

Clinton County Agriculture and Natural Resources Newsletter

Summer 23'



University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

Cooperative Extension Service

Clinton County

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Upcoming Events in Agriculture:

- Clinton County Fair.....June 17th - 24th Fairgrounds
- Clinton/Cumberland Cattle Mtg.....June 29th CC EXT. Office
- CAIP cost-share Applications available.....June 12th - 30th CC EXT. Office
- CAIP cost-share Applications Due by 4:00pm.....June 30th CC EXT. Office
- Twin Lakes Cattle Assoc. Field Day.....July 13th Springhaven Farms
- KY State Fair.....Aug. 17th - 27th Louisville, KY

Hopefully the beginning of Summer is treating you well, crops and cool season pastures are starting to improve after some much needed rainfall. The local CAIP cost-share program signup began on June 12th. Producers can pick up applications at the Extension office from now until June 30th, the deadline to turn in applications is 4PM Friday June 30th. As a reminder producers will need to have an updated Ag Water Quality plan prior to submitting your CAIP application, call the Clinton Co. Soil Conservation Office at 606-387-5976 or the Clinton Co. Extension Office for assistance in completing your KY Ag water quality plans. The Clinton/Cumberland Cattleman’s Association will have their summer meeting at the Clinton County Extension Office on Thursday June 29th at 6PM. UK Extension Entomology Specialist Jonathon Larson will be speaking on ticks in the environment and how they impact livestock and human health. The Twin Lakes Cattle Association will host a summer field day at Springhaven farms on July 13th, more details are listed on page 2. With Poison hemlock populations continually increasing I am re-printing an article from last summers newsletter to remind folks about the issues it can cause.

Colby Guffey

Clinton County Agent for Agriculture and Natural Resources

MONEY FOR ON-FARM INVESTMENTS AVAILABLE...



Twin Lakes Cattlemen’s Association

2601 N. Hwy 127
Albany, KY 42602
606-688-4492
Or
606-387-5404

Visit <https://kyagr.com/agpolicy> for more details

COUNTY AGRICULTURAL INVESTMENT PROGRAM (CAIP)

Applications will be available for Clinton County’s CAIP to assist farmers in making important on-farm investments.

Application Period:

June 12 – June 30, 2023

No applications will be accepted after June 30, 2023

Application Availability:

Clinton County Extension Office
Monday – Friday (8 a.m. – 4:00 p.m.)

For More Information:

Contact Steve Peddicord at 606-688-4492 or email speddicord@windstream.net

No applications will be mailed.

All applications are scored, based on the scoring criteria set by the Kentucky Agricultural Development Board.





*Twin Lakes Cattle Association
Farm Field Day*

*Location : Springhaven Farms
4737 Hwy 639 Albany KY
July 13th @ 5PM CST*



Topics Covered

*Crossbreeding : Gayle Rippe
Rippe Farms, Galax, VA*

*Pasture Weed Control : Rachel Walker
Corteva Rep*

NRCS programs: Danny Hughes

FSA Programs: Carissa Truman



Be aware of poison hemlock dangers to livestock

Source: Michelle Arnold, UK extension ruminant veterinarian; J.D. Green, UK extension weeds specialist

In recent months, evidence of poison hemlock is widespread in Kentucky. Poison hemlock is toxic to a wide variety of animals including birds, wildlife, cattle, sheep, goats, pigs, horses and to humans.

People are usually poisoned when they eat hemlock mistaken for plants such as parsley, wild carrot or wild anise. Although, cattle seldom eat hemlock, they will if no other forage is available or if it is incorporated in hay or silage. A common question is how much do cattle need to eat to kill them. Unfortunately, the answer is not clear cut. There is considerable variation in the toxic alkaloid content of the plant depending on stage of growth, season, moisture, temperature, time of day and geographical region (southern plants are more toxic than northern plants). The alkaloids have two major effects: rapid, sometimes fatal effects on the nervous system, and birth defects in calves and pigs. Cattle have died by eating as little as 0.2-0.5 percent of their body weight in green hemlock.

Although this plant is often seen along roadways, abandoned lots, fencerows and other non-cropland sites, in more recent years, it has expanded out into grazed pasture lands and hay fields. Poison hemlock is classified as a biennial that reproduces only by seed. It is capable, however, of completing its lifecycle as a winter annual in Kentucky if it germinates during the fall. Flowers and new seed are typically produced in late May and June. Plants emerge as a cluster of leaves that form a rosette. Poison hemlock is most noticeable at this stage of growth in late fall through early spring with its parsley-like leaves which are highly dissected or fern-like. The individual leaves are shiny green and triangular in appearance.

As the plant begins to send up flower stalks, the leaves are alternately arranged on the main stem. Each individual leaf is pinnately compound with several pairs of leaflets that appear along opposite sides of the main petiole. As the plant matures, poison hemlock can grow upwards to about 6 to 8 feet tall. At maturity, the plant is erect, often with multi-branched stems, and it forms a deep taproot. Poison hemlock has smooth, hollow stems with random purple spots along the lower stem that help distinguish it from other similar plants. The flowers, when mature, are white and form a series of compound umbels (an umbrella-shaped cluster of small flowers) at the end of each terminal stalk. Although poison hemlock is often associated with areas that have moist soil conditions, it can also survive in dry sites.

Symptoms of poisoning can occur within 30 minutes to two hours of ingestion depending on the animal, quantity consumed and other ecologic factors. Toxicity varies depending on stage of plant growth, location and environment. Poison hemlock foliage has an unpleasant mouse urine-like odor, detectable when near the plant or when a stem or leaf is crushed, so livestock generally avoid it. Signs of acute poisoning include:

- nervousness, trembling, muscle weakness, incoordination
- salivation (slobbering)
- initial stimulation or excitement followed by depression
- dilation of the pupils
- weak heartbeat
- musty, mousy odor to breath and in the urine
- prolapse of the third eyelid across the cornea may cause temporary blindness
- death by respiratory failure, due to paralysis of respiratory muscles



Poison Hemlock in the seed production stage, make note of these areas to prepare for herbicide treatment this fall.

Although acute disease is a primary concern, an equally serious problem is subacute intoxication of pregnant livestock that causes deformed bones and joints in calves and pigs. For this to happen, cows must eat the plants for an extended period of time during the first trimester of pregnancy. The susceptible stage of gestation for maternal exposure for cattle is from 50-75 days for skeletal defects to occur. These alkaloids continuously reduce fetal movement during tissue formation, resulting in crooked legs, deformed necks and spines. Less commonly, cleft palate results from lack of fetal movement in the head and neck regions at 30-50 days gestation, resulting in the tongue preventing normal palate closure during embryo development.

All parts of the plant, including the seeds, contain the toxic alkaloids. Ingestion of fresh, green plant material may quickly produce signs of intoxication within an hour and last for several hours. Seeds and dried plant material contain the highest concentrations of the most troubling alkaloid. Toxicity may be somewhat reduced in dried plants due to volatility of the alkaloids, but the potential for toxicity still exists, particularly when a sufficient quantity is consumed in dried hay. Seeds are highly toxic and can be a source of poisoning when they contaminate cereal grains fed to livestock. Use extreme caution before feeding animals hay or grain known to contain poison hemlock.

Diagnosis is based on history of plant ingestion, clinical signs and chemical analysis for presence of alkaloids in rumen contents. No specific treatment for poisoning exists. If acute poisoning does not progress to respiratory failure and death, the prognosis for full recovery is good. Avoid overexcitement and stress that may exacerbate clinical signs and result in death.

Public health is a concern when dealing with poisoned animals because of the possibility of alkaloid residues in meat. Elimination of plant toxicants through the milk is a minor route of excretion but may be important when consumed by a calf or a human.

The principle strategy for poison hemlock control is to prevent seed production which can be a challenge since a fully mature plant is capable of producing 35,000 – 40,000 new seeds. It is too late to use herbicide control methods after plants have produced flowers. Therefore, you should use mechanical control efforts such as mowing or cutting down individual plants just before peak flower production to avoid or reduce the amount of new seed being produced.

Make note of areas heavily infested with poison hemlock and begin to look for emergence of new plants in the fall. During the late fall, November, or early spring, March, is the best time of year for herbicide treatment. In grass pastures and hayfields herbicide products containing 2,4-D can be effective when applied to young, actively growing plants that are in the rosette stage of growth. Spot treatments with products containing 2,4-D, triclopyr, or glyphosate can also be used depending on the location

Heat Safety

By Tony Edwards - National Weather Service Charleston, WV

While it's been a relatively cool start to summer across the Bluegrass State, heat and humidity more typical of summer are bound to arrive sooner rather than later. Heat is one of the leading weather-related killers in the U.S., resulting in hundreds of fatalities each year. During extremely hot and humid weather, your body's ability to cool itself is challenged. A body heating too rapidly, or losing too much fluid or salt through dehydration or sweating, can result in death or permanent injury. While everyone can be vulnerable to heat, some are more vulnerable than others. Infants, children, the elderly, chronically ill, and pregnant women are especially vulnerable.

During excessive heat, avoid heavy activity and direct sunlight. Stay hydrated, find a cool indoor place, and check on children, the elderly, and pets. Protect yourself outside by wearing light, loose-fitting clothes, stay hydrated, and spend time in the shade. Also, never leave anyone (or pets) alone in a locked car, even in the winter, as death can occur in as little as 10 minutes.

The Centers for Disease Control and Prevention (CDC) provides a list of warning signs and symptoms of heat illness, and recommended first aid steps.

Heat Cramps

Heat cramps may be the first sign of heat-related illness, and may lead to heat exhaustion or stroke. Symptoms include painful muscle cramps and spasms, usually in legs and abdomen, and heavy sweating. First aid for someone experiencing heat cramps includes applying firm pressure on cramping muscles or gently massage to relieve the spasms. Give sips of water unless the person complains of nausea. Seek immediate medical attention if cramps last longer than 1 hour.

Heat Exhaustion

Symptoms include heavy sweating; weakness or tiredness; cool, pale, clammy skin; fast, weak pulse; muscle cramps; dizziness; nausea or vomiting; headache; and fainting. If you suspect someone is suffering from heat exhaustion, move the person to a cooler location, preferably an air conditioned room. Loosen clothing. Apply cool, wet cloths or have the person sit in a cool bath. Offer sips of water. Seek immediate medical attention if the person vomits, symptoms worsen, or last longer than 1 hour.

Heat Stroke

Symptoms include a throbbing headache; confusion; nausea; dizziness; body temperature above 103°F; hot, red, dry or damp skin; rapid and strong pulse; fainting; and loss of consciousness. **Call 911 or get the victim to a hospital immediately** as heat stroke is a severe medical emergency. Move the victim to a cooler, preferably air-conditioned, environment. Reduce body temperature with cool cloths or a cool bath. Use a fan if heat index temperatures are below the high 90s. A fan can make you hotter at higher temperatures. Do NOT give fluids.

Heat Exhaustion	Heat Stroke
<p>ACT FAST</p> <ul style="list-style-type: none">• Move to a cooler area• Loosen clothing• Sip cool water• Seek medical help if symptoms don't improve	<p>ACT FAST</p> <p>CALL 911</p> <ul style="list-style-type: none">• Move person to a cooler area• Loosen clothing and remove extra layers• Cool with water or ice
<p><i>Dizziness</i></p> <p><i>Thirst</i></p> <p><i>Heavy Sweating</i></p> <p><i>Nausea</i></p> <p><i>Weakness</i></p>	<p><i>Confusion</i></p> <p><i>Dizziness</i></p> <p><i>Becomes Unconscious</i></p>
<p><i>Heat exhaustion can lead to heat stroke.</i></p>	
<p><i>Heat stroke can cause death or permanent disability if emergency treatment is not given.</i></p>	

Stay Cool, Stay Hydrated, Stay Informed!



Cabbage Jambalaya

1 pound lean ground beef	1 (13 ounces) package turkey smoked sausage, sliced	1 (14.5 ounces) can diced tomatoes
1 ½ cups chopped celery	1 medium head cabbage, chopped (about 10 cups)	2 cups water
1 ½ cups chopped onion		1 cup brown rice
2 cloves garlic, minced		1 teaspoon garlic powder
		1 tablespoon Cajun seasoning

Heat a large stockpot over medium high. **Add** ground beef, and **cook** until it starts to brown, about 6 minutes. **Add** the celery, and **cook** for 2 minutes. **Add** onion and garlic, and **cook** 4 minutes while stirring. **Add** smoked sausage, and **cook** an additional 2 to 3 minutes. **Stir in** cabbage, and **cook** until it wilts, about 3 minutes. **Add** tomatoes, water, rice, garlic powder, and Cajun seasoning.

Bring to a **boil**, and **reduce** heat to medium. **Cover**, and **simmer** for 40 minutes. Serve hot.

Yield: 10, 1-cup servings

Nutritional Analysis:
250 calories, 8 g fat, 3 g saturated fat, 60 mg cholesterol, 400 mg sodium, 26 g carbohydrate, 4 g fiber, 6 g sugars, 0 g added sugars, 18 g protein