

David G. Hallauer  
District Extension Agent  
Crops & Soils/Horticulture

### ***Hemp Dogbane***

One increasing problem in forages – hay stands in particular – is Hemp dogbane. A perennial, Hemp dogbane grows to three to five feet tall and is confused with milkweed species due to similar appearance and presence of milky sap (NOTE: only fresh plants will show sap). Stems have a reddish tint at maturity and become woody at the base.

Long, horizontal rootstocks result in plant colonies. Plants start as a single taproot, but have been found to grow to a depth of almost six feet and spread laterally as much as ten feet in one season. This vigorous growth and a long growing season (it flowers from May to September) makes it a formidable foe in forage stands. The term dogbane is said to refer to the plant being poisonous to dogs. The same plant resins can also harm cattle under the right conditions.

If plants are few and forage stands are competitive, Hemp dogbane might not be a significant weed of concern. If any production ‘hiccup’ (or combination of) occurs, Hemp dogbane can become a significant problem. From a cultural control standpoint, make sure stands are healthy, with good fertility and appropriate harvest management. A competitive grass stand is your best weapon against allowing Hemp dogbane to gain a foothold.

If pressure is increasing, mowing is an option. Missouri research suggests a mid-August mowing could help to reduce the size of weed patches the next season while frequent mowing throughout the season could reduce plant vigor and seed production. Unfortunately, even repeated mowing isn’t likely to eliminate this perennial.

Chemical control options include many of our common active ingredients: 2,4-D, dicamba, fluroxypyr, and triclopyr. Missouri research suggests 2,4-D or fluroxypyr. Limited research in Kansas shows an advantage to products containing fluroxypyr.

Monitor forage stands post-harvest for Hemp dogbane with an eye to a control program if warranted. For identification aids, check out the Hemp dogbane page at the Kansas Wildflowers and Grasses website at: [https://www.kswildflower.org/flower\\_details.php?flowerID=112](https://www.kswildflower.org/flower_details.php?flowerID=112) .

### ***Japanese Beetles***

Japanese beetle feeding damage is again evident across Northeast Kansas. Most easily identified by their metallic green color with coppery brown wing covers and small tufts of white hairs along the edge of the abdomen, they feed through upper leaf surfaces, leaving leaves looking lace-like or skeletonized. They love warm days, starting at the tops of ornamentals and vegetables (mainly) and moving downwards.

Control starts by minimizing plant stress. Water appropriately and remove smartweeds attractive to Japanese beetles. Physically remove (every other day) adults on cool mornings when movement/feeding is slowed and collect beetles in a container of rubbing alcohol or soapy water. Traps work, (not recommended) but may lure more adults to an area than would occur normally.

Chemical control options are effective, but repeat applications when high numbers are present, will be needed. Find a list of products in the most recent Kansas Insect Newsletter at: <https://entomology.k-state.edu/doc/extension-newsletters/2022/KSInsectNewsletter%2011.pdf> . Always read and follow label directions, making any applications in early morning or late evening to avoid harm to pollinators. Natural enemies of spider mites *will* be harmed by these applications resulting in possible spider mite outbreaks as well.

Cindy Williams  
District Extension Agent  
Family & Community Wellness

### **Dining Outdoors: Tips to Avoid Foodborne Illness**

The heat of summer is here! It's time to break out the barbecue and hit the outdoors for fun in the sun. But before you pack up your picnic basket for a fun-filled afternoon at the park, fire up the backyard barbecue or prepare a poolside lunch for friends, there are a few very important precautions you should take to prevent foodborne illness from ruining your outdoor eating activities.

- **Wash your hands often.** When preparing a variety of foods at the same time, it is important not to pass bacteria from one food to another with your hands. Washing your hands with warm soapy water for at least 20 seconds, before preparing foods and after handling raw meats, will significantly lower the risk of foodborne illness.
- **Keep raw meats and ready-to-eat foods separate!** Cross contamination occurs when juices from raw meat accidentally touch cooked or ready-to-eat foods. Make sure to use two separate cutting boards; one for raw meat and the other for fruits and vegetables.
- **Make mine well.** Whether you like your steak rare or not, it is very important to cook your large cuts of meat throughout. It is ok to have pink in the center, but make sure the outside is cooked to a dark brown. When barbecuing poultry or seafood, always make sure the meat is cooked through out. Use a food thermometer to check the proper cooked temperature of the foods you are preparing.
- **Never wear the same plate twice.** Plates that had raw meats on them should always be washed immediately. Never use the same plate once the meat has been cooked.
- **Keep hot food hot, and cold food cold.** Particularly when you're enjoying an afternoon picnic in the sun, it is critical that cold foods such as potato salad, stay chilled throughout the day. Hot foods, like steak, chicken or hot dogs, should be kept covered in foil to retain heat. At the end of the day, make sure to promptly refrigerate all the food you intend to save for the next day. This will help reduce the growth of bacteria in the food.
- **Keep melons out of the "Danger Zone!"** Melons can pose a risk for foodborne illness if not prepared or stored properly. Before cutting into a melon, wash the outer surface thoroughly to remove surface soil—even if the melon looks clean. Once a melon has been cut, you must keep it chilled in ice or refrigerated at 45 degrees or less. Cut melons can be served without refrigeration for a maximum of 4 hours.
- **Safety on the side.** Never keep side food items out for longer than two hours that are prepared with mayonnaise or are considered high in protein. Bacteria can multiply in moist foods including salads and desserts. Keep your cold side dishes chilled and away from the sun at all time.

Ross Mosteller  
District Extension Agent  
Livestock & Natural Resources

## Heat Stress in Livestock

I might be the only one who feels this way, but it seems like the Kansas weather no longer gives us an extended transition period of beautiful spring weather. More often it feels like we jump directly from winter to summer heat. May was especially warm, June hot at times, with some catastrophic examples of heat stress across the state, and the past week or so has again shown how hot and humid Kansas can be. Let's take a look at some livestock heat stress basics.

As temperatures heat up livestock producers need to assess the heat stress that their livestock are under. While this article will mainly discuss cattle, the same basic principles apply to all classes of livestock. Animals need to have the ability to seek shade, water, reduce physical activity, adjust feeding times and have good air movement, to cool themselves.

At temperatures above 80 degrees Fahrenheit animals begin enduring physiologic stress dealing with heat load. Cattle cannot dissipate their heat load very effectively, with their reduced sweat efficiency, and rely on respiration to cool themselves. Ruminates in general, deal with a compounding heat factor, on top of climatic conditions, the heat energy generated during the fermentation process within the rumen.

Animals accumulate a heat load during the day and dissipate heat at night when it is cooler. Cattle's core temperature peaks 2 hours after peak environmental temperature. It also takes at least 6 hours for cattle to dissipate their heat load. During extreme weather conditions of high heat and humidity, insufficient environmental night cooling can lead to accumulated heat not being dispersed. So, now that we understand a bit of how heat can accumulate/dissipate, what can managers do to deal with heat stress? Here are some basic management tips:

- Water requirements increase during heat stress. Water supply should be able to deliver 1.1% of body weight per hour. A 1000-pound animal needs about 1.5 gallons of water per hour.
- Heat production from feed intake peaks 4 to 6 hours after feeding. Decrease feeding during the heat of day. Feed 70 percent of the animals' ration as late in the evening as possible. This will put the peak heat of digestion overnight when temperatures are likely cooler.
- Shade is critical during extreme heat events, especially with black hided, heavy-weight animals. To be effective there needs to be 20 to 40 square feet of shade per beef animal.
- Increasing air flow helps animals cope with extreme heat events. Animals should be moved to areas with more air flow when possible and/or be given more space between animals in a pen. In barn settings, make sure fans continue to run and have a backup energy source.
- Sprinklers increase evaporative cooling and can reduce ground temperature. When used, sprinklers should thoroughly wet the animal and not just mist the air to effectively cool.
- Do not work livestock during times of extreme heat and only early in morning when it's hot.

Two very important tools that can help managers monitor potential heat stress are: The U.S. Meat Animal Research Center's seven-day forecast tool looking at; temperature, humidity and solar radiation <https://www.ars.usda.gov/plains-area/clay-center-ne/marc> The second is the Kansas Mesonet animal comfort index. This network of observation towers located across the state (Corning and Oskaloosa in Meadowlark District) that updates climate information hourly <https://mesonet.k-state.edu/agriculture/animal/#tab=resource-tab>

Animal observation is critical to know when animals are in suffering from heat stress. As heat stress increases animals will begin to slobber and respiration rates will increase. Severe heat stressed animals will be open mouth breathing, with a labored effort. The time to prepare for heat stress is not during a heat event, you need to have a plan in place to address the basic animal cooling needs. Know the warning signs, be prepared with management strategies and utilize the online weather resources at our finger tips.

Teresa Hatfield  
District Extension Agent  
Family & Community Wellness

### **Keep Your Cool—In the Kansas Heat**

The last few days have been pretty stifling. Going outside for even a brief period is challenging. The summer heat is upon us. Heat-related deaths are one of the leading causes of weather-related deaths. Some groups are more impacted than others and keeping a closer eye on the more vulnerable is essential. Heat is hardest on infants and children, older adults, those with chronic conditions, athletes, people that work outdoors, and those with lower incomes without access to air-conditioning.

Keep watch on your children. Young children do not regulate their body temperature like adults. Remember to never leave children alone in a parked car, even with open windows. Place something in the backseat that you can't do without, like your cell phone, purse, or wallet, so you don't forget to check the backseat.

Know the signs of heat exhaustion and heat stroke and know when to take action. Heat exhaustion warning signs include heavy sweating, cold, pale, clammy skin, muscle cramps, headache, tiredness or weakness, dizziness, and nausea or vomiting. If you believe you or someone is suffering from heat exhaustion, move to a cooler place, loosen clothing, place wet clothes on the body, and sip cool water. Get medical attention if the symptoms get worse or your symptoms last longer than an hour.

Heat stroke is much more severe than heat exhaustion and is a medical emergency that can lead to death. Signs of heat stroke include high body temperature (103 or higher), hot, red, dry, or damp skin, fast, strong heartbeat, confusion, dizziness, nausea, and loss of consciousness. If you believe you or someone else is suffering from heat stroke, **call 911**. Move the person to a cool place and place them in a cold bath. You can also wet the skin, place cold, wet cloths on the skin, soak clothing with cool water, and circulate the air around the worker to speed cooling.

Prevention of heat stroke and heat exhaustion is vital. Stay hydrated by drinking plenty of fluids. If your doctor has limited how much fluids you can consume due to a medical condition, consult your doctor and ask much, you should drink during hot weather. Keep drinking water even if you do not feel thirsty. Stay away from alcohol, sugary, or caffeinated drinks. Stay indoors in an air-conditioned building. If your home is not air-conditioned, go to a public place that has it. Take a cool bath or shower. Don't use your oven or stovetop to cook. Dress in light-colored clothing that reflects the sun. Keep an eye on the weather and know when your area is in a heat advisory or extreme heat warning. The National Weather Service, as well as your local television news, is a good source of weather.

Remember your four-legged friends as well. Outdoor pets need a shady place available all day, like shade from a tree or tarp. They should have cold water available all day. Consider bringing them indoors during extreme heat. Never leave your pet alone in a hot vehicle.

Keep your cool this summer to beat the heat.