K-STATE Research and Extension | Meadowlark District

May 24, 2024

David Hallauer
District Extension Agent, Crops & Soils

Proper Pesticide Use

One of the more important instructions typically provided with many pesticide recommendations is: always read and follow label directions. It's a reminder that pesticides *do* have a label and that the label governs that pesticide's use.

KSU Pesticide Safety and Integrated Pest Management Coordinator Frannie Miller works to provide applicator training throughout the year, with a part of that education focused on the laws governing product labels and how to meet restrictions associated with them. Through her work she has summarized the importance of abiding by label restrictions into a few simple steps.

First, labels help ensure safety. What is required for personal protective equipment? How do we minimize pesticide exposure? What is the cleanup process for the sprayer post application? The label provides guidelines to answer these questions - and many others - to keep everyone from the applicator to the home/landowner 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 from those areas. A lot of research goes into testing formulations that can be used in a manner safe for our food system. Off label uses can reduce that safety.

Finally, 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 into 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.

K-STATE Research and Extension | Meadowlark District

May 24, 2024

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Know Your Water

Water quantity and quality concerns vary from one corner of the state to the other, but there is no doubt that water is an issue of importance for all Kansans. I'm no water quality specialist, although water is a part of my job responsibilities. Luckily, K-State Research and Extension does have water quality specialist across the state. Today, I'll share some information from these folks on a new publication now available in our Extension Offices and via the online bookstore.

With much of the state facing abnormally dry to drought conditions, along with increasing concerns over water quality, it is essential for citizens to KNOW YOUR WATER. According to the Kansas Department of Health and Environment (KDHE), approximately 73,000 individuals in Kansas rely on private wells from groundwater sources. This is approximately 2 percent of the state's population.

For many residents, this is their only source of water, and the water quality from these wells isn't guaranteed. Often, private well users don't know that the water they're using could potentially be unsafe. "It's important to keep in mind you need to KNOW YOUR WATER to protect your water," said Stacie Minson, an extension watershed specialist at Kansas State University. Private wells can be used for domestic human use, livestock use, lawn and landscape irrigation, and more. Good quality water is important, whether it is for human consumption or livestock consumption.

Public water systems use water treatment and monitoring to protect consumers from such contaminants. Unlike public water users, private well owners are responsible for all quality and safety aspects of their water. Testing must be done by the well owners as these are not regulated by most state governments or laws or by the Federal government under the Safe Drinking Water Act.

Improperly disposed chemicals, human and animal manure, fertilizers, pesticides, wastes injected underground and naturally occurring minerals can all cause contamination in a private well. In addition, poor well location, and inadequate well construction, protection and maintenance could also lead to problems. The most common health concern contaminants are nitrates and coliform bacteria, especially *E. coli* or fecal coliform.

K-State Research and Extension and KDHE recommend annual private well testing for bacteria, nitrates and any contaminant of local concern. Other tests that might be of interest include: pH, hardness, iron, lead, cooper, manganese, sodium chloride, petrochemical and pesticides. "Life gets busy, and it's easy to forget to check your private well," said Minson. She suggests setting a reminder on your phone for collecting water samples and getting private wells tested.

Those who have questions on private well testing can contact a local K-State Research and Extension Office to get a copy of a new publication titled *Testing Private Water Systems* MF-3655. Local health departments or environmental offices may also be able to help. All of these agencies may have water test kits available and could even assist in sending samples off to a private lab. Meadowlark District has water testing kits available in our offices for homeowners to use and work directly with the testing laboratory on.

K-STATE Research and Extension | Meadowlark District

May 24, 2024

Laura Phillips
District Extension Agent, Horticulture

It is Time to Fertilize Warm-Season Grass

The best time to fertilize your lawn is when it is actively growing. For warm-season grass, like bermuda grass, zoysia grass, and buffalo grass, that time is now. As our days start getting hotter, these warm-season grasses start to take off!

When you fertilize your lawn, you mainly want to focus on nitrogen. Phosphorus and potassium should only be added to lawns when a soil test indicates it is needed. Nitrogen, however, can be applied annually. The amount of nitrogen you apply depends on the type of grass, and what you want from your lawn.

Bermuda grass needs about one pound of nitrogen per 1,000 square feet every four weeks between May and mid-August. You do not want to apply more than 4 pounds of nitrogen total in a year. Either slow or quick-release nitrogen will work for these applications.

Zoysia grass, however, requires less nitrogen. Zoysia grass is prone to developing a thick thatch that can impair its growth. To help avoid this, do not apply more than 2 pounds of nitrogen in a year. The best approach is applying ¾ to one pound of nitrogen per 1,000 square feet in two applications: one in June and one in mid-July. Slow-release nitrogen is preferable for these applications.

Buffalo grass will survive without supplemental nitrogen, but providing it will improve the color and density of the lawn. To enhance your buffalo grass, apply one pound of nitrogen per 1,000 square feet sometime between now and early June. If a darker green is desired, follow the same fertilizer recommendations as zoysia grass, not applying more than 2 pounds total.

Make sure not to apply fertilizer to your warm-season lawn past August 15th. If these grasses receive fertilizer late in the summer, it will stimulate new growth that will be susceptible to damage from cold fall temperatures.

If you have questions or concerns about your lawn fertilization schedule, or you would like to get a soil test done, contact us for more information.

K-STATE Research and Extension | Meadowlark District

May 24, 2024

Teresa Hatfield
District Extension Agent, Family and Community Wellness

No Place Like Home: Maintain Your Independence

I recently remodeled my old bathroom and replaced the bathtub with a walk-in shower. I hesitated when the contractor asked if I wanted a grab bar installed. It's not something I need right now, but if I want to stay in my home after I retire, I might need it. I told him to go ahead and install the grab bar. Most Americans want to remain in their homes as long as possible. However, many people are unprepared for the modifications they may have to make to ensure their safety and livability in the future. Our homes are the places we feel safe, comfortable, and secure. It is important to consider what changes to make before we face a health crisis or struggle with mobility, eyesight, and hearing loss.

Many homes were not built to accommodate all life stages. However, there are some things you can do to make your home more age-friendly. The best time to make changes is before we need them. Think about what you need to know and what you might need in the future. Planning ahead gives you time to make changes over time, which potentially helps with the cost of making all major changes at once.

You can start by considering home safety. Take a tour of your home and look for obstacles that might cause a fall or other safety issue. Repair or correct anything that poses an immediate threat; this could mean loose handrailing, tripping hazards like clutter on the floor, electrical cords, toys (humans or pets), or throw rugs. Consider the following list when looking over your home:

- Is there adequate lighting? Can I see the top and the bottom of the stairs? Do I need to replace any light bulbs?
- Are there non-slip strips or mats on tile, wood floors, or surfaces that might get wet? Is the carpet fixed firmly to the floor?
- Do you have working smoke and carbon monoxide detectors installed? Have you replaced the batteries recently?
- Are the stairs manageable, or is a ramp or gate needed?
- Are handrails be installed on both sides of the staircase? If installed, do they extend beyond the first and last step?
- Are there grab bars near the toilets or shower?
- Place nonskid adhesive strips, decals, or mats in the tub or shower.
- Is the water set to 120° F to avoid scalding?
- Do you have a night light to make overnight trips to the bathroom safer?
- Make sure to have secure locks on all outside doors and windows.
- Do doorways need to be modified to accommodate a wheelchair?
- Is outside lighting adequate? Do you have light sensors that turn on lights automatically with movement?
- Address uneven surfaces such as walkways that may cause a fall.

The home safety checklist is available at https://www.nia.nih.gov/health/aging-place/aging-place-growing-older-home.

You should also consider who could provide caregiver support should you need it. In the United States, family caregivers provide an enormous amount of unpaid support to family members. Other sources of in-home care include formal caregivers from in-home care providers, organizations, and community services. Caregivers can support daily living activities, including bathing, dressing, grooming, eating, and mobility. They can also help with shopping, bill paying, and transportation.

Your local Aging and Disability Resource Center (ADRC) will also be very familiar with local programs that assist with aging in place. To find your local ADRC, call 1-855-200-ADRC (2372). The right modifications, support systems, and proactive planning will help older adults remain independent and comfortable in their homes and communities for as long as possible.

K-STATE Research and Extension | Meadowlark District

May 24, 2024

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

No news article this week.