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Brush Control Using Cut Stump Treatments

In last week's column, the basal bark method of brush control was discussed. It's a great alternative to foliar control to control brush standing, often extending our control season and potentially increasing control. It has limitations, however, one of which is plant diameter. If brush is greater than six inches in diameter, you're probably better off cutting it at ground level and treating the surface of the cut, a method known as cut stump treatments.

Cutting off at ground level makes sense but treating the cut stump area might not. Simply, it means removing sawdust/debris from the cut surface then applying a herbicide mixture (more below) to the point of pooling to the cut area. It needs to be done in a relatively short time frame after the tree is cut off, typically within 30-60 minutes so the herbicide can be readily absorbed before the sap hardens and seals over the exposed area.

The area to treat is important as well. Concentrate the herbicide on the cambium and light-colored sapwood areas near the outside edge of the stump to ensure herbicide translocation. It's also important, particularly with certain species, to treat exposed trunk/roots that can become growth points for 'suckers' later if not.

The species being treated dictates our product of choice, but much of the chemistry is the same used in basal bark treatments – and maybe even in the same ratios. So, while there are additional herbicides for cut stump treatments you might *not* use for basal bark treatments, triclopyr containing products work on many species with aminopyralid and picloram products providing some enhanced efficacy potential in locust species. As with any herbicide product, always read and follow label directions pertaining to rate, carrier mix, species controlled, and haying/grazing restrictions (some picloram products are *not* labeled for range/pasture and glyphosate labels differ in what sites they can be used on.). NOTE: the stumps of Eastern red cedar do *not* need to be treated. Unlike many woody plants, this species does not root sprout. Simply cutting Eastern red cedar below the lowest green branch will kill it.

Brush control will be the focus in this space for one more week and include a 'catch-all' of other options you might want to consider. If you want a head start on the chemical side of the brush control equation, request a copy of the 2024 KSU Chemical Weed Control Guide (also available online) from any District Office or drop me a line at dhallaue@ksu.edu .

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Chicken Needs in Autumn

Most of NE Kansas has had the first killing frost of the season, tree leaves are changing colors and falling and recent rains have provided some temperatures that make it seem like fall has finally arrived. As I was closing up the large windows on my chicken house, it occurred to me that this is a time of year for transition for poultry flocks and people alike. Let's take a look at some of the considerations needed for our feathered friends in autumn.

The first basic need, at any time of year really, is shelter. Make sure birds have a place to get out of the elements, especially rain and snow. Chickens don't like the rain and will prefer to mostly remain under cover during rain events, especially with hard rains. Chickens will need elevated roosts so they don't have to sleep on wet ground. Cold temperatures are not as much of a problem as cold AND wet conditions. Feathers are good insulators and chickens can withstand temperatures well below freezing, if they can remain dry and out of the wind.

In the fall, chickens will begin to change their eating habits. Because the weather is cooler, feed consumption will increase as maintenance energy requirements increase. In order to stay warm, they need to burn more calories. If chickens have been allowed to forage during the spring and summer, they will find far less feed in that same area in fall. The grass, weed seeds and insects will be mostly gone and birds will need to turn to feeders with a complete balanced feed to meet nutritional requirements. It is important to limit supplementation with scratch grains or table scraps to no more than about 15% to 20% of their total daily consumption.

Don't forget about a reliable water sources as the weather cools from summer heat. Daily water consumption will likely go down in fall, but clean, fresh water supply is a must. Avoid allowing birds to drink from pooled water on the ground, because pathogens and parasites can be an issue. Intestinal round worms are a common problem in chickens drinking from pooled surface water. Regular cleaning and disinfecting of drinking water containers can have noticeable response in terms of bird health and production.

Worm-infested chickens will generally appear healthy but seem to always be hungry, continue to eat but remain thin and emaciated. Worms may be observed in droppings as well. Dewormers are available in several different forms, that are effective at controlling internal parasites. Going into times of more confinement in fall and winter is also a good time to look for and control external parasites if present as well. When using products to control parasites, strictly follow the label directions for safe use, especially as it relates to eggs and meat products.

The primary impact of season change from summer into fall is a reduction in egg production. As discussed in past articles, chickens are stimulated to lay eggs by day length. Moving from summer into fall, day length declines resulting in reduced egg production in most hens. Some hens may completely stop laying eggs. During this period many will molt, a process of losing and replacing old, worn-out feathers with new ones. To reduce the effects of shorter days on egg production, artificial lighting can program chickens to remain in production. A low watt light on a timer in the chicken house that keeps the day length at or above about 14 hours per day will keep hens laying well through fall and winter, especially if a successful molt has taken place.

If you can give attention to management of shelter, feed, water, parasites and artificial light, the poultry flock will remain healthy and productive throughout the fall and into winter months. This is not an exhaustive list, but some big points to consider as you try to keep the egg basket full through the fall.

Laura Phillips
District Extension Agent, Horticulture

When do I prune my trees?

This time of year, there is one question that I get asked a lot: is now a good time to prune my trees? In most instances, the answer is no. The best time to prune your trees is going to be late winter to early spring. Think February or March.

When we start to think about tree physiology, it begins to make sense why pruning is best done in cold weather. Just under the bark of a tree are tiny veins, known as the phloem and xylem. The xylem moves water and nutrients from the soil upwards, and the phloem moves food downwards. Surprisingly, these veins take up a relatively small space in a tree, and are found in the outer rings of a tree's trunk and branches.

When you prune a tree or woody shrub, you are creating an open wound. Anything that cuts through the bark will also cut through these veins, leaving them open to harmful bacteria and fungus, putting the tree at risk for infection. If we prune our trees in the cold, dry weather means there is less chance of fungus or bacteria floating around to infect the tree's wound compared to our hot, humid summer.

So why not prune in early winter? This has to do with a tree's reaction to open wounds. When we get an open wound, we keep it clean and our bodies know to regrow the skin in that spot, slowly closing the wound. Unlike us however, trees do not heal but seal. They will form a callous tissue that slowly starts to cover the wound and reduce the risk of infection. While they can seal wounds in the dormant season, they recover from wounds faster in the growing season. By pruning right before the tree enters its growing season, we limit the amount of time the tree has an open, exposed wound. Additionally, when a tree gets pruned in its growing season, it not only tries to seal the wound, but, depending on where the tree is cut, the tree may try to make up for its lost limb by sending out new shoots in that area. If we prune a tree in the fall before it goes dormant for the year, it will try to send out new growth. That new growth will not have time to mature and harden off before winter, and will die back once our frosts hit, stunting the tree's growth.

While it is clear that late winter or early spring is the best time to prune your trees, there are a few caveats. Dead or diseased branches can be removed any time of year. Not only are these branches a hazard to building and people, but a proper and controlled pruning cut will do less damage than a rough wound left behind from a branch snapping in the wind. Additionally, removing branches with a disease or insect infestation can prevent the issue from spreading to the rest of the tree.

The other caveat comes for flowering trees. Flowering trees generally set their buds in late summer or fall for the next spring. If you prune a flowering tree in the spring, you are cutting off its flower buds, and you will not get a fully blossoming tree. And these instances you can wait until the tree is done flowering before pruning.

While it might seem easier to forgo pruning altogether, trees that receive proper pruning, especially when they are young, will be sturdier and less likely to fall or take storm damage. If you are new to pruning, you can find videos and resources available online at kansashealthyyards.org, or check out the recording of our Garden Hour Webinar on K-State Research and Extension's YouTube Channel from March of 2021 where we talked about tree pruning strategies. You can also reach out to your local extension office for more guidance.

Teresa Hatfield
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November is American Diabetes Month

November is American Diabetes Month, a time to rally behind the fight to end diabetes. I have lost some very close family members to this terrible disease. This fuels my passion to educate people on the disease's seriousness and help prevent diabetes. According to the American Diabetes Association, over 38 million people have diabetes, and nearly 98 million have prediabetes. In the last 20 years, the number of Americans with diabetes has more than doubled.

Diabetes impacts a person's health and wallet. In 2023, the American Diabetes Association published the Economic Costs of Diabetes in the U.S. The report indicated the total annual cost of diabetes is approximately \$413 billion. People diagnosed with diabetes account for one in every four healthcare dollars in the U.S.

Many people are aware that they are at risk for diabetes. People with prediabetes can take steps to reduce the chance or delay developing Type 2 diabetes. Take the prediabetes risk test to see if you may have prediabetes. If you score 5 or higher, please talk to your healthcare provider.

1. How old are you?
 - a. Less than 40 years (0 points)
 - b. 40-49 years (1 point)
 - c. 50-59 years (2 points)
 - d. 60 years or older (3 points)
2. Are you a man or a woman?
 - a. Man (1 point)
 - b. Woman (0 points)
3. If you are a woman, have you ever been diagnosed with gestational diabetes?
 - a. Yes (1 point)
 - b. No (0 points)
4. Do you have a mother, father, or sibling with diabetes?
 - a. Yes (1 point)
 - b. No (0 points)
5. Have you ever been diagnosed with high blood pressure?
 - a. Yes (1 point)
 - b. No (0 points)
6. Are you physically active?
 - a. Yes (0 points)
 - b. No (1 point)
7. What is your weight status? See chart below

Height	Weight (lbs.)		
4'10"	119-142	143-190	191+
4'11"	124-147	148-197	198+
5'0"	128-152	153-203	204+
5'1"	132-157	158-210	211+
5'2"	136-163	164-217	218+
5'3"	141-168	160-224	225+
5'4"	145-173	174-231	232+
5'5"	150-179	180-239	240+
5'6"	155-185	186-246	247+
5'7"	159-190	191-254	255+

5'8"	164-196	197-261	262+
5'9"	169-202	203-269	270+
5'10"	174-208	209-277	278+
5'11"	179-214	215-285	286+
6'0"	184-220	221-293	294+
6'1"	189-226	227-301	302+
6'2"	194-232	233-310	311+
6'3"	200-239	240-318	319+
6'4"	205-245	246-327	328+
	(1 point)	(2 points)	(3 points)
	You weigh less than the amount in the left column (0 points)		

If you scored 5 or higher, you're likely to have prediabetes and are at high risk for Type 2 diabetes. However, only your doctor can tell for sure if you have Type 2 diabetes. Talk to your doctor to see if additional testing is needed.

There is no cure for diabetes, but advancements continue to be made. Take time this month to share this information with a friend or family member. By raising awareness, we can work together to help prevent diabetes.

Resources: American Diabetes Association, DoIHavePrediabetes.org

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

Got Milk?

Questions often come up concerning milk and health issues surrounding this food product. Many questions come up about the health qualities of different types of milk and dairy-free alternatives. This article will be focused on the most popular types of milk and their health benefits. If you have further questions, please feel free to contact me.

What is milk? Most people think about cow milk when they hear the word milk. Cow milk is the most common form of milk in the United States. At the same time, milk can take many forms. Goat and sheep milk are two other common types of milk.

In addition to milk coming from mammals, plant-based “milk” has become increasingly popular in the last decade. These “milks” are made by processing the plant and withdrawing its juices. The more common of these milks include Soy, Almond, Coconut, and Hazelnut.

What are the health benefits of these different milks? All the different forms of milk and dairy-free alternatives have different health benefits. Here are some of the benefits from the most common forms of milk.

- **Whole milk** (3.25% fat) - Whole milk is full of important nutrients like B vitamins, calcium, phosphorus, potassium, protein and vitamin D. Whole milk has more fat and calories than other forms of cow’s milk. It is a complete protein and an 8-ounce glass has 150 calories and 8 grams of fat.
- **2% (Reduced Fat) Milk** - Reduced fat milk is called reduced fat because it has 2% milk fat instead of the 3.25% found in whole milk. It has the same nine essential nutrients found in whole milk but it has on 125 calories and 5 grams of fat per serving. Additionally, it is creamier than the other reduced fat milks.
- **1% (Low Fat) Milk** – Low fat milk has only 1% milk fat. It has the nine essential nutrients with only 100 calories and 2.5 grams of fat per serving.
- **Skim** (Less than 0.5% Fat) Milk - Like whole milk, skim milk is packed with protein and calcium. At the same time, it has fewer of the other nutrients and 80 calories.
- **Lactose-free Milk** - Lactose-free milk is real milk with the natural sugar found in milk (lactose) broken down. Lactose-free milk still has the nine essential nutrients like the other milks, but it is easy for the body to process. Lactose-free milk might be a good alternative for people who are lactose intolerant.
- **Almond Milk** - Almond Milk is higher in calcium than cow’s milk. Since it is made from almonds, it has a slightly nutty flavor. People who are allergic to almonds should avoid almond milk.