

## David Hallauer

District Extension Agent, Crops & Soils/Horticulture

### **Proper Pesticide Use**

If you've ever read an article referencing a pesticide in this space, it often includes one of a couple of different phrases. The first is: the label is the law. The second? It's usually something along the lines of 'always read and follow label directions.' Some may see them as a simple disclaimer, but they're more than that. They're a reminder that pesticides do have a label and that label governs their use.

A recent article by KSU Pesticide Safety and Integrated Pest Management Coordinator Frannie Miller outlined multiple important reasons for giving attention to the label anytime a pesticide is applied.

First, labels help insure safety. What do you need for personal protective equipment? How do we minimize pesticide exposure? How do I clean up afterwards? The label outlines these and many other to keep everyone from the applicator to the home/land owner to the innocent bystander safe.

Second, labels are not only designed for safety from the standpoint of direct human exposure, but also for safety surrounding the areas they are applied to and the food or feed products that may be produced. A lot of research goes in to testing formulations that can be used in a manner that is safe for our food system. Off label uses can reduce that safety.

Last but not least, label instructions are designed to ensure product use success while being safe for the environment and economically viable. Misapplication can be a hindrance to all of the above, while causing other issues as well.

Pesticide applications don't have to be scary – that's the reason for the research put in to their use. They do, however, deserve respect. Making sure to understand product labels is a great way to use products safely, and keep them viable for the future.

Rather *not* use a pesticide? Research into alternatives to pesticides is on the increase, with additional options available every day. Most research would suggest increasing variability in the level of control from many non-pesticide options, but there are possibilities for many different situations, and at the very least can provide an integrated management approach to many of our common pest problems. We'll look more in to that in that in future columns.

## Ross Mosteller

District Extension Agent, Livestock & Natural Resources

### **Estrus Synchronization and AI Protocols**

One of the most important sets of dates have been placed on my spring calendar. You might think it is my kid's birthdays, or my twentieth wedding anniversary (all very important dates that my family might say I don't pay attention to!) but what I'm discussing today are the dates for estrus synchronization for my spring calving cow herd. Regardless of when calving season occurs in your operation, the use of synchronization protocols can result in shorter breeding and calving seasons, which research shows time and time again to have major impacts on cow herd profitability.

More calves born earlier in the calving season result in a more uniform, heavier, consistent sized calf crop at weaning. Other management benefits can include: grouping cows by gestation group for marketing, calving or nutritional management, better use of vaccination timing and quantities, having replacement females of a more uniform maturity at breeding next year, all in addition to the obvious larger groups of more uniform sized calves.

The Beef Reproduction Task Force has released some updated estrus synchronization protocols for heifers and cows, including sexed semen protocols - as that technology is becoming more common place in all phases of both the beef and dairy industries. These protocols can be found in most of the major semen supply company websites, apps and/or catalogs and at many University websites as well. Each year it seems more options become available to producers, which is both beneficial and possibly confusing at the same time.

Estrus synchronization can be used for natural mating or breeding by Artificial Insemination (AI). These synchronization protocols permit managers to concentrate the labor needed for heat detection, and in some cases eliminate the need for heat detection due to the success of timed-AI systems. Estrus synchronization systems vary in cost, labor required, and effectiveness on various classes of livestock. If you've never used estrus synchronization or are looking at a different system, you need to visit with folks more familiar with their use and consider the following questions to help decide what works best for your situation.

Do you have facilities to handle multiple trips through a chute? Do you have adequate labor and/or time to invest? If using AI, is a technician available or are you able to learn the process? Are you willing to invest in some up-front cost for a protocol and do you feel there will be return on this investment? Do you have a specific purpose for AI and synch protocols, such as use of superior sires, goals for all male or female calves with sexed semen, specifically designed crossbreeding systems, etc... These are just a few of the things to consider, but thought needs to be given before jumping into this management approach.

Generally speaking, the use of AI permits more cows to get bred to genetically superior sires for traits of economic importance related to your operation's production and marketing goals. Even if not utilizing AI, there is benefit to having more first heat cycles in the first third to half of the breeding season, with return heats being more uniform and synchronized as well. This can mean more bull power is required with a natural service approach. Having breeding and calving "waves" does have appeal for some, compared to a two month (*or whatever your planned calving season length is*) stretch of intense daily observation.

Maintaining a 60-to-75-day breeding and calving season can be one of the most important management tools for cow calf producers. Estrus synchronization can be the tool to get cows settled as early in the breeding season as possible and get cows bred to bulls with highest possible genetic value. A wealth of information on this topic, including free protocol decision tools can be accessed at: <https://beefrepro.org/>

## Teresa Hatfield

District Extension Agent, Family and Community Wellness

### **How to Properly Dispose of and Store Medications**

The proper disposal of medications is essential. Drugs that fall into the wrong hands could have disastrous results. Medications that have been prescribed or over-the-counter medications that you no longer use should be disposed of appropriately. According to the 2020 National Survey on Drug Use and Health, 9.3 million Americans over twelve years misused prescription pain relievers in the past year. Also, about one-half of those who misused prescription pain relievers stated that they obtained these medications from a friend or relative. Learning how to dispose of and store your medicines properly could prevent potential drug abuse and the poisoning of children and pets and prevent medications from entering our creeks, rivers, and wetlands.

There are several options to dispose of your medications properly. Many Kansas pharmacies provide medication disposal boxes for patients to discard unused and unwanted medications. Contact your local pharmacy for information about the types of medications they accept. Communities will often hold “Drug Take Back Days” a couple of times yearly to allow residents to dispose of medications. Remember, it is important to properly dispose of all your medications, whether they are over-the-counter or prescription drugs.

Another way to get rid of unwanted medication is household disposal. If you are having difficulties finding a take-back location, another option is to throw your medication in the trash if you adhere to the following steps.

1. Take your medications out of their original containers.
2. Mix with warm water and an undesirable substance such as kitty litter or coffee grounds.
3. Put the mixture into a disposable container with a lid, such as an empty margarine or deli meat tub or a sealed bag.
4. Remove personal information from the original medication container, including the Rx number.
5. Place the sealed container with the drug mixture into the trash.

Proper disposal of medications prevents the possibility of drugs entering the water systems in the environment.

Disposal of medications is essential, and it is vital to secure and store your medicines correctly. Keep a list of medications you are currently taking, why you are taking them, and the dosage of each drug. These lists are essential in an emergency. Keep the list somewhere that is accessible in the event of an emergency. The Meadowlark Extension District offers a Red File envelope where you can store this information. Place the envelope on the refrigerator in case of an emergency.

Remember to take your medication as prescribed, and never, never share your medication with any other people. Your prescription was prescribed to treat your specific condition alone. When storing your medications, choose a location that is out of reach and out of sight of children, visitors, and pets. If you are taking prescription opioids, it is recommended that these drugs be stored in a lock box or locked medicine cabinet. Do not leave medications on countertops, nightstands, or other locations that are accessible to others. Return your medicines to a secure place after each use. When traveling or at work, you can use locking travel cases.

For more information about medication disposal and storage, contact the Meadowlark Extension office at 785-364-4125. We also have free Red Files available in all three district offices.

## Cindy Williams

District Extension Agent, Family & Community Wellness

### **What You Watch Is What You Want**

Kids in the U.S. are spending increasing amounts of time in front of a television or computer and playing video games, more than three hours a day. The average is 22 hours each week, according to researchers at Stanford University.

Obesity and being overweight is a problem that's been linked to kids spending more "screen time" and less time being physically active.

Another problem is that the more time kids spend in front of a TV or on websites, the more often they ask for items they saw advertised. Researchers warn that increasing amounts of screen time could foster a rise in consumerism that lasts a lifetime.

Set limits. Enforce a rule that you and your children may spend up to—but not more than—two hours a day watching television, using a computer, and playing video games (including time spent doing these activities when they're away from home). Instead of watching TV or surfing the internet, you could spend time with your child. For example, be physically active, learn a new hobby, play games, or cook and eat meals together.

Remove the television or computer from your child's bedroom. Children who have TV's in their room typically watch it about 90 minutes more each day than kids who don't. They also tend to be more physically isolated from the rest of the family, and communicate with their family members less often. In addition, these children are less active than other kids who watch TV.

Help your child understand advertising. Children are influenced by TV ads for snack foods, candy, soda, fast foods, etc. Teach your child to recognize a "sales pitch". For example, ask your child why his favorite cartoon character wants him to buy a certain brand of cereal. Explain how advertisers make the cereal very appealing to kids, so that they ask their parents to buy it for them, and the company can make more money.