

COSHOCTON COUNTY AGRICULTURE & NATURAL RESOURCES**March 31 Issue (Edition #88)**

USDA Announces Pandemic Assistance for Farmers

2021 East Ohio Women in Agriculture Program Series

Spring Control of Winter Weeds in Hay and Pasture

2021 Brings Chance to Improve Hay Quality

Turning a National Focus to Grain Safety
Now is the Time to Fine Tune Your Sprayer

Pond Management Should Be on Your Mind

ODA to Offer Pesticide Testing in Coshocton County

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Hello Coshocton County! I cannot believe that today, we put a close to the month of March. Where did the month go? We have enjoyed some great weather this month and today March is choosing to go out wetter and much colder....reminding us that spring weather is always a rollercoaster.

Now is the time to scout hay and pasture fields for the presence of winter annual and biennial weeds, especially those that are poisonous to livestock such as cressleaf groundsel. These weeds are resuming growth that started last fall and they are most effectively controlled with herbicides while still small. In addition to cressleaf groundsel, weeds of concern that should be treated soon include the following: poison hemlock, birdsrape mustard (aka wild turnip), wild carrot. In today's newsletter is a great article from our OSU Agronomic Crops team with recommendations.

Looking forward to a great April!

Sincerely,

David L. Marrison

Coshocton County OSU Extension ANR Educator



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USDA Announces Pandemic Assistance for Farmers

By: Chris Zoller, Extension Educator, ANR, Tuscarawas County

Source: <https://u.osu.edu/ohioagmanager/2021/03/26/5130/>

The United States Department of Agriculture (USDA) announced this week it is establishing new programs and efforts to provide financial assistance to farmers negatively impacted by the Coronavirus pandemic.

The new program is called the USDA Pandemic Assistance for Producers and is intended to reach a broader representation of producers than previous COVID-19 aid programs. The program will place a greater emphasis on small and socially disadvantaged producers, specialty crop and organic producers, timber harvesting, as well as support for the food supply chain and producers of renewable fuels.

The USDA Pandemic Assistance for Producers program administered by the Farm Service Agency (FSA) includes four parts. Details below were provided in a news release from USDA.

Part 1:

USDA will dedicate at least \$6 billion to develop a number of new programs or modify existing proposals using discretionary funding from the Consolidated Appropriations Act and other coronavirus funding that went unspent by the previous administration. Where rulemaking is required, it will commence this spring. These efforts will include assistance for:

- Dairy farmers through the Dairy Donation Program or other means;
- Euthanized livestock and poultry;
- Biofuels;
- Specialty crops, beginning farmers, local, urban and organic farms;
- Costs for organic certification or to continue or add conservation activities
- Other possible expansion and corrections to CFAP that were not part of the announcement such as to support dairy or other livestock producers;
- Timber harvesting and hauling;
- Personal Protective Equipment (PPE) and other protective measures for food and farm workers and specialty crop and seafood producers, processors and distributors;
- Improving the resilience of the food supply chain, including assistance to meat and poultry operations to facilitate interstate shipment;
- Developing infrastructure to support donation and distribution of perishable commodities, including food donation and distribution through farm-to-school, restaurants or other community organizations; and
- Reducing food waste.

Part 2:

USDA expects to begin investing approximately \$500 million in expedited assistance through several existing programs this spring, with most by April 30. This new assistance includes:

- \$100 million in additional funding for the Specialty Crop Block Grant Program, administered by the Agricultural Marketing Service (AMS), which enhances the competitiveness of fruits, vegetables, tree nuts, dried fruits, horticulture, and nursery crops.
- \$75 million in additional funding for the Farmers Opportunities Training and Outreach program, administered by the National Institute of Food and Agriculture (NIFA) and the Office of Partnerships and Public Engagement, which encourages and assists socially disadvantaged, veteran, and beginning farmers and ranchers in the ownership and operation of farms and ranches.
- \$100 million in additional funding for the Local Agricultural Marketing Program, administered by the AMS and Rural Development, which supports the development, coordination and expansion of direct producer-to-consumer marketing, local and regional food markets and enterprises and value-added agricultural products.
- \$75 million in additional funding for the Gus Schumacher Nutrition Incentive Program, administered by the NIFA, which provides funding opportunities to conduct and evaluate projects providing incentives to increase the purchase of fruits and vegetables by low-income consumers

- \$20 million for the Animal and Plant Health Inspection Service to improve and maintain animal disease prevention and response capacity, including the National Animal Health Laboratory Network.
- \$20 million for the Agricultural Research Service to work collaboratively with Texas A&M on the critical intersection between responsive agriculture, food production, and human nutrition and health.
- \$28 million for NIFA to provide grants to state departments of agriculture to expand or sustain existing farm stress assistance programs.
- Approximately \$80 million in additional payments to domestic users of upland and extra-long staple cotton based on a formula set in the Consolidated Appropriations Act, 2021 that USDA plans to deliver through the Economic Adjustment Assistance for Textile Mills program.

Part 3:

The Consolidated Appropriations Act, 2021, enacted December 2020 requires FSA to make certain payments to producers according to a mandated formula. USDA is now expediting these provisions because there is no discretion involved in interpreting such directives, they are self-enacting.

- An increase in CFAP 1 payment rates for cattle. Cattle producers with approved CFAP 1 applications will automatically receive these payments beginning in April. Information on the additional payment rates for cattle can be found on farmers.gov/cfap. Eligible producers do not need to submit new applications, since payments are based on previously approved CFAP 1 applications. USDA estimates additional payments of more than \$1.1 billion to more than 410,000 producers, according to the mandated formula.
- Additional CFAP assistance of \$20 per acre for producers of eligible crops identified as CFAP 2 flat-rate or price-trigger crops beginning in April. This includes alfalfa, corn, cotton, hemp, peanuts, rice, sorghum, soybeans, sugar beets and wheat, among other crops. FSA will automatically issue payments to eligible price trigger and flat-rate crop producers based on the eligible acres included on their CFAP 2 applications. Eligible producers do not need to submit a new CFAP 2 application. For a list of all eligible row-crops, visit farmers.gov/cfap. USDA estimates additional payments of more than \$4.5 billion to more than 560,000 producers, according to the mandated formula.
- USDA will finalize routine decisions and minor formula adjustments on applications and begin processing payments for certain applications filed as part of the CFAP Additional Assistance program in the following categories:
 - Applications filed for pullets and turfgrass sod;
 - A formula correction for row-crop producer applications to allow producers with a non-Actual Production History (APH) insurance policy to use 100% of the 2019 Agriculture Risk Coverage-County Option (ARC-CO) benchmark yield in the calculation;
 - Sales commodity applications revised to include insurance indemnities, Noninsured Crop Disaster Assistance Program payments, and Wildfire and Hurricane Indemnity Program Plus payments, as required by statute; and
 - Additional payments for swine producers and contract growers under CFAP Additional Assistance remain on hold and are likely to require modifications to the regulation as part of the broader evaluation and future assistance; however, FSA will continue to accept applications from interested producers.

Part 4:

USDA will re-open sign-up for of CFAP 2 for at least 60 days beginning on April 5, 2021.

- FSA has committed at least \$2.5 million to establish partnerships and direct outreach efforts intended to improve outreach for CFAP 2 and will cooperate with grassroots organizations with strong connections to socially disadvantaged communities to ensure they are informed and aware of the application process.

Summary

Applications for this program will open on April 5th. Anyone interested in additional information about the USDA Pandemic Assistance to Producers program is encouraged to see <https://www.farmers.gov/pandemic-assistance/cfap> or their local FSA office. Source of Information: <https://www.farmers.gov/>

2021 East Ohio Women in Agriculture Program Series

The 2021 East Ohio Women in Agriculture Program Series has offered (and continues to offer) a variety of financial, production, and home-related topics to help you as a woman in agriculture.

Recordings are available on the [“2021 East Ohio Women in Agriculture Program Series”](#) play list on the OSU Extension YouTube page and can be found at the following links:

[Farm Income Tax Update](#) – Barry Ward, OSU Extension – This update arms farm taxpayers with tax information on current critical issues including insight into new COVID related legislation.

[Cooking with Cast Iron](#) – Christine Kendle, OSU Extension – Are you not sure what pan to use? How to season it? How you should care for your cast iron cookware? This class is for you!

QPR (Question, Persuade, Refer) Suicide Prevention – Panel – QPR includes how to “ask a question to save a life,” recognizing warning signs, and referring for help. This session recording is available upon request only by contacting Erika Lyon at lyon.194@osu.edu.

[Insurance – Get Covered!](#) – Kim Davis, Kim Davis Insurance Agency, LLC – Just because you pay an insurance premium doesn’t mean you’re covered for everything! Don’t miss this fun, interactive session discussing all types of insurance.

[LOL – Lots of Loans!](#) – Mary Fannin, Farm Credit Mid-America and Stephanie Beatty, Farm Service Agency – Hear from our panel to find the right fit for your needs. Including lines of credit, ag real estate, equipment & building loans/leases, home loans, home equity loans, youth loans, etc.

The Mystery of Fruit Tree Pruning – Paul Snyder, OARDC Sequest Arboretum – This session covers the basics of how and when to prune fruit trees, highlighting the most common backyard fruit tree, the apple tree. (This will be available soon on the play list.)

There is also still plenty to come!

Webinar Registration is available at go.osu.edu/eowiaseries2021 . Webinars are Thursdays from noon – 1:00 PM. Here are the remaining webinars in the series:

[April 8 – Bury Seeds, Not Stress—Sarah Noggle and Bridget Britton, OSU Extension](#) – When you live where you work, there are stressors that can go unacknowledged. Agriculture life brings unique challenges to us personally and professionally. Join us as we identify what makes us unique and talk about coping strategies.

[April 22 – Reaching Your Educational Goals – Dennis DeCamp, OSU Extension](#) – Regardless of age, educational opportunities are always available. Explore options for obtaining and funding education to meet your goals while maintaining a balanced life.

[May 13 – Veterinarians: Building a Relationship & Knowing When to Call](#) – A working relationship with your veterinarian can teach you when it’s appropriate to try something at home vs. having them out on a call to improve your farm’s husbandry & production.

[May 27 – He Said, She Said – Emily Marrison, OSU Extension](#) – Women in agriculture often work with men in agriculture. Explore ways to improve interpersonal communication for more productive work settings and peaceful home environments.

Field Day Registration is available at go.osu.edu/eowiafielddays2021 .

Field Days are 5:30 PM meal/ 6:00-8:30 PM program. Here are the remaining field days in the series:

April Field Day – Tuesday, April 6
– Soils & Sustainable Agriculture with Erika Lyon and Heather Neikirk, OSU Extension and Clint Finney, USDA-NRCS (Jefferson County) – What is sustainable for you? Dig into improving the health of your soils and the basics of soil testing services and kits. Explore sustainability and stewardship practices and opportunities for utilization in small farm animal and plant-based enterprises. Please register by Friday, April 2.

May Field Day – Tuesday, May 4
– Raising Livestock on 5 Acres or Less with Sandy Smith, OSU Extension (Carroll County) – So you have some land and you want some extra income or a supply of food for your family. This session will investigate all of your options and possibilities.

July Field Day – Wednesday, July 14 – Hands-On Tractor Operation Skill-BUILDER with Dee Jepsen, OSU Farm Safety Specialist (Stark County) – Examining the utility of the compact tractor – safety, parts, color coding, hand signals and operation will be discussed in this interactive audience driven session.

We hope you will find one or more of these resources and programs helpful. Happy Spring!
East Ohio Women in Agriculture Team

Erika Lyon, Agriculture and Natural Resources Educator, Jefferson and Harrison Counties
Chris Kendle, Family and Consumer Sciences Educator, Tuscarawas County
Emily Marrison, Family and Consumer Sciences Educator, Coshocton County
Heather Neikirk, Agriculture and Natural Resources Educator, Stark County
Kate Shumaker, Family and Consumer Sciences Educator, Holmes County
Sandy Smith, Agriculture and Natural Resources Educator, Carroll County

Spring Control of Winter Weeds in Hay Fields

By: Mark Loux and Mark Sulc

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-07/spring-control-winter-weeds-hay-and-pasture>

Now is the time to scout hay and pasture fields for the presence of winter annual and biennial weeds, especially those that are poisonous to livestock such as cressleaf groundsel. These weeds are resuming growth that started last fall and they are most effectively controlled with herbicides while still small. In addition to cressleaf groundsel, weeds of concern that should be treated soon include the following: poison hemlock, birdsrape mustard (aka wild turnip), wild carrot. Herbicides are most effective on these weeds in the fall, but they can be controlled in spring, preferably when still in the rosette stage. Control becomes more difficult once stem elongation (bolting) starts.



Coming to a field near you...

CFAES OHIO STATE UNIVERSITY EXTENSION

2021 EAST OHIO WOMEN IN AGRICULTURE PROGRAM SERIES

REGISTER TO ATTEND OUR UPCOMING FIELD DAYS

Time: 5:30 pm meal/6:00-8:30pm program
Cost: \$15 which includes program materials and meal
Registration and additional details link: go.osu.edu/eowifielddays2021

APRIL FIELD DAY TUESDAY, APRIL 6	MAY FIELD DAY TUESDAY, MAY 4	JULY FIELD DAY WEDNESDAY, JULY 14
Location: Polard, Ohio Extension County: Jefferson County Topic: Soils and Sustainable Agriculture Contact: Erika Lyon (740-264-2212)	Location: Mechanismstown, Ohio Extension County: Carroll County Topic: Raising Livestock on 5 Acres or Less Contact: Sandy Smith (330-427-4310)	Location: Marietta, Ohio Extension County: Stark County Topic: Safety and Tractor Operation Tractor Skill-Builder Contact: Heather Neikirk (330-340-4051, option #7)

OSU Extension, in-person programs and events require University approval and may be cancelled due to University, State or local guidelines for in-person group events. All cancellation decisions are based on current public health concerns as identified by the OSU/OSU Extension system and local health policies.

WHO SHOULD ATTEND:
Women and Young Women (high school age) who are interested, involved, or want to become involved in food, agriculture, natural resources, or small business.

These programs are a great place to learn, share and network. Be surrounded by other women who are facing the same day-to-day ups, downs, adventures and dilemmas as you.

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For more information visit u.osu.edu/ohwomensinag or call 330-339-2337

THERE IS STILL TIME TO GET INTO OUR APRIL 6 MAY VIRTUAL SERIES!
All held on Thursday from 12pm-7pm
Cost: FREE | Registration link: go.osu.edu/eowseries2021

DATES AND TOPICS INCLUDE:
APRIL 8: Virtual event: The Green and Gold: A Journey Through the Ohio River Valley
APRIL 22: Raising Your Educational Goals with OSU Extension
MAY 13: Virtual event: Building a Relationship with Your Land
MAY 27: Virtual event: The Good, the Bad and the Ugly: Managing Your Farm's Financial Health

Options for control in pure legume stands:

- Pursuit – 3-6 oz
- Raptor – 4-6 oz
- 2,4-DB (Butyrac etc) – 1-3 qts
- bromoxynil – (first-year alfalfa only) – 1-1.5 pts
- glyphosate (RR alfalfa) – 0.75-1.5 lb ae
- Extreme (RR alfalfa, glyphosate + Pursuit) – 2.2 – 4.4 pts

Notes: higher rates are going to be generally more effective; poison hemlock or wild carrot cannot be controlled in nonRR alfalfa; combination of Pursuit/Raptor + 2,4-DB will be most effective on birdsrape mustard and cressleaf groundsel in nonRR alfalfa (and control of groundsel will likely be variable).



Options for control in mixed legume/grass stands:

- 2,4-DB (Butyrac etc) – 1-3 qts

Note: 2,4-DB is almost an herbicide on a good day when applied alone, and will not control any of the weeds mentioned here. Check ratings in the OSU Weed Control Guide before spending the money.

Options for grass hay and pasture are more numerous and should be generally more effective. Information on all of these, along with ratings, can be found in the “Permanent Grass Pastures/CRP/Grass Hay” section of the weed control guide. A few comments:

- Most herbicides labeled for these uses have activity on winter annuals, including mustard species, and we assume would be effective on birdsrape mustard.
- With regard to cressleaf groundsel, there is a lack information on effectiveness of many grass hay/pasture herbicides. A study at the University of Illinois across 7 environments determined that dicamba was ineffective on groundsel, while 2,4-D was effective only when applied in the fall. Fall or spring application of site 2 sulfonylurea herbicides, chlorimuron + tribenuron, was effective. While this mixture is not labeled for use on grass hay and pastures, another sulfonylurea herbicide – metsulfuron – is a component of some pasture herbicides. Metsulfuron is effective on a broad-spectrum of winter annual and biennial weeds, so we assume it would be effective on groundsel as well.
- Poison hemlock is most effectively controlled with products that contain triclopyr, such as Crossbow and Remedy Utra. Cimarron Max and products containing higher rates of dicamba also have activity.

Other weeds that can be treated in mid to late spring include bull thistle, a biennial, and spotted knapweed, smooth bedstraw, and Canada thistle, which are perennials. None of these are effectively controlled in legume fields, with the possible exception of glyphosate used in RoundupReady alfalfa. They can be controlled in grass hay and/or pastures, although options may be most numerous in pasture due to restrictions on hay harvest for certain herbicides. We conducted a study of smooth bedstraw control in grass hay at two sites in eastern Ohio, with herbicides applied in mid-April to early May after full leafout. Crossbow (1 qt) provided the most effective control and reduction in bedstraw population the following year. Application of metsulfuron (0.4 oz), Cimarron Max, and the combination of dicamba + 2,4-D controlled the topgrowth through the season, but these treatments were less effective at permanently reducing the population. Spotted knapweed control options include:

- Stinger/Transline – after basal leaves up to bud stage
- Milestone/GrazonNext HL – fall or spring, rosette to bolt stage
- 2,4-D + dicamba – early bolting stage
- Curtail – fall or spring – rosette to mid-bolting

2021 Brings Chance to Improve Hay Quality

By: Chris Teutsch, UK Research and Education Center at Princeton

Source: <https://u.osu.edu/beef/2021/03/31/2021-brings-chance-to-improve-hay-quality/>

Recently I presented a summary of ten years of hay testing results from the Kentucky Department of Agriculture's forage testing program. This sample set included more than 14,000 hay samples. The full presentation can be viewed on the [KY Forages YouTube Channel](#).

The results of this analysis showed that only 12% of the samples tested would meet the energy requirements of a lactating brood cow (Figure 1). This is an important finding for a cow-calf state like Kentucky since reproductive efficiency is so closely associated with body condition.

Practical Considerations for Improving Hay Quality

Grazing is the most economical way to harvest forage and we should strive to extend our grazing season. Our ag economists tell us that about 300 days of grazing is the sweet spot in terms of profitability for most cow-calf operations in the state. This leaves us with 2 to 3 months that we need to feed hay. To optimize reproductive efficiency, it is essential that hay fed will maintain adequate condition on cows OR that poor quality hay is supplemented appropriately. Although hay season seems like a longtime away, it will be sooner than you think. So, 2021 brings us yet another chance to improve hay quality. Below you will find a list of practical considerations that will help you get this done.

- Fertilize and lime according to soil test. A balanced fertility program is essential for optimizing hay production. Phosphorus, potassium, and lime should be applied according to soil test results. Avoid using "complete" fertilizers such as 10-10-10. In hay production, these fertilizers commonly over apply phosphorus and under apply potash. More information on soil sampling can be found in AGR-252, Soil Sampling Hayfields and Pastures.
- Apply nitrogen early to promote rapid spring growth. Applying 80 lb N/A in mid- to late March will promote early growth in hay meadows, resulting in higher first harvest yields.
- Harvest at the boot stage. The single most important factor impacting forage quality is stage of maturity at harvest. Hayfields should be mowed as soon as the grass reaches the boot-stage. By making the first cutting in a timely manner, we will have time to make a leafy second cutting just prior to the summer months.

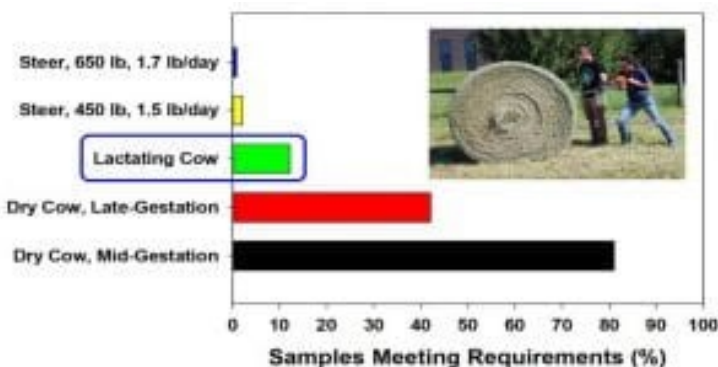


Figure 1. Proportion of hay samples tested at the Kentucky Department of Agriculture over a ten-year period (2007-17) that would meet the energy (total digestible nutrients) requirement of various classes of beef cattle. Only 12% of these samples would meet the energy requirements of a lactating brood cow!

Table 1. Impact of stage of maturity on the crude protein, dry matter intake, digestibility and average daily gain of stocker calves.

Stage of Maturity

Stage of Maturity	Crude Protein %	Dry Matter Intake lb/day	Digestibility %	Average Daily Gain lb/day
Late boot	13.8	13.0	68	1.39
Early bloom	10.2	11.7	66	0.97
Seed forming	7.6	8.6	56	0.42

Adapted from [AGR-62, Quality Hay Production](#) by G.D. Lacefield, J.C. Henning, M. Collins and L. Swetnam. UK Cooperative Extension Service, Lexington.

- Mow early in day. Some studies have shown that sugars tend to be highest in late afternoon, making this the optimal time of day to cut. However, in high rainfall environment like Kentucky, maximizing curing time is the highest priority. Therefore, hay should be mowed in mid to late morning after the dew has dried off.
- Use mower-conditioner. Conditioning the stems allows for moisture to escape at a faster rate. This shortens curing time and improves your chances of avoiding rain. Conditioning is especially important on first cutting grasses, summer annual grasses, and legumes, all of which tend to have larger stems.
- Set swath on mower-conditioner to the widest possible setting. Maximizing the swath width decreases curing or wilting time by exposing a larger portion of the forage to direct sunlight.
- Rake or ted at 40-50% moisture content. Raking and tedding the forage while it is still pliable helps to reduce leaf loss and maintain forage quality. Once the moisture content is below 40%, leaf loss increases, especially in legumes such as alfalfa and clover.
- Bale at 18-20% moisture. Baling in this moisture range inhibits mold growth and reduces heating. Avoid baling hay that is excessively dry due to high levels of leaf loss and hay that is above 20% moisture due to heating and potential hay fires.
- Store under cover and off the ground. Protecting hay from weathering helps to reduce dry matter losses and maintain forage quality. Much of the weathering damage is a result of the hay bale wicking moisture up from the ground. So, storing hay off the ground on a stone pad can greatly reduce deterioration.
- Do not cut hay fields too close. If not properly adjusted, disc mowers can cut very close to the soil surface and this can cause significant damage to cool-season grass stands. Do NOT mow perennial cool-season grass stands closer than 3-4 inches.
- Apply nitrogen following the first cutting. Following a timely first harvest, apply 60 lb N/A to stimulate regrowth. With adequate rainfall, a second harvest can be made approximately 30 days after the first harvest.
- Allow hayfields to go into summer with some regrowth. Make sure to allow cool-season hayfields to go into summer with at least 5-6 inches of regrowth. This will shade the crown of the plant, moderating its temperature, and reduce soil moisture losses.
- Apply nitrogen in late summer. As the temperatures moderate in late summer and early fall, apply 60 lb N/A to stimulate fall growth. This growth can be grazed or harvested as needed.
- Allow plants time to replenish carbohydrates in the fall. Make sure and time fall hay cuttings to allow stand to regrow and replenish their carbohydrates prior to winter dormancy.
- Test hay and supplement accordingly. Testing hay allows you to gauge how well your plan worked and provides you the information needed to develop a supplementation strategy that will keep condition on cows. For more information on hay testing see [AGR-257, Hay Sampling: Strategies for Getting a Good Sample](#).



Figure 2: This hay was baled above the 18-20% moisture range and has reached an internal temperature of more than 150 degrees Fahrenheit. Heating damages protein making it unavailable to the animal. If stored in a tightly packed hay barn, this bale could start a hay fire.

I realize that you probably won't be able to implement all these recommendations, but I would like to challenge you to choose just 2 or 3 things from this list, write them down on the sheet at the end of this article, and hang it on your refrigerator door so that you will see them every day. If you are anything like me, without goals and reminders, it won't get done! Last tip for this month, make sure that one of your goals is to cut at the late

boot for early head stage since this is the single most important factor impacting forage quality!

FORAGE MANAGEMENT TIPS

- Interseed legumes into pastures using a no-till drill.
- Continue hay feeding to allow pastures to rest and spring growth to begin.
- Seed cool-season grass and legumes by mid-March.
- Smooth and reseed hay feeding areas.
- Graze pastures that have been overseeded with clover to control competition.
- Provide free-choice high magnesium mineral to prevent grass tetany.
- Make plans to attend one of the Kentucky Fencing Schools in April.

GOALS for IMPROVING Hay Quality in 2021

I will implement the following practices to improve my hay quality in 2021 growing season.

1. _____
2. _____
3. _____

Turning a National Focus to Grain Safety

By: Lisa Pfeifer, OSU Extension

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-07/turning-national-focus-grain-safety>

Every year hundreds of employees are injured or die from preventable hazards while working in grain storage and handling. Stand Up 4 Grain Safety is an awareness campaign running this week to promote the safety of workers from hazards found in areas of grain handling facilities and on-site storage including grain bins and their surrounding area. The National Stand Up 4 Grain Safety Week is sponsored by an alliance of agricultural industry groups, to provide a collective industry focus and commitment to safety. Everyone deserves to go home from work each day, to that end the industry alliance and safety professionals together recognize a stand for safety March 29 – April 2, 2021. Five learning sessions are offered throughout the week to highlight different aspects of grain handling, from the impact of grain quality on safety to planning and reporting. In addition to the daily live learning sessions, <https://standup4grainsafety.org> houses multiple resources for use within places of employment.



Workers of all ages are at an increased risk when poor grain quality causes reduced flow, bin safety practices are not followed, and emergency action plans are not in place. Practicing simple steps and ensuring protocols are in place will save lives.

Some of the biggest safety concerns present are located at the bin. Slip, trip, and fall hazards are prevalent. Entanglement and amputations can happen at the storage facility even after harvest season has been completed.

- Follow these safety tips when working in and around grain storage:
- Frequently check ladders and stairways attached to the bin for needed repairs.
- Make sure guards are in place on all equipment.
- Turn off and lock out all equipment.
- Ensure no grain is being moved into or out of the bin.
- Test the air within a bin prior to entering.
- Use a N-95 mask when working in a bin with grain.
- Wear a body harness with a lifeline when entering a bin.
- Utilize a farm employee or family member to act as an observer outside the bin when entering.
- Do not walk down grain to make it flow.
- Never enter a bin if there is the potential for bridged grain.
- Account for any items you take into a bin and ensure return to the outside of the bin, so equipment does not later become clogged.

In Ohio there are several services and tools to support industry facilities or farms concerned with safety issues:

Ohio BWC Safety Services has safety and health professionals throughout the state to help every Ohio employer in every industry reduce the risk of employee injury and illness, offering services at no cost to employers. BWC's specialists can provide consultative services in the areas of industrial safety, construction safety, ergonomics, and industrial hygiene. [Request any consultation service online](#) or by phone at 800-644-6292.

Ohio OSHA On-site Consultation can be requested by employers for support in finding and correcting safety hazards in the workplace. Services range from free on-site and virtual safety inspections and consultation, safety program assistance, and safety and hygiene training or seminars, to printed and electronic resources. Unlike the federal OSHA program, OSHA On-Site does not have right of entry to a workplace and does not issue citations or fines. An employer must make the consultation request, and mutually agree upon a time frame within which to correct any safety hazards identified. Call 800-282-1425 or [submit the request online](#).

Ohio BWC Library provides free informational resources on occupational safety and health, workers' compensation, and rehabilitation. Experienced librarians will locate hard-to-find information and provide timely and accurate answers to your questions. If you have a research question about occupational safety & health, call 614-466-7388 or email library@bwc.state.oh.us, and one of the librarians will help you. For questions about their collection of safety training videos and video streaming service, call 614-644-0018.

OSU Agricultural Safety and Health Program directs, coordinates, and administers educational programs, demonstrations and resources to support agriculture and the safety of those working in the industry. As part of Ohio State University Extension's outreach in this area a comprehensive agricultural rescue program is offered to address safety around grain handling. The program consists of Ohio Fire Academy curriculum and professional training for first responders, as well as OSU Ag Safety Grain Handling Awareness curriculum for outreach education and awareness for farmers and the agricultural community. Please visit agsafety.osu.edu to learn more.

Wayne County Regional Training Facility -- Safe Farms Facility is a new training resource available for agricultural safety training as well as rescue training for grain entrapment. It is part of a training campus that has been conducting a diversified list of courses covering Fire, EMS, Agriculture, and other specialty classes/courses over the last 30 years. For a full list of courses and resources offered by the WCRTF, please visit wcfra.com.

Now is the Time to Fine Tune Your Sprayer

By: Dr. Erdal Ozkan

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2021-07/now-time-fine-tune-your-sprayer>

Pesticides need to be applied accurately and uniformly. Too little pesticide results in poor pest control and reduced yields, while too much injures the crop, wastes chemicals and money, and increases the risk of polluting the environment. Achieving satisfactory results from pesticides depends heavily on five major factors:

1. Positive identification of the pest.
2. Choosing the least persistent and lowest toxicity pesticide that will work.
3. Selecting the right equipment, particularly the right type and size of nozzle for the job.
4. Applying pesticides accurately at the right time.
5. Calibrating and maintaining equipment to make sure the amount recommended on the chemical label is applied.
6. Inspection of sprayers



Higher pesticide costs and new chemicals designed to be used in lower doses make accurate application more important than ever. There is no better time than early spring to take a closer look at your sprayer. Here are some of the things I would recommend you do this week if you don't want to unexpectedly halt your spraying later in the season when you cannot afford delaying spraying and missing that most critical time to control weeds:

- First, if you need new or one other type of nozzles on the boom this year, do not delay purchasing new nozzles. Do it now.
- Double-check your sprayer for mechanical problems before you start using it. You won't have time to do this when planting is in full swing.
- Clean the sprayer tank thoroughly and make sure all filters on the sprayer, especially the nozzle filters are clean.
- Clean spray nozzles to make sure they are not partially plugged. Check their flow rates, and replace the ones that are spraying more than 10 percent of the original output at a given spray pressure.
- Check the agitator in the tank to make sure it's working properly. This is extremely important if you will be applying dry chemicals. Run water through the spray system to make sure everything is working properly.
- Always carry a spare, excellent quality pressure gage (glycerin filled) in your shop, and check the accuracy of the pressure gage on the sprayer compared to the reading you see on this spare pressure gage. Your rate controller will not know if your pressure gage is bad, and the flow rate of nozzles will be adjusted by the rate controller using the bad pressure gage.
- Once you are convinced that all sprayer parts are functioning properly, it is time to calibrate the sprayer.

Calibrate the sprayer

One can determine if the chemicals are applied at the proper rate (gallons per acre) only by carefully calibrating the sprayer. Calibration, perhaps more than anything else, will have a direct impact on achieving effective pest control and the cost of crop production. While applying too little pesticide may result in ineffective pest control, too much pesticide wastes money, may damage the crop and increases the potential risk of contaminating ground water and environment. Results of "Sprayer Calibration Clinics" I participated in Ohio a while back, and data from several other States show that only one out of three to four applicators are applying chemicals at a rate that is within 5 % (plus or minus) of their intended rate (an accuracy level recommended by USDA and EPA). For example, if your intended rate is 20 gallons per acre, the 5% tolerable difference will be 1 gallon (5% of 20). So, your actual application rate should be as close to 20 gpa as possible, but not outside the range of 19 to 21 gpa.

How do you calibrate the sprayer?

There are several ways to calibrate a sprayer. Regardless of which method you choose, you will end up measuring the nozzle flow rate (in ounces), and the actual travel speed in miles per hour to determine the actual chemical applied in gallons per acre. Once you determine the actual application rate, you should find out if the difference between the actual rate and the intended rate is greater than 5% of the intended rate (plus or minus). If the error is greater than the 5% tolerable error margin, you will need to reduce the error below 5% by doing one of three things: 1) Change the spraying pressure, 2) change the travel speed, and 3) change nozzles (get a different size) if the error cannot be reduced below 5% by making adjustments in either the pressure or the travel speed, or both.

It usually doesn't take more than 30 minutes to calibrate a sprayer, and only three things are needed: a watch or smart phone to record the time when measuring the nozzle flow rate or the travel speed, a measuring tape, and a jar graduated in ounces. Please take a look at the Ohio State University Extension publication FABE-520 for an easy method for calibrating a field crop (with boom) sprayer. Here is the URL for this publication: <http://ohioline.osu.edu/factsheet/fabe-520>

Pond Management Should Be on Your Mind

By Gary Graham, Holmes County Extension
Originally written for the Bargain Hunter

This past February has brought us one of our first great ice skating and ice fishing opportunities on our ponds in a long time. Shallow ponds and those with low inflow may have seen some fish kills due to the thick ice in 2021. If you experienced a fish kill, know that the key to preventing this is to have open water in your pond. But do remember that open water is dangerous if the pond is used for skating or fishing purposes.

As always, you should have some safety equipment up at your pond year-round. Especially if used in winter for ice fishing and skating. Safety equipment is not just for swimming season. Drownings happen in seconds and too often. In many cases, the would-be rescuers become drowning victims themselves. It is best to throw something to the person in the water from the shore, anything that floats will help. Pond safety is too often overlooked, but is a vital, critical part of being a pond owner. We have pond safety kits available at the Holmes County, Ohio State University Extension Office. If you need a kit for your pond, call 330-674-3015 for details.

Now that spring is here, it's time to control the weed issues you may have experienced last year. Vegetation is not a bad thing in ponds. Aquatic plants add necessary food and oxygen to the aquatic life that reside in your pond. Some of the good weeds are under the water's surface and are not a visual issue. It's the vegetation on top of the pond's water that can cause so much anguish. The first issue to typically appear (and the one that frustrates pond owners the most) is not a weed at all, it is Filamentous algae.

Filamentous algae is a fibrous mat that looks ugly when floating on the pond's surface and seems to appear overnight. This alga starts its growth cycle on the pond's bottom. As it grows, it builds oxygen under its fibrous mat. Once buoyant it floats up to the surface. At first, a couple mats will appear and within a few days, the entire pond surface can be covered. It looks bad and if you use your pond for swimming, it is gross to walk/wad through. Fishing can become annoying when the algae snags on the fishing line and hook each time you reel in the line. A little bit of this menace can lead to some major headaches. Left unchecked, it can explode into a real issue that is bad for the pond.

Of course, the next question is, "How do I kill it?" The time to treat for Filamentous algae is when it is growing on the bottom of the pond. Once it floats to the surface, it is too late to treat as it is already dying. Filamentous algae is controllable with some effort. Management needs to be a multi-front approach including mechanical, chemical, biological and structural control strategies to reduce and rid the pond of this unwelcome guest.

Mechanical Strategies

Once the algae floats to the surface there is no sense to treat it with chemical as it is already dying. The best strategy is to mechanically remove it with a rake by pulling it out of the water and away from the pond. You

can also drag a rake on the pond bottom, close to shore, to break up the mats making them come to the surface quicker to remove them from the pond. The best time to do mechanical removal is on a windy day as mother nature will help you by blowing the floating algae to one area, making for easier removal. Do not leave the removed mats on the pond bank. As it dies, the nutrients flow back into the pond aiding to the next cycle of growth.

Chemical Strategies

Many copper-based chemicals work very well on filamentous algae. Again, once it comes to the surface it is a waste of money to treat then. Chemical application works best after physical removal of mats, both floating and on the pond bottom. Following this order will require lower volumes of costly chemicals and lessens the potential of killing fish. When treating a pond with any chemical only treat a quarter of the pond at once. If you treat and kill all the plants at the same time, you can create a very low dissolved oxygen zone in the water. It takes large volumes of dissolved oxygen to break down the now dying or dead organic matter. Robbing the water of its dissolved oxygen starves the fish of oxygen and can lead to their death.

Biological and Structural Strategies

This is the hardest one to work on as it often means changing what is happening on the land around the pond. Adding more White Amur fish (biological) is not the answer. They eat bottom rooted pond plants, not algae. If runoff from the landscape runs into the pond this can be a source of nutrient loading. If you do not stop the source of nutrients getting into the pond then it will be hard to get ahead of the algae. Reducing the pathway (structural) of nutrients getting into the pond will help greatly.

One thing that helps all ponds is the use of an aerator to add oxygen to the water column. Especially in ponds that are trying to breakdown organic material that robs oxygen from fish. Two types exist; the best method is a bottom bubbler (called a diffuser) that forces air from the pond bottom up to the surface with a series of fine bubbles. The other is a fountain. Although they look nice, they do not do as good of a job getting the oxygen back into the water column. Wind and fresh water flowing into the pond will also add a little oxygen, but if the incoming water is laden with nutrients, then it is just adding to the weed and algae growth.

Lastly, keep the Canada Geese off your pond. They are neat to look at, but they are dirty, annoying and just a couple can really throw off the water quality (especially in small ponds). Their manure, which they deposit at the ponds edge, (where you walk) is very high in phosphorus. Soluble phosphorus is the nutrient that best grows algae. A mature goose at 14 pounds of weight defecates more than 28 times a day, depositing 2 pounds of high nutrient goose stuff. Plus, if you let two geese take up residence, the next year you will have more as many of the offspring will stay.

So again, now is the time to start developing your plan of attack or treatment plan for your pond. Be realistic in that if you want no weeds, you'll need to build a cement pool, which you will have to treat to keep the algae out of too. To reach the Holmes County Extension office call 330.674.3015, or stop in at our NEW office space at 111 East Jackson Street, Millersburg (the old BP gas station east of the Courthouse).

ODA to Offer Pesticide Testing in Coshocton County

OSU Extension in Coshocton County is pleased to announce the Ohio Department of Agriculture will be holding two additional pesticide and fertilizer applicator testing sessions in Coshocton County on and April 14 (**sold out**) and May 12 from 8:00 to 5:00 p.m. each day. These exam sessions will allow individuals to take a private or commercial pesticide applicators examination. The testing will be held in Room 145 in the Coshocton County Services Building with COVID-19 safety protocols enforced. Pre-registration is required and can be made by accessing the Ohio Department of Agriculture's Pesticide Regulatory program at:

<https://agri.ohio.gov/wps/portal/gov/oda/divisions/plant-health/pesticides>

More details can also be by calling 614-728-6987 (option 1) or via email at: pesticides@agri.ohio.gov

***"The first of April is the day we remember what we are the other 364 days of the year."
Mark Twain***



ExploreAg

SPONSOR: Ohio Farm Bureau Foundation

Camps are open to Ohio students interested in science, food and a variety of ag careers. Students must be a high school freshman, sophomore or junior.

DATES OF WEEKLONG CAMPS:

**June 13-18 - Ohio State University
Main Campus**

**June 20-25 - Ohio State University
ATI Campus**

DATES OF WEEKEND CAMPS:

Locations will be announced in conjunction with colleges or universities across the state

July 9-11

July 16-18

September 10-12

COST FOR CAMPS: Free

APPLICATION DEADLINES:

Priority Deadline - March 5th

Final Deadline - April 2nd

REGISTRATION: exploreag.org

APPLICATION REQUIREMENTS:

- A one-three minute video "Please tell us about one agricultural career and why that interests you."
- One reference that is not a friend or family member

OVERVIEW OF PROGRAM:

Why and who should attend

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

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



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES



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