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Rules of Thumb Grazing

This article is too good; I just had to share it with you. Keith Harmony is a Range Scientist at Hays: “Over the years, I’ve heard rangeland managers develop rules of thumb, or short phrases, to try to help them simplify decisions that need to be made to manage their pastures. Some of these rules of thumb have merit and scientific or economic data to support the rules of thumb; however, some rules of thumb may be unfounded and lack informational support. The following is a list of some common rules of thumb, along with an explanation of whether or not the rule of thumb has any merit or basis of support. Thumbs Up means it’s a rule of thumb with merit, and a Thumbs Down indicates the rule of thumb lacks support and has room for improvement. A Thumbs Up and a Thumbs Down means that arguments may be made for and against the rule of thumb.

1. **Take Half and Leave Half.** Thumbs Up. This is probably the most common and most important rule of thumb for rangeland managers to follow. Clipping studies and grazing studies have both shown that when approximately 50% of the growing season’s top growth is removed, animal performance and vegetative production are at near optimal levels, and performance can be sustained over a long period of time. At the right stocking rate, half of the 50% of the growth that is removed during the growing season, or 25% of the total growth for the year, is actually ingested by grazing animals. The other 25% of the total growth that disappears does so as a consequence of trampling, defecation, wildlife use, insect feeding, and natural senescence and weathering of the plant material. The 50% of total growth that should remain standing through the growing season is needed for leaves to continue to photosynthesize to produce carbohydrates for new leaf material, for maintaining and producing new root growth, and for storage during the dormant season to serve as a source of energy to initiate new plant growth the next season. The right stocking rate for a pasture balances forages availability with animal removal to achieve this concept of take half and leave half on a sustainable basis.”
2. **You Can’t Overgraze and Make Money.** Thumbs Up. Pastures that are overgrazed produce lower net returns than pastures that are stocked at a moderate rate using the take half and leave half concept. Greatest net returns per acre will be experienced when, collectively, the greatest number of animals achieve their most efficient individual gain animal production and economic return.

This is also the stocking rate where total pasture gain on a per acre basis is usually at its greatest point of efficiency. As the stocking rate increases further, additional animals cause enough competition for high-quality forage or competition for enough quantity of forage, that individual performance is reduced. This results in production per acre increasing because more animals are on pasture, but production per acre increases at a decreasing rate because each individual animal will gain fewer total pounds. Increasing the stocking rate further and removing more vegetation results in even more competition and lower individual animal gain, and animal gain per acre will eventually even start to decline. Grazing animals at high stocking rates don’t achieve great enough gain to cover their own costs of production, so net returns plummet. Returns per acre and per animal are at their greatest level when total gain is most efficient to cover the costs of production. Grazing studies have shown that the greatest returns per acre are usually achieved at a moderate stocking rate that takes half and leaves half, and are least with heavy stocking when more than half of the standing forage is annually removed.

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Invasive Brush Species – Roughleaf Dogwood

Sometimes reaching a height of almost 15 feet in height, Roughleaf dogwood is very well adapted to almost any of our grazing season environments. It is often found in clusters along fence rows and stream edges as well as open grazing areas, and once established, it can be very difficult to stay ahead of. It is identifiable by its flat-topped clusters of white flowers usually seen starting in late May/early June.

Roughleaf dogwood typically isn't found in regularly burned warm-season grass pastures. In cool-season pastures, or less frequently burned warm-season stands, the plant's tendency to leaf out after the optimum burn window limits the ability of fire to control it. Once it takes hold, only multi-year late spring burns will reduce stands.

Chemical control is an option, but a multi-year program is required. Foliar applications should be made between the flower bud state and early seed production. Many of our more common single product treatments (triclopyr, picloram, dicamba, etc...) seldom result in greater than 25 percent mortality rates. Even high volume multi-product treatments may only provide 50 percent control. For best results, consider products like PastureGard HL (triclopyr + fluroxypyr), Surmount (picloram + fluroxypyr), or even a combination of Grazon P+D and Remedy Ultra, all applied with water and a non-ionic surfactant when possible. As with the buckbrush control recommendations (<https://bit.ly/2YnZ6TP>) last week, remember that application timing is important. Picloram is a restricted use pesticide and requires a Private Pesticide Applicator's License to purchase/apply. Additional product information can be found in the 2020 KSU Chemical Weed Control Guide available from your District Office or at <https://bookstore.ksre.ksu.edu/pubs/SRP1155.pdf>. Always read and follow label directions.

Spring Lawn Care – Pay Attention to Mowing Height

There are lots of things we can do to make our lawn healthier. We fertilize. We apply weed killer. Often overlooked, however, is the importance of mowing height.

Most of our turf grass species are cool-season in nature - predominantly fescue and bluegrass. These cool-season species have an erect growth habit and tolerate low mowing less favorably than warm-season species. Hot weather is more stressful to cool-season grasses than warm-season grasses, too. That means that not only is our base mowing height important, but our mowing height should be adjusted through the season to help insulate the ground against heat, increase the turf's food-producing area, and encourages roots to penetrate more deeply into the soil. Mow too low, and you increase stress on the turf, which can require additional watering. Done too often, you'll end up with thin, weak turf more susceptible to weeds.

A good mowing height for cool-season turf lawns is two and a half to three inches. Mowing at the lower end of the height range might be okay now, but plan to raise deck height as warmer weather arrives. A good rule of thumb is to never remove more than one-third of the height of the turf at one time. To attain a three-inch mowing height, that means mowing when the grass reaches no more than four and a half inches.

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

Tough Times May Mean Changing Your Lifestyle Temporarily

In addition to creating a heightened awareness of personal health and safety, the outbreak of the coronavirus that causes the COVID-19 disease has put a pinch, at the least, on many families' home budget.

Elizabeth Kiss, a family resource management specialist and associate professor at Kansas State University's College of Health and Human Sciences, said that developing a plan for the family's income is key to making ends meet during tough financial times.

"You can direct your financial affairs by taking a close look at your obligations and making informed decisions about what to do," she said.

Kiss and colleagues have developed a series of publications, titled "When Your Income Drops (is now available online providing guidance to families and individuals who suddenly face a drop in income due to unemployment, reduction in wages, termination of support payments and other emergencies-some of which have been witnessed as a result of the COVID-19 outbreak. The publication, When Your Income Drops: Making Ends Meet (<https://www.bookstore.ksre.ksu.edu/pubs/MF3498.pdf>) is available through the K-State Research and Extension bookstore (<https://www.bookstore.ksre.ksu.edu/pubs/MF3498.pdf>).

Kiss says there are "Five C's" to help make ends meet:

Control. "Control as much of the situation as you can," Kiss said. "Don't panic or waste energy, blaming yourself or others. Remember that you and your family can take control of your actions."

She notes that it's natural for individuals to take some time to get over the initial shock, but then start making plans to work around the shortfall. "One way to cut down anxiety is to assure yourself you are doing the best you can with your family resources," Kiss said. "Recognize that your life will be different for a time, but you and your family can still manage financial affairs rather than have them manage you."

Claim. Check with local agencies to determine what benefits or assistance programs for which you may be eligible. "If the decrease in your income is from unemployment, you can start by applying for unemployment benefits (<https://getkansasbenefits.gov>)," Kiss said. Other programs that can help include the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), Medicare, and others.

Communicate. Let family members know what your limitations may be. Perhaps other family members who are still earning an income can contribute more, or maybe the family member no longer earning an income can use a hobby or skill for temporary income.

"Once you know how much income will be coming in, make a list of your expected expenses," Kiss said. "Be sure all family members participate in discussions about expenditures. Decide what the family needs next week, next month, and over two or three months."

Confer. Call your creditors and explain your situation; don't simply default on payments. "Find out what happens if you miss payments," and if there is a grace period for making payments, Kiss said. "with this knowledge, contact creditors before they contact you. Creditors will be more likely to believe you and help you if you make contact early."

She notes that it's wise to make a plan to first pay creditors who are likely to garnish your wages, impose a high finance charge, repossess items, cut off basic services, or who are owed a large amount.

Change. Be prepared to make changes to your lifestyle temporarily so that you can maintain basic essentials. "Look for ways that you and family members can use time, energy, talents and knowledge to reduce expenses," Kiss said. "Take better care of things you already have. Recycle clothing. Swap items and services with a friend or neighbor.

"To make it through hard times, your family will need to make informed decisions and work together to carry out these decisions."

Nancy C. Nelson

Meadowlark Extension District Family Life

Tame Your Sweet Tooth

It is easy to get too much sugar in your diet. It seems like the more of it we eat, the more we crave sugar. Foods with natural sugar, such as fruit, are still part of a healthy diet.

Experts agree, however, that limiting added sugar has many benefits, including weight maintenance, heart health, diabetes prevention and management, and a stronger immune system.

People in the Blue Zones® eat sugar intentionally, not by habit or accident. Their diet contains about the same amount of natural sugar as ours in the U.S., but their consumption of added sugar is only about one-fifth of the amount that we consume.

Here is good sound advice on limiting added sugar in your diet:

Read labels. Sugar is hiding in pre-packaged and processed foods. Check the ingredient list for corn syrup and sweetener, molasses, honey, malt sugar, cane juice, brown or malt sugar, fruit juice concentrates, and sugar molecules ending in “ose” (sucrose, dextrose, etc.)

Save cookies, candy, and bakery items for special occasions and ideally as part of a meal.

Limit sugar added to coffee, tea, and other beverages. Consuming intensely sweetened beverages can leave you craving foods and drinks with more sweetness.

When baking, cut the sugar in the recipe by $\frac{1}{3}$ to $\frac{1}{2}$.

Seek out whole foods. These will satisfy you, and they are full of nutrients.

Be patient. The first few days you eat less sugar will be the hardest. Try getting more sleep, choose healthful carbs (whole grains, fruits, nuts, seeds), and find support.