

Jody G. Holthaus District Extension Agent Livestock and Natural Resources

2021 Ponds

Last summer, we embarked on a pond project. We had 10 ponds that we installed Barley straw into. The Barley straw is said to help in the control of Blue/Green algae and other harmful algae blooms. It turned out to be a good year for ponds, and the Blue/green algae was not much of a problem in small ponds. It was a huge problem in reservoirs. The ponds were tested by KDHE each month to measure the amounts of nutrients. While we are still waiting on the data to be analyzed. We've made the decision to run another study this summer. I'm looking for willing cooperators that have ponds that have had confirmed cases of Blue/Green algae or suspected cases. The ponds should be smaller than 3 acres of surface water and easily accessible, as personnel from KDHE will be testing monthly. If you would like your pond considered for this program, just contact me at one of the Extension offices or email me at jholthau@ksu.edu.

What is the best method for providing water to livestock during the coldest days of the year? Depending on several factors, different options rise to the top of the list. First, what is the actual water source? Will a pond or stream be used? Are waterers going to be installed? Is rural water available? Surface water sources, like ponds and streams, require a lot of management, especially during freezing temperatures. If water is flowing, such as a spring-fed stream, this task is not as labor-intensive. However, if surface water sources are used, one must take steps to ensure that the water quality downstream is maintained and that streambank quality is preserved.

Large stock tanks with greater capacity are another option that can be considered. These also need to be checked often to allow livestock access to water. To limit the amount of ice accumulating, a continuous flow valve could be installed to prevent freezing. This also requires an overflow directing water away from the tank to prevent mud.

Is electricity available at the winter feeding site? If so, the number of watering options increases. An electric heater to keep water thawed can be added to almost any watering system. In some cases, this simply might involve adding a plug-in heater that installs through the drain plug of a stock tank. Also, the addition of plug-in heat tape affixed to interior pipes and water bowls of automatic waterers are options that could be considered.

Another option to provide water to livestock when electricity is not available is through the utilization of geothermal heat. A variety of watering systems have been developed to harvest geothermal heat from the ground below the tank, keeping water thawed and available to livestock even in the coldest of environments. Most of these waterers use heat tubes buried deep into the ground, allowing for geothermal heat to rise and keep water supply lines and the drinking trough thawed. While these systems do a good job of keeping pipes and floats from freezing, they are not ice-free. Depending on the amount of animal traffic using the waterer and environmental temperature, there is often a thin layer of ice over the drinking area on very cold days that must be removed.

No matter which method is used, a clean and consistently available water source is critical. Proper evaluation of where and how to winter livestock could make providing water easier during the coldest part of the year, depending on available water sources.



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

Kansas Corn Management Schools: One Down – Two to Go

The first of three sessions of the virtual Kansas Corn Management Schools were held a couple of weeks. Nutrient management and general corn management research were the first two sessions – with a lot more to come.

During the nutrient management presentation, KSU Soil Fertility Specialist Dr. Dorivar Ruiz-Diaz shared four years of results from work with a nitrification inhibitor at two different sites in eastern Kansas. Over those four years, one site had a statistically different response twice – five bushels per acre one year and sixteen another. A second site showed a statistically different response one time, to the tune of seven bushels per acre.

In other words, an 'average' response may not be all that great, but when it's needed (specific soil/weather conditions), a nitrification inhibitor can certainly do exactly what they are intended to do: keep nitrogen in a form less likely to be lost. A second part of the study looking at soil nitrate levels confirmed this, even when yields were not statistically different.

He also talked about rescue treatments for potassium – and a whole lot more. If you're looking for more research data relating to corn production, the next session will February 4, with weed control and planter technologies the focus. The final week will include a discussion of markets plus information on work being done by the Kansas Corn Growers Association.

Each (free) webinar starts at 7:00 p.m. with two presentations plus a question-and-answer session. Participants should pre-register for webinar links at <u>https://kscorn.com/cornschool/</u>. *Purchasing Fruit Trees – Peaches and Apricot Considerations*

Apricot and peach flowers are probably the most vulnerable of any of our tree fruit species. Late frosts in these species often kill fruit buds, so while we can get the trees to survive, fruit production is typically not quite what we'd like to see. That doesn't mean we don't want to try to get *something* out of those peach or apricot trees, but it takes some management to do so.

Attempts have been made over time to plant later blooming varieties. The idea is bloom will occur *after* potentially damaging temperatures have passed. This idea usually has greater merit for peaches than it does for apricots. In peaches, there are varieties shown to be delayed blooming, but also with fruit bud hardiness – the ability to withstand late frosts better than other varieties. Varieties considered 'late bloomers' include China Pearl, Encore, Intrepid, and Risingstar, with Intrepid exhibiting excellent cold hardiness when in flower.

There are later blooming apricot varieties as well – Hungarian Rose, Tilton, Harlayne, and Harglow are examples. Past research out of Virginia Tech suggests the difference might be slight. Their research suggested a four-day maximum difference between early/late varieties.

In addition to varieties, look at location, too. Planting on a hill can allow cold air to drain to lower elevations. Micro-climates can affect damage, too (protected/in-town plantings may be warmer than exposed locations).

Last but not least, if your planting needs a little 'extra help,' consider heat sources under trees on cold nights. Heat lamps or charcoal briquettes can be used so long as they can be utilized safely.

Don't discount planting peaches or apricots completely – but variety selection and planting location are big factors in having a fruit crop or not.



Cindy Williams Meadowlark Extension District Food, Nutrition, Health, and Safety

K-State to Offer Farmers Market Workshops

Are you interested in having some produce to sell at Farmer's Markets? Do you have other food items that you might consider selling at such events? If so, K-State has just announced that they will be offering Lunch and Learn sessions that may be of interest to you. K-State Research and Extension, along with the Kansas Department of Agriculture, are teaming together to make these educational sessions. Anyone interested is encouraged to participate. This online conference is only \$5.00 for any of all the sessions. When participants register, they can also indicate the number of free printed copies of our recently updated Food Safety for Direct to Consumers Sales/Farmers Market publication (or will be updated in the next few days) and our recently updated Food Labeling for Kansas Food Producers and Processors publication as they would like shipped to them. Workshop registrants can also sign up to get FREE testing of their sales scales (s) after the workshop.

For more information on each of the sessions is available on the website, but here is a brief overview: Lunch and Learn sessions, February 16-18, 2021, noon to 1:00 p.m. each day Tuesday, February 16: Food Safety for Value-Added foods

Wednesday, February 17: Meat and Poultry regulations

Thursday, February 18: Taxation; accepting EBT and SNAP

The main workshop, Friday, February 19, 2021, from 8:30 a.m. to 12:30 p.m.

The Keynote speaker will be Michael Kilpatrick, Thriving Farmer Podcast. Additional topics covered on February 19 will include COVID-19 Related Changes—KDHE; Senior Farmers Market Nutrition Program; From the Land of Kansas program and Double Up Food Bucks Program Overview.

The following thanks to the Kansas Center for Sustainable Agriculture and Alternative Crops and Alternative Crops (KCSAAC) and the Kansas Sustainable Agriculture Research and Education Program (SARE) for their generous financial support of these workshops. Feel free to contact your local extension office is if you have further questions.



Nancy Nelson Meadowlark Extension District Family Life

Better Living, Better Communities

Radon test kits available

We're just wrapping up January, but it's never too late to bring attention to checking your home for radon. Testing your home for radon can be done at any time.

The naturally occurring odorless and tasteless radioactive gas is the leading cause of lung cancer deaths in non-smokers.

Check the Kansas Radon Program www.kansasradonprogram.org for all kinds of information, including Kansas-specific facts, maps, FAQs, and essential radon-related contact information.

Inexpensive testing kits are available at Meadowlark Extension District offices.

Food Allergy Resource

As many as 32 million Americans have food allergies, including 5.6 million children. That's one in every 13 children, or roughly two in every classroom, according to Food Allergy Research & Education.

The organization lists the most common food allergies as cow's milk, eggs, peanuts, soy, wheat, tree nuts, shellfish, finned fish, and sesame. But researchers are making strides in learning how to prevent allergic reactions.

More information about food allergies is available online from Food Allergy Research and Education **www.foodallergy.org**