MARCH 2025

Cooperative Extension Service

NEWSLETTER

AGRICULTURE AND NATURAL RESOURCES

Clark County Extension Service • 1400 Fortune Drive • Winchester, KY 40391 • 859-744-4682 • clark.ext@uky.edu • http://clark.ca.uky.edu/

A Word from the Agent . . .

This has been one heck of a winter, and I can't wait for spring to be here. However, now is a good time to be doing a lot of planning for the spring with regards to fertilizer applications, soil tests, fixing equipment, and preparing equipment.

As always, here at the extension office, we can help with weed identification, soil testing, forage testing, forage evaluation and much more for free. Just give us a call, and we will be there to help.

Please feel free to contact the Clark County Extension Office with questions and setup farm visits. Be safe out there and remember that spring is right around the corner!

Levi Berg
Clark County Extension Agent
for Agriculture and Natural Resources
levi.berg@uky.edu

REMEMBER to get your soil samples into the Extension office, so we can get your sample results back in a timely manner. It is a **FREE** service that we offer. Current wait time on sample results is approximately two to three weeks.

KEEPING YOU Informed

Forage Management Tips for March

- Continue pasture renovation by no-tilling seeding legumes.
- Place small seed at 1/4 to 1/2 inch deep and check depth several times during planting; slow down for more precise seeding.
- Continue feeding hay until adequate forage exists in the pasture for grazing.
- Spring seeding of grasses should be done in early to mid-March (but fall is preferred).
- Begin smoothing and re-seeding hay feeding and heavy traffic areas.
- Graze pastures overseeded with clover to reduce competition from existing grasses. Pull livestock off before grazing new clover plants.
- Provide free choice high-magnesium mineral to prevent grass tetany on lush spring growth.

KEEPING YOU Informed

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https://www.facebook.com/ClarkCountyExtension

Situation:

On January 7, 2025, the first human patient diagnosed with H5N1 died, raising concerns for the general public. The patient was confirmed infected on December 18, 2024, through routine surveillance when they were hospitalized with severe respiratory illness. The patient was 65 years old with underlying health conditions and appeared to have been infected from exposure to backyard poultry and wild birds.

First, the CDC still maintains that the risk to the general public remains low. They do, however, caution those that come into contact with wild birds, poultry, or dairy cows that they are at a higher risk. The CDC is providing information for those potentially exposed to H5N1 birds -

https://www.cdc.gov/bird-flu/prevention/farm-workers.html

For such people Personal Protection Equipment (PPE) is recommended. The CDC also provides flyers on the proper use of PPE, found at the same website. The information is available in both English and Spanish.

Background Material:

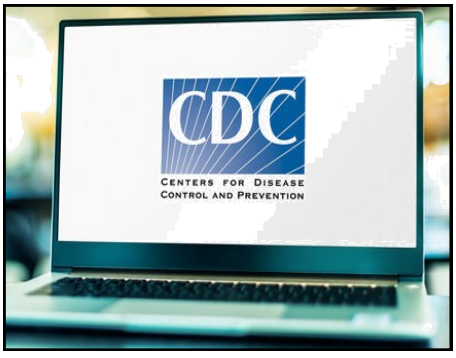
H5N1 is an influenza virus that primarily affects birds but in the last couple of years has started to affect mammals, including dairy cows. In 2024 there were 66 confirmed human cases of H5N1 in the USA, although there have been many more globally. Of these 66 cases, 40 were work-related to exposure (to dairy cows). The highest incidence of human infections has been confirmed in California (37), Washington (11), and Colorado (10). There have also been two confirmed cases in Michigan and one each in Iowa, Louisiana, Missouri, Oregon, Texas, and Wisconsin.

Symptoms of H5N1:

A December 2024 article from the New England Journal of Medicine1 described 46 human cases of H5N1 confirmed between March through October 2024. The cases were primarily due to exposure to infected poultry (20) or infected dairy cows (25). One had no identified exposure and was hospitalized with non-respiratory systems and the H5N1 confirmed through routine surveillance. None of the other patients were hospitalized. Of these, 93% had conjunctivitis (pinkeye), 49% had a fever, and 36% had respiratory symptoms only. The median duration of the illness for which they have data (16 patients) was 4 days. Most patients (87%) received oseltamivir (Tamiflu). There has been no known person-to-person transmission.

From the CDC - Symptoms Can Include:

- √ Eye redness and irritation (conjunctivitis)
- √ Fever (temperature of 100°F [37.8°C] or greater) or feeling feverish
- √ Shortness of breath or difficulty breathing
- √ Cough
- √ Muscle or body aches
- √ Sore throat
- √ Runny or stuffy nose
- √ Headaches
- √ Fatigue
- √ *Less common signs and symptoms include diarrhea, nausea, vomiting, or seizures.*



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Should there be a concern?

While the Louisiana patient is the only severe case of H5N1 in the USA, a Canadian case occurred in November 2024. The case involved a 13-year-old girl who was overweight and had mild asthma. She went to the hospital with a case of conjunctivitis in both eyes and a day-old fever. She was discharged without treatment but returned a few days later with a cough, vomiting and diarrhea and was in respiratory distress and acute kidney injury. She was treated with oseltamivir and recovered.

Genomic testing of the H5N1 virus obtained from both patients showed important mutations that lead to the respiratory symptoms. The mutation in the H5 hemagglutinin (the 'H' in the H5N1 designation) gene resulted in increased binding to a receptor that facilitates virus entry into cells in the human respiratory tract and enabled viral replication. The pre-mutation virus was not able to enter cells in the human respiratory tract. The mutation occurred in the patient, but no person-to-person transmission was observed.

As a follow up to the previous articles, an editorial published in The New England Journal of Medicine3 concluded that the CDC still designates the public risk of H5N1 is low and we have candidate vaccines and antivirals available to try to mitigate severe influenza in the case of wider spread. The influenza A virus is highly susceptible to mutations. There is concern for changes to the HA gene resulting in increased binding to the human airway receptors and a need for increased gene testing during surveillance has been recommended.

Conclusions:

Anyone who comes into contact with wild birds, poultry, dairy cows and other mammals should use proper personal protection equipment – gloves and mask at a minimum. Report any sick or dead wild birds using the Kentucky Department of Fish and Wildlife. Call 1-800-858-1549 from 8:00 AM to 4:30 PM (Eastern) on weekdays. Poultry owners who think their birds are sick please immediately call the Kentucky Sick Bird Hotline at 866-536-7593. This hotline is available for bird owners in Kentucky who are dealing with unusual signs of illness or increased mortality in their flock or livestock.

Additional Resources:

- KDA's Factsheet: Avian Influenza in Kentucky – Information for bird owners: https://www.kyagr.com/statevet/documents/HPAI_Avian_Influenza_HANDOUT.pdf
- KY Fish and Wildlife avian influenza webpage: https://fw.ky.gov/Wildlife/Pages/AvianInfluenza.aspx

[1] Garg, S. et al. 2024. Highly Pathogenic Avian Influenza A (H5N1) virus infections in humans. The New England Journal of Medicine. Published December 31, 2024, and available online at https://www.nejm.org/doi/pdf/10.1056 NEJMoa2414610

[2] Correspondence: Critical illness in an adolescent with Influenza A (H5N1) virus infection. The New England Journal of Medicine. Published December 31, 2024, and available online at https://www.nejm.org/doi/pdf/10.1056/NEJMc2415890

[3] Ison, M.G. and J. Marrazzo. 2024. Editorial: The emerging threat of H5N1 to human health. The New England Journal of Medicine. Published December 31, 2024, and available online at https://www.nejm.org/doi/pdf/10.1056/NEJMe2416323

Buttercups mostly grow as winter annuals, although some species are classified as short-lived perennials. In Kentucky there are different species of buttercups that are known to impact pasture fields, such as hispid buttercup (*Ranunculus hispidus*), tall buttercup (*Ranunculus acris*), creeping buttercup (*Ranunculus repens*), bulbous buttercup (*Ranunculus bulbosus*), and small flower buttercup (*Ranunculus arbortivus*). These plants typically produce five, shiny yellow petals beginning in the early spring. Although different species may have somewhat similar flower heads, each of these buttercup species differs somewhat in their vegetative leaf characteristics. During the time petals are showy new seed has already begun to develop. Waiting until after flowers appear can be too late to implement control tactics. This is one reason buttercups survive year to year and new plants emerge each year. The photo above shows hispid buttercup with mature flowers and new seed forming.

Some buttercup plants may emerge in the fall but most plants emerge from seed during the late winter months when temperatures begin to warm. Buttercup, as a cool season weed, often flourishes in over grazed pasture fields with poor stands of desirable forages. Therefore, pasture management practices that improve and promote growth of desirable plants during these months is one of the best methods to help compete against the emergence and growth of this plant. Whereas, livestock animals allowed to overgraze fields during the fall and winter months is one of the main factors that contribute to buttercup problems. Mowing fields or clipping plants close to the ground in the early spring before buttercup plants can produce flowers may help reduce the amount of new seed produced, but mowing alone will not totally eliminate seed production. The photo above shows hispid buttercup with mature flowers and new seed forming.

For chemical control, herbicides registered for use on grazed grass pastures that contain 2,4-D alone will effectively control buttercup. Depending on other weeds present herbicide products that contain dicamba+2,4-D (eg. Weedmaster, Brash, Rifle-D, etc.), aminopyralid (eg. GrazonNext, Duracor), or triclopyr (eg. Crossbow) can also be used. However, legumes such as clovers interseeded with grass pastures will be severely injured or killed by these other herbicide products. For optimum results apply a herbicide in the early spring (March or early April) before flowers are observed, when buttercup plants are still small and actively growing in a vegetative growth stage. For best herbicide activity wait until daytime air temperatures is greater than 60 F for two to three consecutive days. Consult the herbicide label for further information on grazing restrictions, precautions, or other possible limitations.

For fields heavily infested with buttercup a variety of control tactics may be needed. Apply a herbicide to help reduce the population of buttercup plants in the spring plus use good pasture management techniques throughout the year to help improve and thicken the stand of desirable forages. The field photo at the bottom of the page shows a pasture field in late April with flowering buttercup.

~ Article by Dr. J.D. Green, UK Extension Weed Scientist

Tree Seedling Give-A-Way

The Clark County Conservation District will be holding its annual Tree Seedling Give-A-Way. The seedlings consist of:

- Pawpaw
- Shellbark Hickory
- Hazelnut
- Eastern Redbud
- Red Shumard Oak
- White Pine
- Pin Oak
- Pecan
- Persimmon
- White Oak

Wednesday, March 26

8:30 am to 4:00 pm
(or as supplies last)

Note

Clark County Conservation District
(667 Tech Drive; Winchester, KY)

The seedlings will be given away free on a a first come / first serve basis, with a limit of 15 per person. Please bring wet newspaper or cloth and a plastic bat to transport seedlings to ensure that the roots will stay moist.

KADF
KENTUCKY AGRICULTURAL DEVELOPMENT FUND

~ YAIP INFORMATION ~

Youth Agricultural Incentives Program (YAIP) is a cost share program designed for applicants that are enrolled in elementary, middle, high school or home school, that are at least 9 years of age at the time of the application, and are actively engaged in agriculture. Starting **Monday, February 24**, until **Friday, March 14,** during the hours of 8:30 am to 4:00 pm, Monday through Friday the applications will be available at:

Clark County Conservation District Office
667 Tech Drive; Winchester, Kentucky
(also available at cccdky.com under forms)

For more information:
Angie Embry: 859-744-2322
angela.embry@ky.nacdnet.net

~ YAIP INVESTMENT AREAS ~

- **Agricultural Diversification**
- **Supervised Agriculture Experience**
- **Forage & Grain Improvement**
- **Showmanship**
- **Animal Production**
- **Country Ham Projects**

Maximum local cost share is $1,500.00 on a 50/50 matching basis upon the investment area completion. Submit Student Report & Certification form, project invoices, and proof of payment for cost share reimbursement. ***(NO cash receipts).***

BEEF MANAGEMENT WEBINAR SERIES

If you are interested and would like to be registered, send an email to dbullock@uky.edu with Beef Webinar Series in the subject line and your county in the message to receive a Zoom link and password. You will receive an invitation and password the morning of the presentation.

March 11

PREPARIING FOR A SUCCESSFUL BREEDING SEASON

Dr. Les Anderson, Extension Professor, University of Kentucky

April 8

HEALTH UPDATE AND INTERNAL PARASITE FIELD STUDY RESULTS

Dr. Michelle Arnold, Extension Veterinarian, and Dr. Jeff Lehmkuhler, Extension Professor, University of Kentucky

If you have questions or need additional information, please email dbullock@uky.edu.
If you have already registered, you will get a Zoom invitation the morning of each session with the link and password.

RECIPE

Slow Cooker Wild Side Burgoo

Cook Wild KENTUCKY

SOURCE: Adapted from "Slow Cooker Mount St. Joseph Burgoo" from "Pride of Kentucky" by University of Kentucky Cooperative Extension and Kentucky Department of Agriculture.

INGREDIENTS:
SERVINGS: 12 **SERVING SIZE:** 1 cup

- 4 medium potatoes, peeled and diced
- 1 cup cooked rabbit or chicken, cubed
- 1 cup cooked venison or beef, cubed
- 1 cup cooked squirrel or pork, cubed
- 1 cup cooked lima beans (or 1 15-ounce can, drained)
- 1 cup whole kernel corn (or 1 15- ounce can, drained)
- 3 1/4 cups chopped tomatoes (or 1 28-ounce can undrained)
- 1 1/2 cups cabbage, shredded
- 1/4 cup Worcestershire sauce
- 2 tablespoons vinegar
- 1 teaspoon sugar
- 1 teaspoon salt
- 1/2 teaspoon ground pepper
- 3 cups water

DIRECTIONS:

Wash hands with warm water and soap, scrubbing for at least 20 seconds.
Wash potatoes with a clean vegetable brush under running water before preparing.
Combine all ingredients in a 6-quart slow cooker. Stir to blend.
Cover with lid and cook on low for 8 hours.
Refrigerate any leftovers within 2 hours after slow cooker is turned off. Divide leftovers into smaller containers to allow quick cooling.

NUTRITION FACTS PER SERVING:

210 calories; 3.5g total fat; lg saturated fat; Og trans fat; 50mg cholesterol; 460mg sodium; 25g total carbohydrate; 4g dietary fiber; 5g sugars; Og added sugars; 20g protein; 0% Daily Value of vitamin D; 6% Daily Value of calcium; 15% Daily Value of iron; 10% Daily Value of potassium. 210 calories; 3.5g total fat; lg saturated fat; Og trans fat; 50mg cholesterol; 460mg sodium; 25g total carbohydrate; 4g dietary fiber; 5g sugars; Og added sugars; 20g protein; 0% Daily Value of vitamin D; 6% Daily Value of calcium; 15% Daily Value of iron; 10% Daily Value of potassium.

EFNEP Expanded Food and Nutrition Education Program | SNAP Putting Healthy Food Within Reach | USDA Supplemental Nutrition Assistance Program | University of Kentucky College of Agriculture, Food and Environment Cooperative Extension Service

Find this Cook Wild Kentucky recipe and others for Fish, Venison, Rabbit, Dove, Frog Legs, and more at: https://planeatmove.com/recipes/, then browse by Category, and choose Cook Wild Kentucky.