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Out To Pasture August 2022

ACROSS THE AGENT'S DESK

While we have finally seen some relief and rainfall these last couple of weeks, we will be seeing repercussions from this year's drought for some time. While loss of forage supply was the most immediate consequence of the dry weather, we have also seen an impact to earlier planted corn that was pollinating during some of the dry, hot weather and some has seen significant yield loss. If you haven't scouted your corn fields yet, then I would highly encourage you to select several random ears throughout the field so there are no surprises later. This year's drought is very similar to 2012, where we saw excellent looking crops, but extremely hot, dry weather during pollination led to zero yield in many fields. With the recent rains, soybean yields may be above average despite yield losses that may be seen in corn.



I would also highly encourage you to pregnancy check cows this fall that were being bred during May/June for spring calving herds. These animals would have



been experiencing significant heat stress during this time, especially if grazing endophyte infected tall fescue.

dramatically decrease income potential for 2023 for our beef farms. Be sure to continue scouting crops and monitoring your livestock herds in case your management strategies.

UPCOMING EVENTS

Aug 18 - 28 – [Kentucky State Fair](#); KY Exposition Center; Louisville, KY Versailles, KY; 6pm

Sep 5 – Labor Day; office closed

Sep 8 – 4-H/FFA Invest in Youth Sale; Woodford County Fairgrounds; Versailles, KY

Sep 13 - 14 – [Kentucky Grazing School](#); Woodford County Extension Service; Versailles, KY

Sep 16 – Woodford Co. Farm to Table Dinner; The Barn at Duckworth Farm; Versailles, KY

Sep 24 – [Twilight Festival](#); Downtown Versailles; Versailles, KY

GRAIN CROPS

Considerations for Harvesting Drought-Stressed Corn to Feed to Cattle

Source: Drs. Donna Amaral-Phillips, Jeff Lehmkuhler, and Chad Lee (UK Dairy Extension Specialist, UK Beef Extension Specialist, & UK Extension Agronomist)

Even with recent rains, some corn was too damaged by droughts to produce adequate yields. Some drought-stressed corn can be salvaged as cattle feed. Here are some things to consider if harvesting drought-stressed corn.

[READ MORE....](#)

Tar Spot on Corn

Source: Dr. Kiersten Wise; UK Plant Pathologist

With tar spot being first confirmed in Kentucky last fall, you may want to keep an eye on corn fields this year to determine if tar spot is present in our area. While it may be too late to affect corn this year, some management strategies may need to change in order to prevent it from affecting yield next year.

Identifying Tar Spot

Figure 1. Signs of tar spot observed on a corn sample from Todd County, KY, 2021. (Photo: Kiersten Wise, UK)



Tar spot is usually first observed when the causal fungus produces small black structures called stromata on leaf tissue. These structures protrude from the leaf surface, and affected

areas of the leaf feel rough or bumpy. The stromata can also be present on leaf sheaths and husks.

At this point in the season, no management is needed if tar spot is confirmed in a field, but it is important to alert your county Extension agent if you observe the disease so we can document distribution in the state. If you suspect you have tar spot, please contact your county Extension agent to submit a sample to the PDDL for diagnosis.

Tar Spot in Other States & Impact

Tar spot was first confirmed on corn in the United States in 2015. Since 2015, it has been reported in multiple midwestern states and Ontario, Canada, and as far south as Georgia (confirmed 2021) and Florida. A map of the current tar spot distribution in the United States can be found on the corn [ipmPIPE website](#).

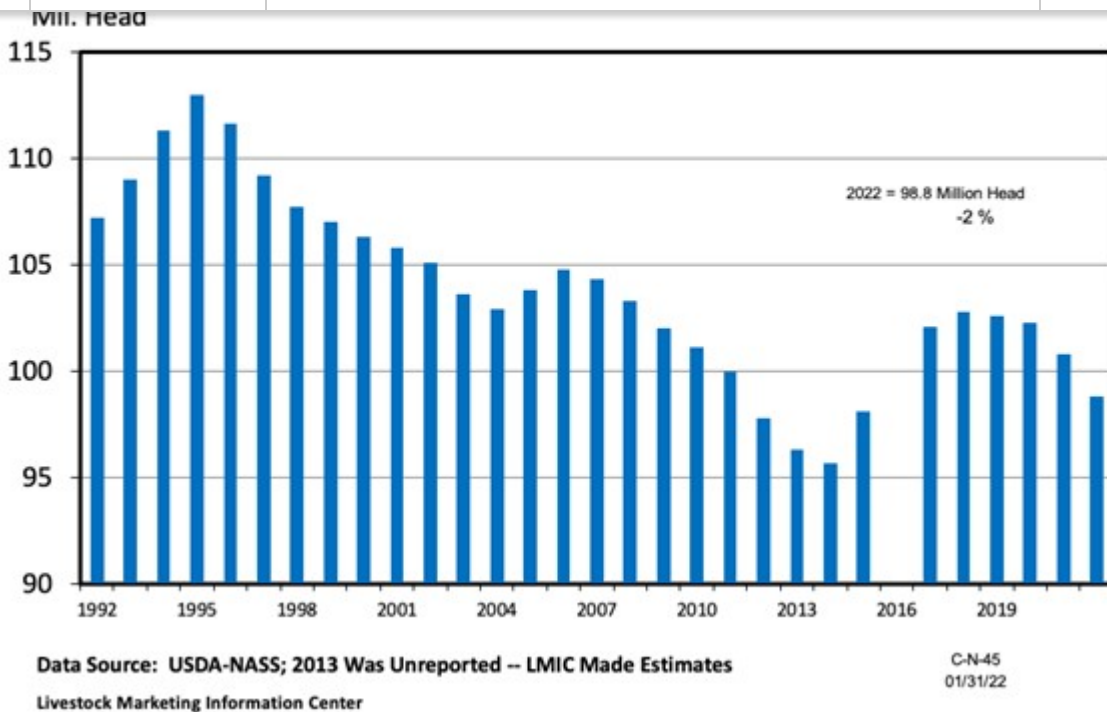
Yield loss due to tar spot varies, and depends on hybrid susceptibility, infection timing, and environmental conditions. Research on tar spot is ongoing and has primarily occurred in northern states. It is unknown what impact tar spot will have in Kentucky, and how management recommendations for the disease in other areas will apply in Kentucky.

BEEF

July Report Shows Declining Cattle Inventories

Source: Dr. James Mitchell (University of Arkansas Extension Livestock Economist)

Last week [7/26/22] USDA published the July Cattle Inventory, which showed lower year-over-year inventories for most reported categories. While inventories posted a year-over-year decline, NASS estimates were higher than pre-report expectations, with analysts expecting larger decreases in cattle numbers. The full report is available on the USDA-NASS website.



Total cattle inventories totaled 98.8 million, falling below 100 million for the first time since 2015, when inventories totaled 98.1 million. Total cow inventory decreased 2 percent year over year. Beef and dairy cow inventories were 2.4 percent and 0.5 percent lower compared to July 2022, respectively. The report confirms another year of beef cow herd liquidation with little evidence of anyone looking to expand. Heifers held as beef replacements were 3.5 percent lower compared to last year.

Drought has been the main factor contributing to the decline in the number of beef cows and replacement heifers. Total beef cow slaughter through June is 14.6 percent higher year over year. Nationally, weekly auction receipts also indicate a larger number of heifers being sold. Regionally, drought pressure this month has been a big concern in the Southeast. The effects of drought are shown in the auction data. For example, auction receipts for Arkansas show a 20 percent increase in slaughter cattle sales (see table).

The July Inventory report also suggests tighter feeder cattle supplies (both current and future). USDA expects the 2022 calf crop to be 34.6 million head, down 1.4 percent year over year and the lowest level since 2015. Feed cattle supplies outside of feedlots totaled 35.7 million head, down 3 percent from the July 2021 total of 36.7 million head.

Last week’s Cattle on Feed report indicates that we might already be seeing tighter feeder cattle supplies. June feedlot placements totaled 1.63 million head, down 2.4 percent year over year and the lowest June placement total since 2016. July cattle on feed inventories are close to even with last year, totaling 11.340 million head.

POULTRY

Avian Influenza (AI), also known as “bird flu,” is a group of viruses that can infect domestic and wild birds. AI viruses can be classified by their ability to cause illness and death. Highly pathogenic AI is extremely infectious, can cause high death loss and can spread rapidly from flock to flock. Low pathogenic AI produces a less dangerous form of the illness. AI can be further divided by subtypes. Subtypes H5 and H7 are of special concern, because they are highly pathogenic.

AI is spread through the bodily fluids and feces of infected birds. Wild birds act as a host for the virus. They may not show signs of the disease, even if they have it. Other species that may be able to catch the bird flu virus include pigs, primates, ferrets, rodents, rabbits, cats, and humans.

Common signs of AI in domestic poultry, such as chickens and turkeys, may include:

- Sudden death
- Little or no energy or appetite
- Little or no eggs produced
- Eggs are soft or deformed
- Nasal discharge, coughing, sneezing, or trouble breathing
- Swelling around the head, neck, and eyes
- Purple discoloration
- Loss of muscle control
- Drooping wings, twisting of head and neck, or inability to move
- Diarrhea



Birds may have the disease for 3-7 days before the first signs are seen. Death may occur 24-48 hours after the first signs. Other diseases in birds can cause symptoms like those listed above. Always seek a veterinarian’s advice. Wear latex or rubber gloves and washable clothing when touching sick or dead birds. Do not touch feces or bodily fluids from sick or dead birds.

Early detection and reporting are the most important steps in stopping a disease from spreading. Those who see unusual symptoms or that have a high number of deaths in their flock should call their local veterinarian or the Kentucky Office of State Veterinarian at (502) 782-5920. They can also call the USDA’s toll-free hotline at (866) 536-7593, where veterinarians can answer questions.

Call the U.S. Department of Fish and Wildlife at (866) 4US-DAWS or the Kentucky Department of Fish and Wildlife at (800) 858-1549 to report sick or dead wild birds. Call to report any number of sick or dead waterfowl. For any other type of wild bird, only call to report if there are 5 or more birds.

2022 Kentucky Grazing School

New and experienced forage producers can receive educational information on the attributes of more profitable and nutritious grazing systems during the 2022 Kentucky Grazing School.

The school will be September 13th and 14th, at the Woodford County Cooperative Extension Service. Hands-on field exercises will occur at UK's C. Oran Little Research Center.

Presenters will cover grazing information specific to Kentucky and will focus on spring and summer grazing options. It is particularly geared toward managing grazing systems for ruminant animals, but there is plenty of information for equine, or other operations with different classes of livestock.



Registration is \$60 and includes all materials, grazing manual, breaks and lunch for both days.

During the first day, participants will work in groups to install a rotational grazing system. They will assess pasture yield and set up small paddocks. Cattle will then graze the paddocks. On the second day, the participants will observe the grazed paddocks and hear reports from each group.

You can register [online](#); or by calling 859-257-0597.

Hay Production Cost Increases in 2022 and Management Implications

Source: Dr. Greg Halich; UK Farm Management Specialist

Costs for hay production have skyrocketed in 2022. Fertilizer is driving the bulk of the overall increase, followed by fuel, and then general cost increases for other categories (what could be considered “general inflation”). While we can debate the exact causes of all these increases (i.e. “Policy Blunder” or “Putin’s War”), we have a serious situation that needs to be understood and dealt with.

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GENERAL

Cicada Killer Season Leads to Confusion with Murder Hornets

Source: Dr. Jonathan Larson; UK Extension Entomologist

As we head into the latter end of summer, the trees are alive with the sound of insect music


largest wasp species in Kentucky. They have to be big because they hunt those large cicadas, sting, and paralyze them, and then drag their body to a hole in the ground where the wasp will lay her eggs on the cicada. After the eggs hatch, the immature wasps will slowly devour the cicada alive. It's a bug eat bug world out there!

[READ MORE....](#)

PUB HUB

[ID-217: Forage-Related Cattle Disorders: Nitrate Poisoning](#)

ID-217



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

Forage-Related Cattle Disorders

Nitrate Poisoning

*Michelle Arnold and Cynthia Gaskill, Veterinary Diagnostic Laboratory;
Jeff Lehmkuhler, Department of Animal and Food Sciences; and Ray Smith, Department of Plant and Soil Sciences*

Sources of Nitrates

Nitrates are present in all plants, but normally their concentrations are not excessive. Under normal growing conditions, nitrate from the soil is absorbed by the roots of forage plants, and is supplied to the upper portions of the plant (primarily leaves) where it is converted into plant protein. However, adverse environmental conditions (such as drought), sudden weather changes (cool, cloudy weather), leaf damage (due to hail, frost, or herbicides), or heavy fertilization with nitrogen, can cause plants to develop and retain potentially dangerous levels of nitrate. The lower stalks and stems at the base of the plant are the site of accumulation. Grains, seeds and leaves do not accumulate significant amounts. Nitrate levels will remain high until there is new leaf growth. Plants with high stem-to-leaf ratios are more likely to cause nitrate intoxication. Levels of nitrate will remain high until there is new leaf growth, increasing photosynthesis that provides the necessary energy to utilize the excess nitrate. Hay will remain a hazard because toxicity is unchanged by drying, but the nitrate concentrations in ensiled forage crops may be reduced by up to 60 percent with proper fermentation and microbial degradation.

Drought-stressed sorghum and/or corn are the source of most of the forage-related cases of nitrate poisoning in Kentucky, but wheat, sudangrass, rye, pearl millet, soybeans, beets, *Brassica* spp. (rape, kale, turnips, swedes) and oats can also accumulate nitrates. Common weeds that are nitrate accumulators include ragweed, pigweed, thistle, bindweed, dock, jimsonweed, and johnsongrass. These lists are not complete, but these weeds and forages cause the most problems within the state.

Cause of Poisoning

When consumed more rapidly than they can be converted in the rumen to protein, nitrates enter the bloodstream as nitrite, which combines with hemoglobin in red blood cells to produce methemoglobin, a form incapable of transporting oxygen. Death occurs as a result of asphyxiation as methemoglobin levels approach 80 percent.

Nitrate and nitrite poisoning can occur in all animals but cattle are considered most susceptible because of the rapid conversion of nitrate to the more toxic nitrite form by rumen microorganisms.

Horses are much less sensitive to nitrate than are cattle or other ruminants, and can tolerate much higher concentrations of nitrate, but exact threshold values have not been established. Horses are extremely sensitive to nitrite, so any preformed nitrite in forages can pose a significant risk. Consult with a veterinary clinical toxicologist for interpretation of nitrate/nitrite concentrations in horse feeds.

Sheep and goats are less susceptible than cattle to nitrate toxicity and camels are rarely affected.

Signs of Poisoning

The first indication of nitrate toxicity may be the discovery of one or more dead animals while others may be exhibiting clinical signs. These first signs of nitrate poisoning in an animal include weakness; rapid, labored breathing; rapid, weak heart beat; staggering; muscle tremors; and recumbency (inability to stand). Affected animals typically show signs of poisoning within a few hours after consumption of a toxic dose of nitrates. Examination of the mucous membranes, especially the vaginal mucous membranes, may reveal a brownish discoloration that occurs well before other clinical signs. Chocolate colored blood and a brownish cast to all tissues are hallmark signs of nitrate poisoning. Most deaths occur within the first six to eight hours after onset of clinical signs and largely depend on the quantity and rate of absorption of nitrite and the amount of stress or exercise the animal is forced to do. After death, nitrate concentration can be measured in the eye fluid and is a reliable indicator of poisoning. Pregnant cows that survive toxicity will likely abort three to seven days following recovery from nitrate poisoning.

Treatment

Animals showing signs of nitrate poisoning should be removed from the source of toxicity and a veterinarian should be contacted immediately. Animals severely deprived of oxygen are subject to sudden death so stress associated with handling must be minimized. Administration of a two-percent solution of methylene blue intravenously by the veterinarian will aid in converting methemoglobin back to hemoglobin. Mineral oil or other emollients may be given to protect the lining of the digestive tract.

Click [here](#) for a directory of all our publications.

CONSERVATION CORNER

Woodford County Conservation District has several no-till drills for producers to rent across the county. Be sure to check out some new equipment and where you can find them!

Equipment	Location
Haybuster 10 ft no-till drill	Agriculture Resource Building
Haybuster 10 ft no-till drill	Versailles Southern States
Haybuster 7 ft no-till drill	Agriculture Resource Building
Great Plains 7 ft no-till drills (2)	Versailles Southern States
Pull-behind ag lime spreader	Agriculture Resource Building
In-line hay wrappers (2)	Woodford Feed Company
Pull-behind post driver	Agriculture Resource Building

Woodford County Conservation District

JOB OPENING

District Operations Manager



Please see post for details! Contact Rachel Cain at woodfordcd@gmail.com or (859) 873-4941 EXT 3 with questions.

Woodford County Conservation District is an equal opportunity employer.

FEATURED RECIPE

Autumn Apple Pork

Source: Brooke Jenkins-Howard, UK Nutrition Extension Specialist



Ingredients

For the spice rub:

- 2 pound pork loin
- 1 teaspoon garlic powder
- 1/4 teaspoon salt
- 3/4 teaspoon dried sage
- 3 apples, cored and sliced
- 1/2 cup dried cranberries
- 1 tablespoon unsalted butter
- 1 tablespoon honey

Directions

1. Season pork on both sides with garlic powder, salt and sage. Wrap pork tightly in foil and place in the slow cooker.
2. Place apple slices, cranberries and butter on a large piece of foil. Drizzle with honey. Wrap up foil to create a packet. Place in slow cooker.
3. Cook 4 hours on high.
4. Unwrap both packets. Slice pork and top with apples.

Optional step: brown the top of the pork loin by placing it in the oven at 425 degrees F for five to seven minutes.

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