighbors and co-workers about the importance of these services to Morrow County citizens. Help is needed to, participate in a speaker's bureau, canvas door to door, make phone calls, and donate to the levy fund through treasurer, Melissa S. Kidwell, 5790 Co. Rd. 20, Mt. Gilead, Ohio 43338.

Can someone donate to the operations of OSU Extension - Morrow County?

Yes, for years other moneys, either donated or raised, have financially supported the operations of the OSU Extension - Morrow County office. This donation would be a tax-deductible donation. Please contact the Morrow County OSU Extension Office for more information.

What youth can participate in 4-H?

Youth ages 5 and in kindergarten to 19 all

may join the traditional club 4-H program all year long. Beyond traditional 4-H club membership we offer youth education programs county wide. These programs would only be limited to 4-H membership due to OSU state guidelines and liability. But remember youth may join 4-H anytime. We are also educating youth in schools by teaching new topics and/or enriching/adding to the curriculums being taught.

What is OSU Extension - Morrow County?

OSU Extension - Morrow County has been educating Morrow County since 1919. OSU Extension - Morrow County is your connection to the trusted resources of The Ohio State University. We offer practical information on issues of home, family living, agriculture, horticulture, businesses, community, and well-being that improves your everyday life.



Carri Jagger poses beside the OSU Extension float with Chris Clover and Charlotte Benedict.



The OSU Extension Float from the parade during the Victory Shaft Celebration Sept. 28.



The OSU Extension Float from the parade during the Victory Shaft Celebration Sept. 28.

OSU Extension has float in Victory Shaft Centennial Celebration parade

The Morrow County Victory Shaft Centennial Celebration was held in Mt. Gilead on Saturday, Sept. 28.

A Veteran's tribute for the 112 veterans featured on this year's banners and hosted by the Williamsport Grange #1815 began at 11 a.m. at the First Baptist Church in Mt. Gilead.

The parade began at the Morrow County fairgrounds in Mt. Gilead at 1 p.m. and featured three county high school bands, several antique tractors and over 27 floats. One of the floats was put together by the local OSU Extension Office to promote OSU Extension programming. OSU

Extension is also celebrating 100 years.

At 2:30 p.m., there was a re-enactment of the 1919 Victory Shaft dedication by the Morrow Little Theatre at the Victory Shaft in Mt. Gilead.

The monument was originally placed and unveiled on Dec. 4, 1919. Morrow County won the monument by purchasing more war bonds per capita than any other county in Ohio after previously winning a prior war bond campaign selling the most war bonds per capita in the nation.

The Victory Shaft bears the names of 29 World War I veterans who made the ultimate sacrifice.

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OSU Extension - Morrow County participation numbers

Over **3,700** Youth Annually

2,239
In school programming youth



1,568 Quality Assurance and Skillathon participation



Mt. Gillead 3rd Graders learning how Beavers affect the environment by building a dam.

Morrow County Scarlet & Gray News



Beef Quality Assurance Training Class



88 CLASSES
were offered related to agriculture or horticulture



Master Gardener
Volunteers Trained: **18**



Pesticide Applicator
Training and Fertilizer
Applicator Certification: **95**

495
Special Interest Programs
(i.e. Cloverbud Fun Day, Ohio Birds Program, Goat Clinic)

57 Career Exploration Workshops

Agriculture & horticulture programs reached
2,200
people in Morrow County in 2018

FCS Impact & Data:

22 participants from **17** businesses and agencies completed the Ohio Department of Health required Food Handler & Manager Certification.

324 youth and adults participated in Health and Wellness Programs such as Dining with Diabetes, 4-H Health Projects, and Live Healthy Live Well programming.

Of the **164** youth in the county who participated in the Real Money, Real World, program... **76%** report they would like to "Get more training or education after high school." **84%** report they would like to "Have a plan for my money that includes both needs and wants." **94%** report "I believe that participating in this program will help me in the future."

459 youth and adults participated in Sun Safety Presentations & DermaScan Screenings with information on being sun safe. **35%** reported they planned to use sunscreen more often and start wearing a hat.

221 individuals were reached regarding Home Food Preservation & Food Safety through workshops, individual instruction, presentations, a Health & Safety Fair, and pressure canner inspections with dial gauge testing.



AGRICULTURE



Palmer Amaranth is HERE in Morrow County!

By Mark M. Loux, Horticulture and Crop Science, The Ohio State University

Palmer amaranth has been found in two townships in Morrow County, Lincoln and North Bloomfield both under powerlines. The Palmer amaranth that was found in Lincoln township came in on the big wooden planks that the power company used when working on the powerlines. The other we believe came in bird feces.

What is Palmer amaranth and where is it coming from?

Palmer amaranth is an *Amaranthus* (pigweed) species that has become a devastating glyphosate-resistant weed problem in the South and parts of the Midwest over the past decade. It has caused substantial losses in crop yield and farm income, and a permanent increase in the cost of herbicide programs. Preventing additional Palmer infestations in Ohio is a primary goal of the OSU weed science program, and will require efforts from the entire Ohio agricultural community. There are several mechanisms for the movement of Palmer amaranth into Ohio:

- Movement of equipment from Palmer-infested areas into Ohio
 - The presence of Palmer seed in cotton-derived feed products that are transported from the south into Ohio, or in hay from Kansas
 - The presence of Palmer seed in cover crop and wildlife seed that originates in areas infested with palmer amaranth, such as Texas and Kansas
- What makes Palmer amaranth such a problem?**

- Female Palmer plants produce 100,000 to upwards of 500,000 seed
- Broad period of emergence -April to August
- Small seed that is well-adapted to minimum and no-tillage
- Rapid growth -up to 3 inches a day. Post-emergence herbicides must be applied when Palmer plants are less than 3 inches tall
- Readily develops herbicide resistance
- Dioecious reproductive system (male and female plants). Obligate outcrossing results in rapid spread of herbicide resistance

Palmer amaranth distribution-late 2018

Most counties shown on the map as "infested" (red square) have only a few populations



of Palmer amaranth. In some cases only a few plants were found and the "infestation" has been completely remediated. Palmer is more widespread in several areas:

- Near two dairies along the Madison-Fayette county line
- Wayne County east of Orrville
- Highland County east of Hillsboro
- Preble County
- Eastern Mahoning and Columbiana Counties

Herbicide resistance in Palmer amaranth

- Most populations of Palmer in Ohio are resistant to glyphosate (group 9) and ALS inhibitors (group 2). Palmer will not be controlled by burndown or postemergence applications of glyphosate alone. The addition of ALS inhibitors such as Classic and Pursuit will not improve control.

- Populations in the South have developed resistance to site 14 herbicides (fomesafen, Cobra, etc), and appear to be developing resistance to glufosinate (Liberty, Cheetah, Interline).
- Diversification of herbicide programs and preventing escapes from going to seed are essential to prevent the development of resistance to additional sites of action -use different sites of action in corn versus soybeans and multiple sites of action in postemergence treatments

Bottom line -steps to take for prevention

- Know what Palmer amaranth looks like and if there is any in the neighborhood.
- When purchasing used equipment, know where it has been previously. Avoid purchase of combines that come from Palmer-infested areas. Know where custom harvesting equipment has been previously.
- Scout recently seeded CREP, wildlife, and similar areas for the presence of Palmer. For any intended seedlings of this type, ODA will test seed lots for the presence of Palmer seed. They must pick it up from your operation (do not mail



or drop off). Contact ODA for information -614-728-6410. Seed can also be tested for a fee by the University of Illinois: web.extension.illinois.edu/plantclinic/download/herbicide.pdf

- Avoid use of cotton seed products or hay that might contain Palmer amaranth seed -check with feed supplier for more information. When using manure from another animal operation, know whether they are using cotton feed products or hay from Kansas.
- Include residual herbicides in corn and soybean programs to control the early-emerging Palmer plants.
- Scout fields starting in mid July for the presence of Palmer that escaped herbicide programs. Get help with identification if in doubt.
- Plants without mature seed (black) should be pulled out (uprooted) or cut off just below soil and removed from field, and then burned or buried at least a foot deep or composted. Plants with mature seed should be bagged and removed from field.
- Do not run the combine through Palmer



patches that are discovered during harvesting.

- Consult OSU and USB Take Action resources for additional information on management of established populations. u.osu.edu/osuweeds/takeactiononweeds.com

Revised 11/18

FORCING BULBS

Ohio State University
Master Gardener Volunteers

The Morrow County Mast Gardener Volunteers will teach you how to successfully force bulbs in the winter so that you can enjoy bulbs inside during the cold weather.

WHEN: Wednesday, Oct. 23 at 6:30 p.m.

WHERE: Ag Credit Upstairs Conference Room
5362 US Hwy 42, Mt. Gilead, Ohio



AGRICULTURE

Harvesting Very Late Planted Corn for Silage

By Mark Sule, Peter Thomison,
Bill Weiss, Rory Lewandowski, CCA

We have some very late planted corn this year that will be harvested for silage. Some of this corn was planted early enough to produce grain and will reach normal stages of maturity for silage harvest before a frost. The normal maturity stage for full-eared corn when the whole-plant dry matter content is correct for direct chopping and ensiling (32-36% dry matter, 64-68% moisture) usually occurs shortly after the corn kernels are fully denting and the milk line is in the upper half of the kernel.

But some corn was planted so late this year that pollination will not occur, and the stalks will be barren of grain. Other corn plantings will produce ears but will not reach the proper dry matter content in the dent stage before a frost. How should these two cases be managed? Joe Lauer, Extension Corn Specialist at the University of Wisconsin, addresses these scenarios in detail in the references listed at the bottom of this article, and are available online. Other references listed

provide additional details that apply to these conditions. Below are a few salient points taken from these references.

Corn producing ears with grain has two peaks in forage quality, with the first occurring at pollination (tassling/silking); however, whole plant moisture is too high at this stage for direct chopping and ensiling. After pollination, forage quality of the whole plant decreases until grain content increases sufficiently to begin offsetting the forage quality decline of the forage portion of the corn crop. Forage quality improves with increasing grain fill until reaching the second peak of forage quality, which occurs just after the grain kernels are fully denting and the milk line is about halfway down the kernel.

The median frost date in Ohio ranges from October 10 in the northwest to October 20 in southern Ohio and near Lake Erie and the Cleveland area (Ohio Agronomy Guide, 15th edition).

In Ohio, corn kernels will reach the dough stage 24 to 28 days after tasseling/silking (Ohio Agronomy Guide, 15th edition). If corn plants

are severely frosted before dough stage, the whole plant moisture will seldom drop enough to reach acceptable levels for proper fermentation before the plants rot in the field. Therefore, if it is anticipated that corn will NOT reach dough stage before a killing frost (consider median frost dates and current predictions of first frost date) then it is advisable to cut the corn with a mower earlier and wilt it in the field to the dry matter content that ensures good fermentation (see accompanying article in this newsletter "Wilt Corn Silage Before Ensiling").

If frost occurs in the dough stage (at least 24 to 28 days after tasseling) but prior to 50% milk line in the dent stage (45 to 52 days after tasseling), then the crop should be allowed to field-dry until whole-plant moisture drops to 64 to 68% (see accompanying article "Harvesting Immature Corn as Silage"). The more mature the kernel is prior to frost, the lower the whole plant moisture will be and the shorter the drying period necessary. Be sure to test moisture content before chopping.

Cutting height can also be raised to achieve drier forage, but this occurs at the expense of yield. Based on a meta-analysis of multiple published studies, researchers at the University of Florida (Paula et al., 2019) concluded that a 12-inch increase in cutting height of corn silage would increase the dry matter percentage of the silage by 2.5 – 3.0 units, but decrease forage yield by 0.7 tons/acre (on dry matter basis, not as-fed). The 12-inch cutting height increase caused forage quality to be improved (milk production per ton of silage increased) but milk production per acre of land decreased because of the lower forage yield.

Forage yield and quality of barren and poorly pollinated corn was evaluated in Wisconsin and provides useful information for what to expect with varying degrees of barrenness (see reference article below "Yield and Quality of July Planted Corn"). The planting date and timing of a killing frost will have a big effect, especially on forage yield achieved.

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Ohio State University Extension

Forage Analysis Class

Join Tim Barnes and Carri Jagger to learn how to get your livestock through the winter on poor quality hay.

Thursday, October 24 at 6:30 p.m.

at the

Ag Credit Building Upstairs Conference Room
5362 US Hwy 42, Mt. Gilead, OH 43338

Topics:

- Forage sampling
- Interpreting the results
- Feed supplement options
- Developing a fee ration

Contact information: Carri Jagger
419-947-1070 or jagger.6@osu.edu



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Ohio State University Extension

Swap and Sip Event

Morrow County Master Gardener Volunteers
and
Bunker's Mill Winery

Wednesday, Oct. 30

at 6:30 p.m.

at Bunker's Mill Winery

102 E. Main St., Cardington, OH 43315

A perennial plant swap and wine tasting. Dig and divide your favorite perennials to bring and share with others. Then we will be tasting wine.

Contact information: Carri Jagger
419-947-1070 or jagger.6@osu.edu





AGRICULTURE



Mineral Supplementation: The Benefits You May Not See

By Caitlin Hebbert, Livestock Consultant
(originally published by the Noble Research Institute, www.noble.org)

It's no secret that good nutritional management is one of the most vital contributions to a profitable herd.

Within the realm of cattle nutrition, protein and energy tend to receive the most hype due to their direct relationships to growth performance and overall body condition. This hype is rightfully placed since the first step to a good nutrition program is to identify and meet protein and energy requirements. The second step involves the lesser-discussed dark horse of the ruminant nutrition world: minerals.

Much of the discussion surrounding minerals is vague, and information is more often accepted by producers than is understood since the world of minerals is complicated and tedious to navigate. As a result, I often find myself on the receiving end of this conversation: "Mineral is so expensive and consumption seems to be hit-or-miss. What will happen if I stop feeding mineral?"

Mineral consumption does indeed vary — from animal to animal as well as from one month to the next. This is often reflective of changing mineral content in forage, fortified winter supplements and the production phase of cattle (growing, lactating, gestating, etc.). These fluctuations should not deter you from making mineral an option to your cattle year-round, as other sources of mineral for grazing cattle are neither constant nor consistent.

It is also important to note that the mineral deficiencies of cattle on an otherwise-well-managed nutrition program are often relatively minor. This may be referred to as a subclinical deficiency, a deficiency that presents itself in obscure ways.

Subclinical symptoms, while not always initially obvious, usually become apparent after they've already impacted your bottom line. Most of these subclinical deficiencies make you scratch your head and think "Hmmm, something is a little off," but rarely would you make the connection between a change in or a lack of mineral with the discrepancies you are observing. That is, unless you were aware of those connections existing.

Below are a few such connections that I've observed anecdotally, encountered in conversations with producers and verified in research.

"My conception rates are a little low this year."

Most cow herds in the Southern Great Plains are currently in the midst of calving and are rapidly approaching breeding season. The mineral requirements (and nutritional requirements in general) of cows are at their peak when lactation is also at its peak, 30 to 60 days postpartum. It is critical at this time to make sure your cows are in optimal body condition and that they have all the tools on the cellular level to conceive early in the breeding season.

Some of these tools are minerals that are highly active in various reproductive processes. Selenium, zinc and manganese in particular have been found to have direct effects on reproduction in cattle, significantly affecting processes such as ovarian function, steroidal synthesis, and even testicular development and function in bulls.

It is not uncommon for an extreme mineral deficiency to result in an open cow (as in she doesn't get bred or, just as likely, she suffers early embryonic loss following conception). However, a subclinical deficiency may yield a bred heifer or cow — but one that conceived during second or third service rather than conceiving upon first AI service or exposure to bull. This could lower

pregnancy rates in a short breeding season or extend your calving season.

It is well-documented that cows and heifers that conceive early in the breeding season sustain a longer, more productive herd life. Doing what you can to ensure early conception can help boost your long-term profitability.

"I seem to be treating more calves post-weaning than usual."

Many minerals have dramatic implications in the immune system and its function. Lack of optimal mineral management at the cow-calf level is speculated to be correlated to sickness later on in life — such as incidence of respiratory illness at the feedlot.

When calves are retained at the ranch and pre-conditioned, the consequences or benefits of nutrition earlier in their life often come to light. Adequate mineral nutrition may be just as important as, and may enhance, the viability of a vaccination program.

This is not to say that minerals are the magic bullet to end all morbidity problems, but they are an important part of the equation along with genetics, vaccination and overall management.

"My cattle aren't keeping or gaining condition as well as they have in the past."

Many metabolic processes in the body are regulated or activated by minerals, including processes vital to sustain physiological systems through periods of high growth.

For example, digestibility can be driven or impeded by availability of minerals. Digestibility in ruminants is largely impacted by the state of the microbial population in the rumen, making microbes the driving force behind utilization of

nutrients. Rumen microbes require a specific environment and substrates in order to thrive and survive, and the availability of certain minerals (depending on the microbe) are part of this specificity.

While you should not expect the presence or absence of a mineral supplement to behave like an ionophore or a growth implant in terms of feed efficiency or pounds of gain, a mineral supplement is a key player in the digestibility and absorption of all nutrients and their subsequent utilization in the body. While any major nutrient deficiency will likely be visibly apparent by way of body condition or average daily gain (or lack thereof), a subclinical deficiency may cost you a pound per week, which really adds up come sale time.

Most mineral supplements are formulated to be consumed at a rate of 2 to 4 ounces per head per day. If your supplement targets 4 ounces, and a cow is "off" supplement about one-third of the year (due to her needs being met through other sources), then she's consuming about 60 pounds of mineral per year. At an estimated \$35 for a 50-pound bag of loose mineral, meeting her mineral needs costs you \$42 per head per year.

Plus \$42 is less expensive than having to replace a cow that fell out of your target calving season. It's also less expensive than the ¼ pound you may sacrifice in calves every day and the cost of just one treatment for respiratory illness.

Though not always immediately evident, being intentional and consistent about keeping mineral in front of your cattle will benefit both your herd and your bottom line in the long run.

Poultry Litter Applications

By Glen Arnold, CCA

Stockpiles of poultry litter can be seen in farm fields across Ohio. While common each year in wheat stubble fields, there are also stockpiles showing up in preventative plant fields. Poultry litter is an excellent source of plant nutrients and readily available in most parts of the state.

Poultry litter can be from laying hens, pullets, broilers, finished turkeys, turkey hens, or poults. Most of the poultry litter in the state comes from laying hens and turkey finishers. Typical nutrient ranges in poultry litter can be from 45 to 57 pounds of nitrogen, 45 to 70 pounds of P2O5, and 45 to 55 pounds of K2O per ton. The typical application rate is two tons per acre which fits nicely with the P2O5 needs of a two-year corn/soybean rotation.

Like all manures, the moisture content of the poultry litter greatly influences the amount of nutrients per ton. Handlers of poultry litter have manure analysis sheets indicating the nutrient content.

Poultry manure for permitted operations needs to follow the Natural Resource Conservation Service 590 standards when being stockpiled prior to spreading. These include:



Poultry Litter Pile

- 500 feet from neighbors
- 300 feet from streams, grassed waterways, wells, ponds, or tile inlets
- not on occasionally or frequently flooded soils
- stored for not more than eight months
- not located on slopes greater than six percent
- located on soils that are deep to bedrock (greater than 40 inches to bedrock)

Farmers who want to apply the poultry litter delivered to their fields are required by Ohio law to have a fertilizer license, Certified Livestock Manager certificate, or be a Certified Crop Advisor. Check with your local Soil and Water Conservation District for proper setbacks from streams, ditches and wells when applying poultry litter.

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Ohio State University Extension

Holiday Wreath Make and Take

Wed., Nov. 20 at 6 p.m. & Thurs. Dec. 5 at 6 p.m.

5362 US Hwy 42, Mt. Gilead, OH
2nd Floor Conference Room



Come make a wreath with the
OSU Extension Morrow County Master Gardener Volunteers!
Fresh evergreen wreaths will be provided with an assortment of decorations to create a beautiful Thanksgiving, Christmas or Winter wreath to enjoy all season long.

There is a \$25.00 registration fee to cover the cost of the wreaths and decorations.

Please preregister with OSU Extension - Morrow County by Nov. 15.
The class is limited to 30 participants.

Contact Carri Jagger at 419-947-1070 or email jagger.6@osu.edu



AGRICULTURE



Spring Forage: Looking Beyond Cereal Rye

By Jason Hartschuh, OSU Extension
Crawford County, AgNR Educator

Winter wheat, barley, triticale, and cereal rye planted in the fall can produce high quality forage in the spring when harvest is in the boot stage. These forages are not equal though in their speed of maturity or quality in the soft dough growth stage. Rye grows and matures faster than the other cereals making it the ideal choice for double cropping with corn silage but is also the hardest to manage harvest timing on so that it is not over mature. After this past spring is it time to diversify our spring forage options to spread out harvest timing and risk?

Each of these crops has slightly different management strategies but many are the same. Planting date has been critical for maximizing tonnage with highest yields being achieved with planting dates 10 days sooner than the hessian fly free date but be cautious of hessian fly infestation and barley yellow dwarf virus. Timely planting leads to plants absorbing more nitrogen from last year's crop improving tillering. Variety selection can also be an important factor in yield and rate of maturity. Most of the cereal rye planted is variety not stated but trials from Kentucky, Georgia, and North Dakota show yield variation between varieties to be ¼ to 2 tons DM in most planting locations. Triticale also has variability averaging ¾ ton DM between varieties. The study from North Dakota compared dry matter

yields of 3 winter cereals, triticale varieties had the highest average yield of 2.66 tons, then wheat at 2.22 tons and finally rye yielding 1.86 tons. The rye was harvested a week before the triticale and two weeks before wheat.

Each of these species matures at a different time but also maintains quality differently as they mature. Crude Protein and Digestible NDF was the highest at the boot stage and decreased as the crop matures. Rye and barley mature the quickest but barley will maintain quality for a few days longer but yields less.

Barley is the least winter hardy small grain, therefore it needs sown earlier in the fall with an ideal planting date in early September and needs planted at a higher seeding rate between 2 and 3 bushels. It should not be planted in wet soils, sandy soils, or low fertility soils. It tends to have lower dry matter yields but is higher digestibility with lower lignin than other small grains when harvested in the boot stage.

Wheat is the most common small grain in the area but not for forage use, it is not even the best option for wet soils. While there are special forage varieties, grain varieties tend to yield more tons than barley. The greatest benefit of wheat is that it matures later than other small grains allowing for a larger harvest window. It also holds quality into bloom much better than rye with yields increasing by 50 percent when cut in bloom instead of boot stage. While some small



grains can be planted earlier than the fly free date, wheat should not be planted before this.

Rye is the most common small grain used for forage but it is also the most early maturing and declines rapidly in palatability and quality from the boot stage on. It is the most winter hardy of all small grains and handles wet soils the best. Rye can also make great fall grazing when planted in early fall. While it is much easier to plant corn on time after rye with the current climate variability, it may not be the best option as your solo spring forage for a dairy ration. There is a new variety of rye on the market that is a hybrid

developed in Europe, while there is little work done on it in the US it has higher forage quality and grain yield than traditional cereal rye.

The last small grains option to discuss is Triticale which is a cross between rye and wheat. Triticale yield and quality has been increasing with every new variety released. It matures slower than rye but should still be harvested in the boot stage. Planting a week before fly free date has been shown to increase yields in New York by about 20 percent. Studies have shown it respond to higher nitrogen rates without lodging than rye. While rye is still an excellent forage, it is time to move your eggs from one basket into two to better manage spring harvest timing and weather?

In addition to offering high quality forage, the small grains described above can also provide an alternative for creating bedding. One option that has gained some popularity is pre-cut rye straw.

There are two options when making pre-cut straw, both of them take place just after the head emerges in the spring but before pollination and seed formation. The most common process is to spray the rye with glyphosate and let stand in the field as it dries and bleaches yellow. The Pre Harvest Interval (PHI) for cereals on some glyphosate products is 7 days between application and grazing or harvest. The best rye straw comes from having a couple tenths of rain on the rye, removing the wax from the plants. Once plants are dry, mow and leave lay for a day then rake and bale. The other option is to mow and let lay in wide windrows until dry for baling. Usually the rye needs tilled at least twice in order to get it dry.

Average yields for rye straw are 1.5 to 2 tons per acre; it is recommended that you do not use spring nitrogen fertilizer because it causes rye to lodge if rates are too high. Seeding rates of one bushel or less tend to allow for more air movement within the rye, helping it dry faster. While this is becoming a more common practice with rye, it could also work with wheat and allow for earlier soybean planting. Remember, we will be removing some phosphorous and potassium in the straw.

Considerations for 2019 Wheat Planting

By Andy Michel, Laura Lindsey, Pierce Paul

With the autumn rapidly approaching, wheat planting is likely to begin soon. Planting after the Hessian fly free date remains the best chance to avoid issues with insects and diseases, as well as helping ensure good agronomic quality. Some benefits of the fly free date:

Hessian Fly: Adults of the Hessian fly lay eggs in emerging wheat. These eggs then hatch into small larvae that feed before spending the

winter as a flaxseed. The early autumn feeding will stress the young wheat plant right before the winter, resulting in stunted and wilted plants. Very little egg laying occurs after the fly free date, which helps to limit infestation. Wheat varieties with resistance against the Hessian are available, in addition to seed treatments, which can help limit damage.

Aphids: Two main aphids infest wheat in Ohio: the English grain aphid and the bird

cherry-oat aphid. These aphids rarely cause economic injury on wheat from feeding. However, they can transmit several viruses that can severely impact wheat including Barley Yellow Dwarf virus. These aphids do not only feed on wheat, but several other grasses that serve as natural sources of viruses. If wheat is planted too early, and emerges before the aphids overwinter or stop feeding, they can be early transmitters of viruses. Although seed treatments could help kill the aphids, they may survive long enough to transmit the virus to the plant. Any transmission in the autumn would likely serve as a local source in the following spring.

Other foliar diseases: Although not directly related to the Hessian Fly, planting after the fly free date also helps to reduce the early establishment of leaf diseases like *Stagonospora* leaf blotch and powdery mildew. Planting date is indirectly linked to spore production by fungi that cause these diseases and infection of young plants. The earlier you plant, the more spores are available, and the more suitable (warmer) conditions are for infection. Fall infections often leads to more damage and greater yield loss in the spring, especially of susceptible varieties are planted and not protected with a fungicide at Feeks 8 (flag leaf emergence). As conditions become cooler after the fly free date, pathogens that cause leaf diseases become less active, and as such, are less likely to infect plants.





4-H NEWS



Youth experience emergency services careers

By Amanda Forquer, 4-H Educator

On September 21, twenty-three youth in grades 5-11 had their chance to experience careers they're thinking about pursuing when they're a bit older. This workshop gave them the opportunity to do tasks that professionals in these careers do every day.

This workshop focused on the careers of 911 Dispatch, Emergency Medical Technician (EMT) and Paramedic, Firefighter, Law Enforcement, and Ohio Highway Patrol.

In the morning the youth worked directly within the career they're interested in pursuing. They work in small groups so it's easy to ask questions of the professionals they're working with and they can easily do hands-on activities. Some of the activities included learning about the vehicles they use and what they carry inside them, how to do CPR, pull fingerprints, connect a fire hose to a fire hydrant, extinguish fire, bandage a wound, dispatch emergency calls and so much more!

"Zeke had an awesome time at the Career Exploration Workshop. We've heard a ton about what firemen do!"

Peggy Wolf

The mock crash was a highlight of the day! Youth rode to the crash (onsite) in the fire engine, ambulance, or watched the trooper from the sidelines go to the scene and they all jumped into action with the professionals and helped them get to work.

The firefighters demonstrated to the youth how to use the Jaws of Life to pry open the car. The youth then was able to help get the victim out and take her to the ambulance to be evaluated. At this time the law enforcement and Ohio

Highway Patrol takes over and analyzes the scene to figure out how the crash occurred. This was a great learning exercise for the youth!

Deputy Coulter brought his K9 partner and conducted a demonstration of how the dog works a scene. Trooper Nelson talked with the youth about the importance of not driving while impaired. The youth wore fatal vision goggles that made the youth see as though they were impaired, and we asked them to play corn hole. They became very aware how much of what they were seeing wasn't reality. None of them came close to hitting the target.

This workshop occurred because of a great partnership between OSU Extension - Morrow County, 911 Dispatch, Morrow County EMS, Morrow County Sheriff's Department, Mt. Gilead Fire Department, and Ohio Highway Patrol.

A special thank you to Norm's Towing who was able to provide us with a last-minute car to use for our mock crash.

For upcoming Career Exploration Workshops go to our website at go.osu.edu/careerexploration for more information. One will be coming up this winter and in April.



Youth hear about EMS careers.



Connecting a fire hose was one activity.



4-H NEWS



Participants in the Buckeye Fitness Challenge at the 2019 Morrow County Fair show their muscles.



Buckeye Fitness Challenge winners – The Cousin Crew!



Chicks hatched at the Morrow County Fair.

Some added education and fun at the 2019 Morrow County Fair!

By Amanda Forquer, 4-H Educator

This year at the Morrow County Fair I provided several educational (in some cases just fun) activities, displays, or events which any youth could participant.

The week started off with having an educational display in the poultry barn. The most exciting part was having an incubator with 23 fertilized eggs in it that began hatching Tuesday afternoon of the fair and continued into Wednesday that the public could come and watch at their leisure. Once hatched we displayed the chicks for the public to see and could ask questions about them when I was there.

In partnership with the Buckeye Training & Fitness Academy we held the Buckeye Fitness Challenge. Thirty-nine youth participated in teams of three to compete in the tug of war, speed challenges while carrying weights, and a tire flipping challenge. The youth had a great time during this friendly competition. Youth from the 5-8 age group won the overall trophy for showing

that they were the mightiest!

Ice cream in a bag was a big hit with people of all ages! For an hour we helped nearly 100 people make their own vanilla ice cream. It was DELICIOUS!

Thursday of the fair we focused on STEM activities. I conducted the EGGtraordinary STEM Challenge twice that taught youth about the strength of an egg. Youth and parents were amazed when they realized you can stand on a carton of eggs without them breaking.

The youth also learned about the importance of pollinators, including honeybees when they did the Honeybee Challenge where they made honeybee bots that made foraging routes on a challenge mat that had a farm pictured on it.

We had a lot of hands-on learning and even more fun. We hope to do even more of it next year so make sure you look for our schedule of events on our Facebook page to see what we are doing each day in 2020.



Engineering their own egg carton that can withstand their weight.



Two fairgoers examine the poultry incubator at the educational exhibit at the 2019 Morrow County Fair.



The strength of eggs is demonstrated at the 2019 Morrow County Fair.



The Speed Challenge while carrying weights at the Buckeye Fitness Challenge.



Enjoying the ice cream she made at the 2019 Morrow County Fair.



Making homemade ice cream in a bag at the 2019 Morrow County Fair.



4-H NEWS



Counting soybean plants in a field was one of the STEM activities at Camp.

Science, Technology, Engineering, and Math (STEM) at Camp

By Amanda Forquer, 4-H Educator

Each year I try to bring something for the youth to experience that most of them likely haven't tried before so they can experience it for the first time at camp. This year with the help of the team from OSU's CFAES Food, Agricultural, and Biological Engineering (FABE) Department we were able to introduce the youth to three different areas.

1. Each youth drove a Case IH Magnum 340 and a Kubota UTV (with an adult) to learn about the autosteer technology. 2. Youth were introduced to several types of drones. One drone was used for flying over fields that could scan them for farmers to report back data on the health of plants. One of the drones had a camera on it and

the youth could wear a headset to see everything the drone was seeing as it flew over us in the field. This was a fast flying drone so the kids LOVED it! 3. The youth learned about some of the things they do at FABE, how to count soybean plants in the field for data collection, and about the GreenSeeker handheld device used to scan a plant and it will tell you how healthy the plant is! How cool is that!?!

Other STEM sessions that were offered were to build bottle rockets and straw rockets, bee bots to learn about pollinators, and several activities to learn about the science of weather.

All these sessions were optional during the session or workshop times of camp.



Judging Results

Congratulations to the following 4-H members who qualified to represent Morrow County at the Ohio State Fair. Members are listed by club.

4H-10

Ava Franks: Grow Your Own Vegetables, State Fair
Cora Wall: Electricity: Entering Electronics, State Fair

Craig Brokaw: Seeing Through Graphic Design, 2nd Place; Shooting Sports: Archery, State Fair

Elliot Wall: Self-Determined - General, State Fair

Jimmy Brokaw: Shooting Sports: Rifle, 3rd Place

Shayla Barry: Clothing: Look Great For Less, 2nd Place

Viktor Williamson: Fishing - Intermediate, 3rd Place

America's Country Farmers

Chad Carpenter: Racing The Clock To Awesome Meals, 2nd Place

David Dye: Ohio Birds, State Fair

Erick Brooks: Robotics Master, 2nd Place

Ethan Taylor: Tractor (12-13), State Fair

Haley Snyder: Seeing Through Graphic Design, 3rd Place

Hayden Brooks: Genealogy, 2nd Place

Hayleigh Anthony: Global Gourmet, State Fair; Money: Teens On Road To Financial Success, County Winner; Pocket Pets, State Fair

Heidi Johnson: Let's Bake Quick Breads, 2nd Place; Pet Rabbit, State Fair

Jacob Anthony: Grill Master, 2nd Place; Laundry, State Fair

Kalden Robinson: Fishing - Beginner, 3rd Place; Fishing - Intermediate 2nd Place; Geology: Can You Dig It?, State Fair

Kylie Linnabary: Photography: Controlling the Image, State Fair

Rebecca Johnson: Take A Break For Breakfast, 3rd Place

Sammi Brown: Cats III, State Fair; Clothing: Designed By Me, State Fair

Birds N' Buckshot

Carson Kessler: Fishing - Intermediate, State Fair

Maren Ross: Self-Determined-Paper Crafting, State Fair

Raven Ross: Photography: Focus on Photography, 2nd Place

Zaric Ross: Fishing - Beginner, 2nd Place

Blazin' Brides

Henry Boice: Electricity: Magic of Electricity, 2nd Place

Isabella Stang: Robotics II, State Fair

Buckeye Brigade

Anna Kennedy: Seeing Through Graphic Design, State Fair

Camberlyn Schade: You're The Athlete - Senior, 2nd Place

Dana Clinedinst: Alcohol & Drug Abuse - Senior State Fair Buckeye Brigade

Emily Keckler: Pet Rabbit, State Fair

Jordan Schauer: Photography: Mastering

Photography, State Fair

Julia Kennedy: Clothing: Clothing For Middle School, State Fair

Katelynn Votaw: Bicycling For Fun, County Winner; Dogs: All About Dogs, State Fair; Insects Adventure I, State Fair; Money: Becoming Money Wise, County Winner; Ohio Birds, 2nd Place; Science Fun With Dairy Foods, State Fair

Kayley Smith: Vet Science: On The Cutting Edge, 2nd Place

Lauryn Smith: Photography: Mastering Photography, 2nd Place

Megan Gardner: Clothing: Shopping Savy, State Fair; Take A Break For Breakfast, 2nd Place

Michael Ramey: Everyday Food & Fitness, State Fair

Nick Smith: Small Engines: Tune It Up, State Fair

Clover Posse

Abram Newson: Welding, 3rd Place

Amelia Newson: Clothing: Sew Fun, 2nd Place

Josiah Fatka: Shooting Sports: Crossbow, 1st Place; Tractor (8-11), State Fair

Katrina Mendell: Yeast Breads On The Rise, 2nd Place

Kayla McLeod: Let's Bake Quick Breads, State Fair; Racing The Clock To Awesome Meals, State Fair

Micah McLeod: Robotics Master, State Fair

Mykenzi Hobson: Snack Attack, State Fair

Spencer Fatka: Rockets Away: Solid Fuel State Fair Clover Posse; Use Of Guns, 2nd Place; Shooting Sports: Rifle, State

Breanna Lott: Clothing: Shopping Savy, 2nd Place

Country Crossroads

Fletcher Gompf: Genealogy, State Fair; Woodworking: Making The Cut, 2nd Place

Mila McRill: Clothing: Loungewear, 2nd Place; Clothing: Sew For Others, 1st Place

Olivia Levering: Clothing: em*bel*lish, State Fair; Self-Determined - General, 3rd Place

Country Guys & Gals

Claire Butcher: Photography: Mastering Photography, State Fair

Kaden Gall: Explore The Outdoors, 3rd Place

Megan Beck: Get Started In Art, 3rd Place; Yeast Breads On The Rise, State Fair

Shalynn Irwin: Everyday Food & Fitness, 2nd Place; Vet Science: From Airedales To Zebras, 2nd Place

Wyatt Irwin: Grill Master, 3rd Place

Country Kids & Critters

Mackenzie Grandstaff: Woodworking: Measuring Up, State Fair

Dream Chasers

Matthew Swetland: Explore The Outdoors, 2nd Place

Family 4-H'ers

Mason Newsome: Pet Rabbit, 2nd Place

Continued on Page 11



4-H NEWS



Judging Results

Continued from Page 10

Farmers & Charmers

Darren Styer: Woodworking: Making The Cut, 3rd Place

Elizabeth Erlsten: Science Fun With Kitchen Chemistry, State Fair

Kallie Wright: County Cookies County Winner Farmers & Charmers

Katie Dean: Beekeeping, 2nd Place

Kimberly Staley: Cake Decorating, 3rd Place

Lauren Johnson: Quilting: You Can Quilt, 2nd Place

Maya Trainer: Vet Science: All Systems Go, 2nd Place

Nicole Staley: Scrapbooking, State Fair

Rebecca Staley: County Candy, County Winner

Riley Johnson: Clothing: Ready, Set Sew Active, 2nd Place

Ryan Lehman: Global Gourmet, 2nd Place

Fast & Furriest

Owen Winkelfoos: You & Your Dog, State Fair

Free 4-All

Emarah Miller: Scrapbooking, 3rd Place

Emily Ball: Woodworking: Nailing It Together, State Fair

Gabriella Braddock: Self-Determined - Natural Resources, State Fair

Riley Babbs: Woodworking: Measuring Up, State Fair

Friendly Farmers

Brooke Jagger: Snack Attack, 3rd Place

Ella Albert: You & Your Dog, 2nd Place

Emma Artrip: Clothing: Look Great For Less, 3rd Place

Gabby Brinkman: Clothing: Sew Fun, State Fair

Jonathan Artrip: Grill Master, 2nd Place

Kaylene Brinkman: Make Over My Space State Fair Friendly Farmers

Kaylene Brinkman: Quilting: The Best Better, State Fair

Maizy Brinkman: Clothing: Terrific Tops, State Fair; Scrapbooking, State Fair

Michalea Zeger: Scrapbooking, State Fair

Natalie Jagger: Scrapbooking, 3rd Place

Owen Yunker: Basic Archery, State Fair

Rangan Zeger: Scrapbooking, 2nd Place

Ryann Brinkman: Clothing: Sundresses & Jumpers, State Fair

Grain Train Farmers

Makenna Spurlock: You & Your Dog State Fair

Marcella Rollins: Vet Science: From Airedales To Zebras, 3rd Place

Grass Roots & Boots

Candace Grimm: Discovering 4-H, 3rd Place

Delaney Ostrom: Cats I, State Fair

Karley Wallace: Clothing: Loungewear, State Fair; Clothing: Sew For Others, State Fair

Will Baker: Small Engines: Crank It Up, State Fair; Woodworking: Making The Cut, State

Fair

Happy Hemstitchers & Haymakers

Allison Johnson: Sports Nutrition: Ready, Set, Go, State Fair

Anna Marocco: Safe Use Of Guns, 3rd Place

Emily Mattix: County Pies, County Winner

James Fiant: First Aid In Action - Junior, State Fair

Kasey Fiant: Cake Decorating, 2nd Place

Kelsey Knelp: Self-Determined - General, State Fair

Samuel Baer: You're The Athlete - Senior, State Fair

Selia Shipman: Money: Teens On Road To Financial Success, 2nd Place

Shelby Huvler: Discovering 4-H, 2nd Place

Shelby Robinson: Horseless Horse, County Winner

Sy Shipman: Money: Teens On Road To Financial Success, County Winner

Highland Achievers

Haven Loudermilk: Vet Science: All Systems Go, State Fair

Hunter Dye: County Cookies, 3rd Place

Kelsey Munday: Everyday Food & Fitness, 3rd Place

Laken Dye: County Cookies, 2nd Place

Iberia Jr. Farmers

Alexander Threadgill: Geology: Can You Dig It?, 2nd Place

Ava Arnett: Photography: Focus on Photography, State Fair

Avigal Thompson: Geology: Can You Dig It?, 3rd Place

Barry Kress: Self-Determined - General, 2nd Place; Self-Determined - Natural Resources, 2nd Place

Cheyenne Arnett: Clothing: Designed By Me, 2nd Place

Isabella White: Let's Start Cooking, 3rd Place

Parker Repp: Quilting: You Can Quilt, State Fair

Trinity Pelfrey: Cats I, State Fair

Johnsville Jolly Farmers & Farmerettes

Abby Leonhard: Demonstrations & Illustrated Talks, State Fair; Genealogy, State Fair; Vet Science: From Airedales To Zebras, State Fair

Anita Bricker: Snack Attack, State Fair; The Truth About Tobacco - Senior, State Fair

Austin Krabill: Woodworking: Measuring Up, 2nd Place

Becca Duckworth: Demonstrations & Illustrated Talks, State Fair; Scrapbooking, 2nd Place; Self-Determined - Leadership, State Fair

Brenna Leonhard: Explore The Outdoors, State Fair

Case Bowersmith: Small Engines: Crank It Up, 2nd Place

Cassady Heales: Scrapbooking, 2nd Place

Cole Perkins: Welding, State Fair

Dane Perkins: Woodworking: Measuring Up, State Fair

Elizabeth Leonhard: Demonstrations & Illustrated Talks, State Fair; Vet Science: On The

Cutting Edge, State Fair

Emma Smith: Health & Safety Contest, State Fair; Your Thoughts Matter, Junior, State Fair

Evan Bowersmith: Electricity: Magic of Electricity, State Fair; Woodworking: Measuring Up, 3rd Place

Cutting Edge, State Fair

Emma Smith: Health & Safety Contest, State Fair; Your Thoughts Matter, Junior, State Fair

Evan Bowersmith: Electricity: Magic of Electricity, State Fair; Woodworking: Measuring Up, 3rd Place

Gage Bowersmith: Collectibles, State Fair

Kendal Fulk: Quilting: You Can Quilt, 3rd Place

Lydia Leonhard: Clothing: Ready, Set Sew Active, State Fair; Demonstrations & Illustrated Talks, State Fair

Manny Heilman: Am I Ready To Work?, State Fair; Cake Decorating, 2nd Place; Clothing: Loungewear, 3rd Place; Clothing: Shopping Savvy, State Fair; Club Leadership, State Fair; Collectibles, State Fair; Demonstrations & Illustrated Talks, State Fair; Leadership Road Trip, State Fair; Let's Bake Quick Breads, State Fair; My Hands To Larger Service, State Fair; Quilting: The Best Better, 2nd Place; Teens On Board, 2nd Place; The Writer In You, County Winner; You're The Chef, State Fair; Cats I, State Fair; Finding Your Voice: Public Speaking, State Fair; Get Started In Art, State Fair

Nathan Krabill: Tractor (12-13), State Fair

Olivia Hill: First Aid In Action - Junior, 2nd Place; Grow Your Own Vegetables, 2nd Place; Let's Start Cooking, 2nd Place; Take A Break For Breakfast, State Fair

Reuel Lewis: Bicycling For Fun, 2nd Place

Trinity Bricker: Let's Bake Quick Breads, 3rd Place; Star Spangled Foods, State Fair

Tyler Duckworth: Rockets Away: Solid Fuel, 2nd Place

Morrow County Clever Clovers

Aleisa Tobin: Exploring Ponds, State Fair; Teens On Board, State Fair

Alexis Shaw: Photography: Focus on Photography, 3rd Place

Dalton Shaw: Basic Archery, 3rd Place; Grow Your Own Vegetables, 3rd Place

James Michels: Small Engines: Crank It Up, 3rd Place

Robinetta Hopkins: Get Started In Art, 2nd Place

Zoe Shaw: Basic Archery, 2nd Place

Next Generation

Addison Rogers: Staying Healthy - Junior, State Fair

Alyssa Anton: Snack Attack, 2nd Place

Chase Jordan: Rope: Not Just Knots, 3rd Place

Collin Bowman: Woodworking: Finishing Up, State Fair

Cooper Kidwell: Woodworking: Making The Cut, State Fair

Elias Bulkowski: Grill Master, State Fair

Gavin Spoon: Cats I, 2nd Place

Grace Meier: Pathways To Culinary Success, State Fair; Your Thoughts Matter, Senior, State Fair

Hayden McClelland: Sports Nutrition: Ready, Set, Go, State Fair

Jason Bockbrader: Rope: Not Just Knots, 2nd Place

Josh Burnaugh: Robotics I, 2nd Place

Kate Kelly: Pathways To Culinary Success, 2nd Place

Keegan Lawler: Science Fun With Kitchen Chemistry, 2nd Place

Landon Spoon: Keeping Fit - Junior, State Fair

Mary Kelly: Take A Break For Breakfast, State Fair

Mason Kidwell: Self-Determined - General, 2nd Place

Myles Jordan: Welding, 2nd Place

Nathaniel Meier: Let's Start Cooking, State Fair; You & Your Dog, State Fair

Nora Kelly: Scrapbooking, State Fair

Troy Bockbrader: First Aid In Action - Junior, 3rd Place

Rolling Hills 4-H Club

Amelia Bender: Party Planner, State Fair

Ava Worcester: Dogs: All About Dogs, State Fair

Aviano Capra: Reptiles & Amphibians, State Fair

Cadie Hamilton: Clothing: Clothing For Middle School, 2nd Place; Scrapbooking, 2nd Place

Hannah Hamilton: Clothing: Clothes For High School & College, State Fair; Clothing: Look Great For Less, State Fair

Jacob Hamilton: Grill Master, State Fair; Self-Determined - General, 3rd Place

Natalee Eichorn: Clothing: Sew Fun, 3rd Place

Zeke Wolf: Electricity: Investigating Electricity, State Fair

Shaw Creek Farmers

Alexis Crone: Beekeeping, State Fair

Austin Radel: Dogs: All About Dogs, 2nd Place

Austin Radel: Ohio Birds, State Fair; Robotics I, State Fair; Rockets: Solid Fuel Master, State Fair

Bailey Crone: Beekeeping, 3rd Place

Delisa Goodman: Scrapbooking, 3rd Place

Jacob Russell: Rope: Not Just Knots, State Fair

Mason White: Keeping Fit - Senior, State Fair

Showing & Growing

Addison Rhea: Get Started In Art, State Fair

Cassandra Snopik: Woodworking: Measuring Up, State Fair

Cassidy Gamble: Cake Decorating, State Fair

Kegan Searls: Beekeeping, State Fair

Madison Searls: Cake Decorating, State Fair

Memphis Clapper: Discovering 4-H, County Winner

Triple-R-Bar

Breyer Cooper: Fishing - Beginner, State Fair; Shooting Sports: Shotgun, State Fair

Cooper Nelson: Safe Use Of Guns, State Fair; Shooting Sports: Rifle, 2nd Place



4-H NEWS



County Winners



Family Treasure Hunt 4-H Project Winners!

Ann Artrip (Genealogical Society Award Donor), Fletcher Gompf (County Winner), Brenna Leonard (County Winner and State Fair Outstanding of the Day)



Congrats to our Rabbit Quiz Bowl Teams!

5th Place Junior Team: Savannah Hiatt, Emily Keckler, Julia Kennedy, J.J. Palm Rhodes, Dane Nauman (not pictured); Coaches: Russ Mayer, Rachel Keckler (not pictured); Kirk Biori, Interim Assistant Director Ohio 4-H.



Sr Team placed 11th!!! (L to R back row) Tess Ruehrmund (Sr), Savannah Heitt (Jr), Dane Nauman (Jr), Julia Kennedy (Jr), Emily Keckler (Jr), Russ Mayer (Coach), Kaylynn Votaw (Sr) (Front row) Rachel Keckler (Coach), Manny Heilman (Sr)

Morrow County Scarlet & Gray News

From the Junior Fair Office

News from Shelby & Lisa

The 2019 Morrow County Fair has come and gone. Fair week is always hectic but is so much fun at the same time. Lisa and I enjoyed seeing all the exhibitors show their projects. We know how much work goes into getting a project to the fair!

We would like to take a moment to thank all those that helped us make it through our first fair season. The Jr. Fair Board – These kids put in a lot of hard work prepping not only for fair week, but Quality Assurance, fundraisers, still project Judging, weigh ins, tattooing and skillathon.

Thank you to the Jr. Fair Board, Fair Board Advisors – Wow, you guys are amazing! Thanks for all the help keeping everything running. The shows and activities at fair would not run without all your help. Thank you to the Fair board Advisors. The Sr. Fair Board – Thank you for all your support and encouragement, not to mention the hard work getting the fairgrounds in shape for the fair season! So, much is done behind the scenes. Thank you to the Sr. Fair Board. Becky Barker and the extension staff – The knowledge, programs and support you guys provide is so valuable to not only fair exhibitors but the whole county. Thank you, Extension Office. The exhibitors and Parents – Thank you for so many kind words of encouragement we heard through out our first season. It takes all of us to make this

fair happen!!

Please remember that if you sold an animal in the 2019 livestock sale a thank you note needs to be turned into the Jr. Fair office before your sale check will be sent out. Buyers really appreciate receiving these notes from the kids that they buy from.

As we start our preparations for the 2020 fair season, we would like to encourage those interested in being on the Jr. Fair board to please apply. If you have any questions, please reach out to Lisa or Shelby with any questions. Also, we are constantly looking for ways we can improve the fair or new ideas to include into the fair. If there are any suggestions, we would love to hear about them. Please drop us an email, stop in the office or give us a call. Like us on Facebook for up to date information.

****IMPORTANT****

Those who will be attending the December steer weigh in please make note that the date has been changed to December 14th. This is the second Saturday in December.

Shelby Perkins, Jr. Fair Coordinator, 419-560-7046

Lisa Duckworth, Assistant Jr. Fair Coordinator, 419-560-7101

Office phone: 419-947-1567

Email: Morrowcountyjrfair@gmail.com

Design the Morrow County 2020 Thank You Card

The Morrow County Jr. Fair Board would like to invite 4-H, FFA, Boy Scouts and Girls Scouts to put their artistic skills to work. We would like you to design the front of our 2020 Jr. Fair thank you cards. The theme for the cards is "Morrow County Fair". The artwork that is picked will be used on all the award thank you

cards and will also be available for purchase during the livestock sale, to use as buyer thank you cards. The size of the cards will be about 4 1/4 in. by 5 1/2 in. The due date for artwork is February 1st. We will put reminders up on Facebook as the due date approaches. Ideas can be turned into either the Extension Office or the Jr. Fair Office.

4-H General Information

Skillathon!

By Becky Barker

Skillathon — the hands-on testing and interview of our 4-H and FFA member's knowledge of their animal projects! Since 1997 I have organized and provided this educational test of a member's knowledge. They are required to complete the skillathon in order to participate in our Jr. Fair and to give them a knowledge grade beyond the showing grade. Over the years countless individuals have volunteered their time to help put on 9 specie skillathons consisting of 1 interview station and 3 hands-on knowledge checks. Some species such as rabbits have 3 to 4 lines to move the number of youth through during

ing the 2 nights in August. Thank you again to the over 2,600 volunteers who have helped to educate our county youth in the last 22 years.

2019 Number of youth per specie:

258 – Rabbits
119 – Swine
118 – Goats
88 – Beef and Feeders
71 – Poultry
62 – Horse
54 – Sheep
8 – Dog
6 – Dairy Heifers/Cows



4-H NEWS



Ohio State Fair Results

Congratulations! State Fair Skillathon Results!

RILEY JOHNSON: 2nd place - Sheep 13 yr old
LAUREN JOHNSON: 8th place - Sheep 13 yr old
GWENDOLY CLINGER: 8th place - Poultry - 11 yr old
SAVANNAH HIETT: 10th place - Rabbit 13

yr old
CAIDEN DAUGHERTY: 3rd place - Beef 10 yr old
TAYLOR STEPHEN: 3rd place - Beef 17 yr old
KAYLA BARKER: 14th place - Swine 18 yr old



Outstanding of the Day State Fair Sr. Individual Speaking Contest Winner

Congrats to Manny Heilman for his Outstanding of the Day State Fair Sr. Individual Speaking Contest Win!



Health Speaking Contest Winner

Congratulations Emma Smith on winning the Junior Individual 4-H Area III Health and Safety Public Speaking Contest! The title of her speech was "Pancreatitis and Papaya."

2019 Ohio State Fair Accomplishments

Emmy Myers: 6th Place in Junior Hunter Under Saddle Category with her horse "Zip"
Kayla Barker: 5th place in Senior Swine Showmanship, 2nd Place Spot Gilt
Jordan Schauer: 6th in Intermediate Equitation Over Fences, 8th in Low Working Hunter
Isabella Stang: Placed 4th with her horse in Western Horsemanship
Kaydence McKenzie: 2nd place in Hunter Under Saddle, 10th place in the Championship Hunter Under Saddle
Madison Huntsman: Grand Champion Berkshire Gilt, Reserve Champion Supreme Breeding Gilt, Division 1 Reserve Champion Dark Cross Barrow
Brooke Huntsman: 5th Overall Yorkshire Breeding Gilt
Morrow County Junior Rabbit Quiz Bowl Team: Placed 5th (Team Members: Emily Keckler, Julia Kennedy, Savannah Hiett, Dane Nauman, JJ Palm Rhodes)
Avian Bowl Team: 6th Place (Team Members: Manny Heilman, Katelyn Votaw, Aleisa Tobin, Julia Kennedy)
Julia Kennedy: 5th Place in the Individual Scores in Rabbit Bowl
Senior Rabbit Team: Manny Heilman, Katelyn Votaw, Tess Ruehrmund
Emma Smith: Your Thoughts Matter - Junior OUTSTANDING OF THE DAY
Kayla McLeod: Racing the Clock to Awesome Meals, Junior OUTSTANDING OF THE DAY
Karley Wallace: Sew For Others, Senior

OUTSTANDING OF THE DAY
Manny Heilman: Cat 1, (Age 14 - 18)
HONORABLE MENTION
Emily Keckler: Pet Rabbits (Age 11-13)
OUTSTANDING OF THE DAY
Abby Leonhard: Family History Treasure Hunt (Beginner/1st Year Only) OUTSTANDING OF THE DAY
Josiah Fatka: Junior Tractor Division, (Age 8 - 11) OUTSTANDING OF THE DAY
Nathan Krabill: Intermediate Tractor Division (Age 12 - 13) CLOCK TROPHY
Manny Heilman: Demonstration - Senior Individual (Age 14+) OUTSTANDING OF THE DAY
Isabella Stang: Robotics2: EV3N More CLOCK TROPHY
Brenna Leonhard: Explore the Outdoors OUTSTANDING OF THE DAY
Brooke Clapham: 3rd Place Horse Keyhole
Caiden Daugherty: 5th in Beef Showmanship class, 3rd Place with his Outstanding Record Book
Jacob Levering: Placed 3rd with his Cross Bred Steer
Karli Gaddis: 3rd in her Chi Steer Class, 3rd Overall with AOB Steer, 8th Overall in 16-year Showmanship
Brody Beck: 6th in his class with his Duroc Breeding Swine, 8th in his class with his Duroc Breeding Swine
Lucy Smith: 3rd with her Cross Bred Steer
Brandon Miller: 4th in Senior Horse Stakes Race

4-H General Information



Cloverbud Fun Day

By Amanda Forquar, 4-H Educator
A great time was had by all at the 4-H Cloverbud Fun Day! Thirty-six youth learned about weather and chemistry while doing cool experiments. They even made stepping stones, slime, and their own vanilla ice cream in a bag. It was

a very hot day so a great way to finish the day was with water games!
Thank you to all the adult volunteers, teen volunteers, and Carri Jagger and her Master Gardener Volunteers that helped to make the day such a success!



Outstanding of the Day State Fair Pet Rabbit Project

Emily Keckler, Highland Achievers 4-H Member, being judged at the Ohio State Fair and was selected as an Outstanding of the Day for her Pet Rabbit Project!



4-H NEWS



County Winners



Showman of Showmen Winners!

Showman of Showmen Winners! (L to R) Elijah Leonhard (5th), Maddison Huntsman (4th), Morgan Beck (3rd), Taylor Nelson (Res), and Taylor Stephens (Champion)

Top Project Book Winners!

If you did not pick-up your award during fair, they are available at the Extension Office

GOATS: Morgan Beck, Ryann Brinkman, Bryce Cooper, Ashtyn Gail, Fletcher Gompf

SHEEP: Owen Cass, Larissa Coleman, Lauren Johnson, Riley Johnson, Victoria Kovacs, Emily Mattix, Taylor Rush

SWINE: Skye Bivens, Cassidy Healea, Bailey Uirey

POULTRY: Brett Shipman, Zoya Winkelfoos

RABBITS: Hannah Hamilton, Alexis Howard, Heidi Johnson, Kendal Kline, Tess Ruchtmund

BEEF: Dana Clinedinst, Caiden Daugherty, Natalie Jagger, Grant LaRoche, Abigail Leonhard, Brenna Leonhard, Elizabeth Leonhard, Lydia Leonhard, Emily Mattix, Cade Miracle, Morgan Powell, Ashton Prest, Cooper Young

HORSE: Casey Berke, Dana Berke, Jili Berke, Bella Huey, Mira Huey, Taylor Nelson

Champion Project Information

Champion Projects

Congrats to our 2019 Champion Animal Project Awards - Results are based on a combined score from Showmanship placing and Skillathon Score.



Champion Project Sr. Rabbit Winner Alanna Parsons



Rabbit Champion Projects

Rabbit Champion Projects (L to R): Elijah Leonhard (Jr Fair King), Katelyn Votaw, (Inter and Overall), Ava Baker (Inter), Kallie Wright (Beg), Gracie Hinkle (Jr Fair Queen)



Top 4-H Food Project Winner

Top 4-H Food Project Winner - Hayleigh Anthony



Top 4-H Clothing Project Winner

Top 4-H Clothing Project Winner Karley Wallace (Right) with her Ohio State Fair Outstanding of the Day Sew For Others Project for her cousin Faith (Left)



Poultry Champion Projects

Poultry Champion Projects (L to R): Elijah Leonhard (Jr Fair King), Brett Shipman (Sr and Overall), Zari Ross (Inter), Owen Winkelfoos (Jr), Heidi Johnson (Beg), Gracie Hinkle (Jr Fair Queen)

4-H General Information

Another Great 4-H Camp!!

On June 9-13 Morrow County 4-H held their annual 4-H camp with record breaking numbers again!

Thank you Adult Volunteers - we couldn't do it without you!

Dustin Bender, Erin Bender, Darla Clinedinst,

Nat Harris, Carol Holsinger, Missy Kidwell, Russ Mayer, Rachelle Newson, Quin Winkelfoos

The Numbers:

283 Total: 220 Campers, 52 Camp Counselors, 11 Adults



4-H NEWS



Champion Project Information



Horse Champion Projects

Horse Champion Projects (L to R): Elijah Leonhard (Jr Fair King), Casey Berike (Sr), Taylor Nelson (Inter and Overall), Isabella Stang (Jr), Jill Berike (Beg), Gracie Hinkle (Jr Fair Queen)



Swine Champion Projects

Swine Champion Projects (L to R): Elijah Leonhard (Jr Fair King), Kayla Barker (Sr and Overall), Griffin Healea (Inter), Olesia Looker (Jr), Brooke Bower (Beg), Gracie Hinkle (Jr Fair Queen)



Sheep Champion Projects

Sheep Champion Projects (L to R): Elijah Leonhard (Jr Fair King), Lauren Johnson (Sr), Zoe Parrott (Int and Overall), Grant Jennings (Jr), Victoria Kovacs (Beg), Gracie Hinkle (Jr Fair Queen)

County Winners



Fair Carcass Contest Winners!

SWINE: (shown above) Derek (pictured) and Kayla Barker (Sr Fair Winner), Pam Gandee, Donor in Memory of Lawton McClintock, Jeff Barker Res Champion Jr. Fair (Not pictured – Brayson Adams, Champion Jr. Fair)

BEEF: Holly Gompf (1st place Jr. and 2nd Place Sr. Fair), Lucy Smith (2nd Place Jr.), Dana Clinedinst (3rd Place Jr), Sue Sherman (1st place Sr Fair)



Dr. Lyda Garcia, OSU Assistant Professor of Meat Science and her students judge/educate Morrow County about meat science and how their market beef rank for the consumer.



4-H NEWS



County Winners



Clothing Projects Winners!

Julia Kennedy models her County Winning "Clothing For Middle School" Project
She placed 3rd at the State Fair Clothing Skillathon



Lydia Leonhard models her County Winning "Ready, Set, Sew Active" Project
She placed 3rd at the State Fair Clothing Skillathon

Champion Project Information



Beef Champion Projects

Beef (L to R): Elijah Leonhard (Jr Fair King), Jakob Edgell (Sr), Mason Powell (Inter), Morgan Powel (Jr and Overall), Riley Cooper (Beg)



Goat Champion Projects

Goats Champion Projects (L to R): Tyler Duckworth (Sr), Megan Beck (Inter), Bryce Cooper (Jr and Overall), Laken Dye (Beg)

4-H General Information

2019 Morrow County Trash Bash Results!!

24 4-H Clubs!!! Thank you clubs!!!

- 10 Families
- 4 Community Organizations
- 3 Local Businesses
- 1 Local School
- 673 Volunteers
- 6.09 Tons of Litter
- 183 tires
- 5 TV's
- 1.4 Ton of Recyclables
- 16 Townships
- 7 Public Spaces (parks, school facilities, etc.)

* New in 2019

- 478.5 mi of County & Township Roads
- 2,160.5 hours of service time donated
- \$3,159.00 back to local nonprofit & community organizations
- 16 local monetary supporters & 8 in-kind donation supporters
- Total miles cleaned by: 4-H: 247.764 mi + 3 of 7 public spaces VS Other: 230.75 mi + 4 of 7 public spaces
- Townships 4-H totally cleaned-up Congress (55.214 mi), North Bloomfield (23 mi), and Troy



Feeders Champion Projects

Feeders Champion Projects (L to R): Elijah Leonhard (Sr, Overall and Jr Fair King), Elizabeth Leonhard (Inter), Lizzie Erlstein (Jr), Lydia Shaffer (Beg), Gracie Hinkle (Jr Fair Queen)



4-H NEWS/FAMILY & CONSUMER SCIENCES



Heer teaches "Hidden In Plain Sight"

OSU Extension-Morrow County serves the county in many ways such as participating on committees and coalitions to help make a difference. We are a member of the Drug & Alcohol Awareness & Prevention of Morrow County (DAAP) Coalition. As the Family & Consumer Sciences Educator I participate on the Hidden In Plain Sight sub-committee which is an awareness program for adults that helps identify signs of risky behaviors in teens. In the Spring of 2019, I delivered four presentations, on behalf of the sub-committee, with the assistance of two Morrow County Sheriff Detectives. Recently I received "a story with a happy ending" as quoted from a participant who, along with a friend, attended one of the presentations. Here is a snippet of what she shared about her friend's recent experience since attending the presentation.

The mother of three, including a teenager, attended the presentation to learn what kids are "getting away with" today. She was so "alerted" by the program she encouraged friends to attend and felt confident in how to handle a similar situation if it should develop at home. Near the end of the school year the parent soon learned that her teenager was drinking. The youth then participated in a 90-day rehab program in a state facility and is now back home, wearing an ankle bracelet, and attending school. "With all of this going on, the mom was able to use the information she gained from Candace Heer, Extension Educator from Family & Consumer Sciences, and applied it to the instructions from the Juvenile Facility in Marysville. She is staying "afloat" and being a mother who loves well and follows tight discipline. Thank you for aiding my new friend."

Written by a School Senior Volunteer—



Candace Heer, FCS Educator, teaching "Hidden In Plain Sight" at the Highland Middle School.



Youth Fitness Quest 2019

The Youth Fitness Quest was a fun and challenging day! On July 25, twenty-one youth worked-out, did a challenging obstacle course, played games, learned about mindfulness, and even about nutrition. They all went home with new knowledge and tired! Thank you to Buckeye Training and Fitness Academy for partnering with us for this great event.

OSU Extension provides programs to Cardington-Lincoln afterschool program

By Kim Harvey, 6th Grade Science Teacher
Cardington SAILING Club, an afterschool program for 5th through 8th grade students, were thrilled to have Extension Educators from the Morrow County OSU Extension office work with the program this past year and we are looking forward to more educational adventures this year. Students really enjoyed the fun ice breaker and team building activities we learned from the Educators the first time they joined us. Several of the students already knew some of the activities from attending 4-H camp and those students were able to become student leaders and help their peers to learn.

Many middle school students are reaching the age where they are gaining more responsibilities in the kitchen, helping to prepare meals and occasionally preparing a meal for their family on their own. The OSU Extension Educators guided students in making easy, fun and healthy snacks for their parents and siblings during a family involvement event. Students learned the differences and similarities of pressure cookers, slow cookers and crockpots and how to easily make a simple, nutritious meal.

Students love to build things! OSU Extension

4-H Educator, Amanda Forquer, brought many STEM activities for the students. One of them showed the students how to build their own tiny robot and course for their robot bee to maneuver through to simulate a live bee pollinating flowers and crops.

Making and launching rockets using recycled 2-liter bottles with compressed air and water was also a great hit with this group. The students were impressed with the launcher Amanda brought to the school and enjoyed seeing whose design would go furthest.

Students' favorite lessons presented by Amanda revolved around the hatching of chicken eggs! Students learned about eggs and the parts of the egg. Everyone was amazed while testing the strength of eggshells in an activity that invited them to stand on open cartons of raw eggs! Then the students conducted a STEM activity that challenged them to build a protective case for a raw egg. Learning about the development of the chicks inside the eggs and watching as they hatched was an amazing learning opportunity that the kids will remember for years to come.





FAMILY & CONSUMER SCIENCES



Chow Line: Healthy, safe lunch options for back to school

School is back in session for my fourth grader, and he's decided this year that he wants to pack lunch for the first time. Any tips on how to make sure his packed lunch is safe and healthy?

Considering that nearly 40 percent of school-aged kids bring their lunches to school on a given day, it's important to take some simple precautions to ensure that your son has a safe, nutritious meal to eat and enjoy.

When deciding what to pack, it's a good idea to include lean proteins, whole grains, vegetables, fruits, and low-fat dairy products in his lunch. If you want to pack your son a sandwich, opt for whole-grain bread and veggies for toppings. If you want to be a little fun and adventurous, use a cookie cutter to cut the sandwich into fun shapes for your child.

As a timesaving measure, you can prepare snack-sized bags of fruits and veggies in ad-

vance, store them in the fridge, and let your child choose which ones he wants to put in his lunch that day. In-season whole fruits such as apples, peaches, pears, bananas, and tangerines are also good choices, said Shari Gallup, an Ohio State University Extension educator.

OSU Extension is the outreach arm of The Ohio State University College of Food, Agricultural, and Environmental Sciences.

When packing a lunch for your child to take to school, remember that cold foods need to stay cold and hot foods need to stay hot, she said. This will help to avoid the development of harmful bacteria that could cause a foodborne illness.

When a food's temperature reaches between 40 and 140 degrees Fahrenheit, also called the "Danger Zone," bacteria grows rapidly.

To help avoid that from happening and make sure your child's perishable foods stay cold until lunchtime, the U.S. Department of Agriculture advises that you pack two cold sources in his lunch.

Frozen water bottles or frozen juice boxes can count as a cold source, as well as a freezer pack that you stick into the lunchbox. Lunches that contain perishable food items such as luncheon meats, eggs, cheese, or yogurt can be kept cold this way. Be sure to place the cold sources onto the top and the bottom of the perishable food items to keep them cold.

If you plan to pack soup, stew, or chili for your child's lunch, you will need to use an insulated container. Before adding in the hot item, you can fill the container with boiling water, let it stand for a few minutes, empty it, and then add the hot food, advises the USDA. Also, tell your

child to keep the lid on the container closed until lunchtime to help prevent bacterial contamination and growth.

The USDA also advises the following:

- If you pack your son's lunch the night before, leave it in the refrigerator overnight. The meal will stay cold longer because everything will be refrigerator temperature when it is placed into the lunchbox.

- If possible, your child's lunch should be stored in a refrigerator or cooler with ice upon arrival at school. Leave the lid of the lunchbox or bag open in the fridge so that cold air can better circulate and keep the food cold.

- After lunch, make sure your child discards any leftover food, used food packaging, and paper bags. Don't reuse the packaging, because it could contaminate other food and cause foodborne illness.

- Once home, you should clean the insulated lunchbox or bag with hot, soapy water after each use.

Lastly, while it's best that kids wash their hands before eating their lunch, we all know that there is a possibility that they won't be able to do so right before lunch. With that in mind, you can pack disposable wipes in your son's lunch bag or container so that he can at least wipe his hands before and after eating lunch.

Chow Line is a service of The Ohio State University College of Food, Agricultural, and Environmental Sciences and its outreach and research arms, Ohio State University Extension and the Ohio Agricultural Research and Development Center.



Multiple ways to disinfect drinking water in an emergency

The water supply for my household has been disrupted twice this summer due to historic rainfall levels, leaving us faced with boil alerts due to floodwaters. But since our power was also out because of the storms, we had to buy bottled water instead. Is there any other way to clean the water in a situation like that?

Many people in Ohio and throughout the Midwest have experienced similar situations due to the excessive rainfall that has hit the region recently.

In fact, May 2018 to April 2019 was the wettest year on record nationwide, according to a report from the National Oceanic and Atmospheric Administration's National Centers for Environmental Information. An average of 36.20 inches of precipitation fell nationwide, which was 6.25 inches above the mean, the agency said.

As a result, several communities in Ohio at one point or another this season have had to issue boil-water advisories or boil-water orders, which is a directive given by health authorities to consumers when a community's drinking water is, or could be, contaminated by pathogens.

These alerts can be issued for multiple reasons, including as the result of storms, flooding, and waterline breaks that cause a disruption in drinking water supplies. And while boiling water is the standard recommendation, there are other

methods to disinfect water in an emergency situation, according to Emergency Disinfection of Drinking Water, a recent OhioLine fact sheet.

OhioLine is Ohio State University Extension's free online information resource and can be found at ohioline.osu.edu. OSU Extension is the outreach arm of The Ohio State University College of Food, Agricultural, and Environmental Sciences (CFAES).

Boiling water for just a minute is extremely effective at killing bacteria and parasites that can make people sick, writes Karen Mancel, a professor in CFAES' Department of Food, Agricultural and Biological Engineering and a specialist with OSU Extension.

In many circumstances, "the boil water call is for good reason, since consuming contaminated water can make people very sick," she writes. "When in doubt, drink boiled water."

"Any heat source—electric or gas range, camp stove, wood fire, and even a microwave oven—heats water to boiling temperatures and kills disease-causing microbes."

But, as in your case, there are other measures that can be used for emergency disinfection of drinking water when the power is out, Mancel said, including:

- Chlorine bleach, which can be added to water to kill microbes. According to the Centers

for Disease Control and Prevention, you can add 1/8 teaspoon for every 1 gallon of clear water. It's important to note that chlorine does not kill microbes on contact, so you must wait at least 30 minutes before drinking the water. After disinfection, the water will have a strong chlorine smell and taste. If the water you are trying to disinfect is cloudy, you can add 1/4 teaspoon for everyone 1 gallon of water. This is because particles in cloudy water help protect and hide microbes from disinfection, increasing the chance they will not be killed by the chlorine and will make you sick. If the water source is cloudy, more chlorine will be needed to disinfect it.

- Disinfection tablets containing chlorine or iodine are available for campers and travelers to disinfect a small volume of water. Many different companies market disinfection tablets that can be easily added to water bottles. Always follow the directions on the package.

- Sunlight is an amazing disinfectant and is the key to solar disinfection. Ultraviolet light kills pathogens on contact. To use sunlight to disinfect water, the water must be very clear and placed in the sun in clear containers. Clear plastic water bottles, plastic bags, or specialized commercial solar bags can be used for solar disinfection. The water should be exposed to sunlight for at least four and up to 10 hours to kill microbes.



All Year Long – FREE – Pressure Canner Inspections & Dial Gauge Testing

- OSU Extension Morrow County tests the accuracy of pressure canner dial gauges.

- Dial gauges on pressure canners need to be tested every year to make sure the pressure is reading correctly. Gauges that read high cause under-processing and may result in unsafe food. Low readings cause over-processing. An accurate gauge is essential for safety!

- Please call 419-947-1070 for an appointment to have your gauge tested or you can drop off your canner and

lid with gauge and gasket attached for a complete inspection. We'll let you know when it's ready for pick up and provide you with a completed inspection form.

- Only dial gauges need to be checked (weighted gauges need not be tested).

- FREE for Morrow County Residents & \$5 for out of county



FAMILY & CONSUMER SCIENCES



WALK WITH A DOC in Morrow County

Come walk with us INDOORS at the Mount Gilead Cherry Street Administration Building at NOON on...October 22 for the Walk With a Doc program.

- You walk, chat with others, and get some of your questions answered by doctors and specialists

- All ages and abilities are welcome
- No need to register – just show up to the walking location

WALK WITH A DOC Morrow County Partners:

- Morrow County Hospital OhioHealth
- Morrow County Community Center
- Mount Gilead School District
- Morrow Family Health Center
- Morrow County Health District
- Ohio State University Extension – Morrow County

For more information, contact Candace Heer at heer.7@osu.edu or 419-947-1070

Reclaiming Fitness

By Jenny Lobb,
Family and Consumer Sciences Educator,
OSU Extension Franklin County

July was a big month for me. After evaluating and reflecting on my personal wellness in a blog post in June, I decided it was time to act. Motivated in part by the meme pictured above, which I initially saw on a friend's social media page, I knew it was time to stop making excuses for my lack of inactivity and re-invest in my personal well-being.

In June, I had identified coping with stress as a priority area for my overall wellness. I knew I needed to either resume an exercise routine (my former go-to method for coping with stress) or identify an alternative stress coping strategy. I decided to resume exercising, and I set a SMART goal for myself to re-establish a routine.

A SMART goal is specific, measurable, attainable, realistic and timely. My goal was to attend at least one fitness class for a week for a month. This goal was:

- Specific – I stated what I wanted to accomplish.
- Measurable – At the end of the month, I could tell whether I had achieved my goal by looking at my fitness class attendance.

- Attainable – Because I did not have a current routine when I set this goal, I started small by challenging myself to attend just one class a week.

- Realistic – In setting this goal, I knew I had the time and financial resources to attend fitness classes at a convenient location for me.

- Timely – My goal was for the coming month.

I am proud to say that I met my goal, and now I am working toward a new goal of attending two or more fitness classes each week this month!

Before setting and achieving this goal, I was not entirely inactive; I used resistance bands and my own body weight to do simple strength training exercises while at work, and I took walks around my neighborhood when I was able. But, according to the Physical Activity Guidelines for Americans, while some physical activity is better than none, engaging in moderate- to vigorous-intensity activity is key to experiencing substantial health benefits.

Regular moderate- to vigorous-intensity activity:

1. Reduces the risk of many adverse health outcomes such as coronary heart disease, stroke, certain types of cancer, diabetes, hypertension



IF YOU WANT TO
REACH YOUR GOALS,
YOU MUST SHRINK
THE SIZE OF YOUR BUT.

LEARN MORE

and Alzheimer's disease; and

2. Promotes brain health by reducing anxiety and depression risk while improving sleep quality and overall quality of life.

The guidelines state that the benefits of physical activity generally outweigh the risk of adverse outcomes or injury. However, if you are starting a new physical activity routine, make sure to choose types of activity that are appropriate for your current fitness level, knowing that you can increase your activity over time to meet your goals. If you have a chronic condition and/or are unsure about the types and amounts of activity appropriate for you, take time to consult with a health care provider before setting a goal or beginning a routine.

Postoperative Depression... the Struggle is Real

By Shannon Carter, Ohio State University
Extension, Fairfield County

A year ago, I struggled with depression after a foot surgery. I experienced feelings of hopelessness, worthlessness, fatigue and overwhelm. I thought this had something to do with my reaction to my limitations after surgery: restricted mobility and not being able to work, etc. while I was healing. But when these same symptoms repeated a year later after a similar surgery (even with much quicker healing and return to work) I began to realize that depression may be related to the surgery itself. I investigated this phenomenon

and found that postoperative depression is a very common occurrence. If this is so common, why didn't anyone prepare me? In hopes that my experience might help someone else as they face or recover from a surgery... I'd like to share what I've learned...

Depression is a well-documented adverse effect of many surgical procedures. According to the American Heart Association, 25% of patients experience depression after cardiac surgery. Depression can result from a number of reasons, including pain and discomfort, decreased mobility, and increased dependency on others. For patients

who have had a surgery to remove an organ or body part, a feeling of loss can also contribute to depression. In addition, the brain's immune response to anesthesia and surgery can cause cognitive dysfunction.

Symptoms of postoperative depression may include:

- fatigue
- difficulty making decisions
- memory problems
- eating more or less than usual
- sleeping more or less than usual
- loss of interest in activities
- irritability and restlessness
- slower movement
- slower speech
- anxiety and stress
- feelings of despair or hopelessness
- suicidal or self-harming thoughts

Depression can also increase the risk of physical illness and slow the recovery from an injury or operation. Furthermore, depression after surgery can increase a patient's perception of pain.

While it is normal to experience many of these symptoms after surgery, if they persist longer than two weeks, talk with your doctor. He or she may be able to prescribe a medication temporarily to help you feel more like yourself.

There are several things you can do to beat the post-surgery blues...

- Take care of yourself
- Ask for help
- Spend time outdoors

- Get enough sleep
- Eat a healthy diet
- Surround yourself with loved ones
- Do something you enjoy
- Ease SLOWLY back into routine

The American Heart Association (AHA) has resources including this pre-surgery checklist and postoperative recovery milestones. AHA offers these tips for recovering from surgery:

- Manage Expectations – ask questions ahead of time to know what to expect for your recovery
- Take it slow – if you push it too fast, you can slow your healing. Give your body and mind the time they need to heal
- Move, but at your own pace – exercise can aid in healing, but only what your doctor has approved
- Celebrate progress – while recovery can seem to take forever, a look back to see how far you have come can be encouraging.

If you or a loved one is facing surgery, learn as much as you can about the physical, and emotional effects of surgery in order to improve chances of feeling better while recovering.



Dining with Diabetes – During the Holidays

Take Charge of Your Diabetes during the Holidays will provide you with tips for managing your diabetes during the holidays. You will learn how to prepare a holiday favorite that is both nutritious and delicious. See a live cooking demonstration, sample healthy versions of holiday favorites, and take home recipes to try at your holiday celebrations.

- Date: October 30, 2019
- Time: 6:30 p.m.
- Location: Ag Credit Building,
Second Floor Conference Room,
Mt. Gilead, Ohio
- Cost: Free – paid for by your levy dollars
- Register: OSU Extension-Morrow County
419-947-1070



OSU EXTENSION CALENDAR OF EVENTS

OCTOBER 2019

- 2 Cattlemen's Meeting, Ag Credit Building Conference Room, 6:30 p.m.
- 7 Jr. Fair Board, Fairgrounds, 7 p.m.
- 7 Dairy Board Meeting, Ag Credit Building Conference Room, 12 noon
- 6-12 National 4-H Week
- 10 Pork Producers, Ag Credit Building Conference Room, 7 p.m.
- 17 Horse & Pony Committee, Ag Credit Building Conference Room, 7:30 p.m.
- 22 Walk With A Doc – 12 noon, Mt. Gilead Cherry Street Administration Building
- 23 Forcing Bulbs Class, 6:30 p.m., Ag Credit Building Conference Room
- 24 Forage Analysis Class, 6:30 p.m., Ag Credit Building Conference Room
- 24 Sr. Fairboard, Fairgrounds
- 28 Jr. Leaders, 7-8 p.m., Extension Office
- 30 4-H Teen Opportunities Application Due
- 30 Dining With Diabetes – Take Charge During The Holidays, 6:30 p.m., Ag Credit Building Conference Room
- 30 Swap & Sip Event, 6:30 p.m., Bunkers' Mill Winery

NOVEMBER 2019

- 4 Jr. Fair Board, Fairgrounds, 7 p.m.
- 4 Dairy Board Meeting, Ag Credit Building Conference Room, 12 noon
- 6 Cattlemen's Meeting, Ag Credit Building Conference Room, 6:30 p.m.
- 11 Veterans Day – Office Closed
- 14 Pork Producers, Ag Credit Building Conference Room, 7 p.m.
- 19 CARTEENS, Extension Office, 6:30-8:30 p.m.
- 20 Holiday Wreath Make & Take Workshop, 6 p.m., Ag Credit Building Conference Room
- 21 Horse & Pony Committee, Ag Credit Building Conference Room, 7:30 p.m.
- 21 Sr. Fairboard, Fairgrounds
- 25 Jr. Leaders, 7-8 p.m., Extension Office
- 28-29 Thanksgiving Holiday – Office Closed

DECEMBER 2019

- 2 Jr. Fair Board, 7 p.m.
- 5 Holiday Wreath Make & Take Workshop, 6 p.m., Ag Credit Building Conference Room
- 14 Market Beef Pre-Fair (2020) Weigh-In, 8-11 a.m., Fairgrounds
- 19 Sr. Fairboard, Fairgrounds

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