

David Hallauer District Extension Agent, Crops & Soils

The Competitive Nature of Sericea Lespedeza

During the first part of the growing season, sericea lespedeza might not have seemed all that noticeable. As the season winds down and grass is shorter following haying or a season of grazing, however, it takes full advantage of growing conditions to take off.

It might seem easy to look the other way. After all, there's not *that* many plants out there, right? Surely it won't get to be a problem, will it? The competitive nature of sericea lespedeza would suggest just the opposite.

Put simply, established sericea plants can reduce or eliminate competing vegetation. It does so numerous ways, starting with restricting light to more desirable forage species. It grows tall, puts out lots of branches, and can provide a heavy shade, particularly in thick stands. It's worse on cool season grasses than warm, but neither responds well to the competition.

While not necessarily a 'competitive' plant (normal germination rates are only 10-20 percent), once it gets started, its high water requirement can actually cause a 'drought' for competing vegetation while stealing nutrients (sericea is a legume, but has low N fixation and provides little in the way of nutrient contribution) as well. As if simply tying up other nutrients and moisture wasn't enough, roots also produce allelopathic chemicals that when released inhibit seed germination and growth of various forages. Root extracts from sericea have been shown to reduce forage production of tall fescue by up to 15 percent.

Once it gets a foothold, seed production is extreme, with individual plants producing in excess of 1000 seeds per plant. It also tends to survive for long periods in the soil as well.

There's a reason sericea lespedeza is considered a statewide noxious weed. Fall can be a tricky time to control it, particularly if drought conditions exist, but if plants are growing well or you expect recently received moisture to return them to good growing conditions, consider fall treatment options. The last page of the 2024 *KSU Chemical Weed Control Guide* is dedicated solely to sericea lespedeza control. Request a copy from any of our three District Offices or find it online at: <u>https://bookstore.ksre.ksu.edu/pubs/2024-chemical-weed-control-for-field-crops-pastures-rangeland-and-noncropland_CHEMWEEDGUIDE.pdf</u>. Local noxious weed offices are a great resource as well, providing knowledge on everything from herbicide selection to rates and timing recommendations. Make sure to visit with them if you haven't previously.



Ross Mosteller

District Extension Agent, Livestock & Natural Resources

Thinking Like a Calf at Weaning

The fall calf runs at sale barns across the country will soon begin. Many times, buyers in the seats will hear "weaned 45 days" as this has become an industry standard. This 45-day period provides calves an opportunity to overcome the stress associated with weaning, bolsters immune function, and provides proper nutrition, allowing for maintained health and performance upon entering the next phase of the beef supply chain.

Stressors at weaning include removal from mother, nutritional changes, new environments, and altered social structure. These stressors are often referred to collectively as "weaning stress", however, each is unique and provides its own challenge to calf welfare. Understanding this critical time will allow a better understanding of the importance of a 45-day weaning period.

Most cow calf operations find it necessary to wean calves, usually between 6 and 8 months of age, increases cow reproductive performance and herd economic efficiency. Many times, the process of weaning is abrupt and the calf is transitioned to a new environment away from the dam. While it is a necessary part of life, breaking the maternal bond by removing access to the udder and/or dam is a major stressor for a calf.

Some weaning strategies such as fence-line weaning or the use of nose flaps to prevent nursing seek to mitigate stress caused by removal from the dam. While these methods provide the benefit of maintained contact with the dam, research indicates that calves fitted with nose flaps to prevent suckling still exhibit stress-related behavior such as increased vocalization, decreased time playing, and decreased rumination indicating that access to the udder is a critical component of calf contentment.

Calves experience nutritional changes as they transition away from access to milk, which is a protein and energy-dense food source and can account for up to one third of a weaning aged calf's caloric intake. Prior to weaning nursing is a calf's primary source of social interaction is the dam. Following weaning calves must learn to interact with their peers, which leads to brief social stress as each calf seeks to find its place within the group.

Calves are usually transitioned to an unfamiliar pasture or dry lot during the weaning process resulting in environmental stress as the calf seeks to orientate to its new surroundings. A weaning period of 45 days or more ensures calves can cope with weaning stressors and remain healthy. An Iowa State University study found that calves that had been weaned for a minimum of 30 days had a 15% lesser incidence of bovine respiratory disease compared to calves that had been weaned for less than 30 days.

Weaning stress cannot be attributed to a single stressor, but involves multiple stressors including severing the maternal bond, loss of access to the udder, altered diet and available nutrients, social challenges, and environmental changes. A weaning period of at least 45 days, lays the foundation to maintain and improve calf health. Evaluating the weaning period through the eyes of a calf provides understanding regarding this unique period of life.



Laura Phillips District Extension Agent, Horticulture

Planting Fall Cover Crops

As you go over the garden checklist from last week, cover crops might stand out as a novel idea for your garden. On the surface, cover crops sound like extra effort, but their long-term benefits actually reduce your workload. After warm season vegetables die off, the soil in your garden slows down too. Without plants to cycle nutrients, store carbon, and prevent erosion, your soil can suffer. A barren garden also provides a perfect space for winter and early spring weeds to cause trouble. This is where cover crops come into play.

While different crops offer unique benefits, you will see positive impacts from any cover crop. Roots from cover crops prevent otherwise barren soil from eroding, and allow for greater water infiltration. As they outcompete weeds for resources and create a shade canopy over the soil, they lower the need for herbicides and hand weeding. You will also reduce your need for fertilizers. Their roots prevent nutrient leaching and increase nutrient cycling. Additionally, when cover crops decompose, they add organic matter to your soil. Legumes in particular will move nitrogen from the air into your soil for your spring and summer plants to use.

Capitalizing on these benefits may be easier than you think. First you need to choose a crop. Ideally you will have more than one cover crop. We recommend choosing at least two species, ideally one legume and one non-legume. If you want to plant early spring vegetables, then oats, winter wheat, barley or grain rye are great options. They will go dormant in the winter and leave a small yet meaningful mat of decomposing organic matter for you in the spring. Field peas and oats are a good, reliable pair for those just starting out. Hairy vetch, a legume that produces long vines, pairs well with a small grain crop that it can climb on, like winter wheat, barley, or oats.

After you choose a crop, you should plant before the beginning of October. To prepare for planting, remove existing garden vegetation, mulch, and debris. Then use a rake or garden fork to smooth and loose the top layer of soil. If your entire garden is not done for the year, you can still plant cover crops in the portions of your garden that have died off or stopped producing.

Once you have prepared the soil, check the weather. If possible, time the planting directly before a rain. You can sow them by scatting seeds across the garden (known as broadcast seeding) either with a broadcast seeding implement or simply throwing the seeds with your hands. Alternatively, you can mix the seeds with soil or compost, then spread the mixture evenly across the garden. Whatever method you choose, try to make distribution as even as possible. Follow the instructions that come with your seeds when deciding how much seed to use.

Once the seeds are on the ground, use a rake to gently work them into the soil. While the exact depth varies by crop, most of the seeds will need to be ½ inch deep. You can walk across them to press them in deeper. Although not necessary, you can give them a boost with a balanced fertilizer such as 10-10-10 at a rate of 1 pound per 100 sq. feet. If you are planting legume cover crops, use a fertilizer with lower nitrogen rates such as 5-10-10.

Lastly, sit back and watch your cover crops grow and heal your soil!



Teresa Hatfield

District Extension Agent, Family and Community Wellness

Prostate Cancer: Raising Awareness and Promoting Early Detection

September is National Prostate Awareness Month. Prostate cancer is the most common type of cancer (other than non-melanoma skin cancer) for men in the United States. It is also the second leading cause of cancer deaths among men in the United States. Around one in five men will develop this type of cancer. The prostate is a gland in the male reproductive system lying under the bladder. It tends to increase in size as men age. As the prostate increases, the urethra gets pinched, and it becomes harder to urinate. Prostate cancer is a disease in which cells grow out of control in the prostate. Prostate cancer can be a slowgrowing cancer, but it still poses health risks if left undetected. Prostate cancer often shows no signs or symptoms in the early stages, but as it progresses, men may have trouble passing urine, pain in the lower belly, sexual problems, and loss of sex drive.

An enlarged prostate does not mean you have cancer. It is always best to detect prostate cancer in the early stages. Contact your healthcare provider to determine when you should be screened. You may have risk factors for prostate cancer if you answer yes to the following questions:

- I have trouble passing urine.
- I have a family history of prostate cancer.
- I have rectal pressure or pain.
- I have a strong, frequent urge to pass urine.
- I have pain in my lower belly or groin or behind the scrotum.
- I am over age 55.

Screening options for prostate cancer include a digital rectal exam and a blood test for prostate-specificantigen (PSA). These tests are essential for catching the disease before it spreads, which can significantly improve survival rates.

You can make some healthy lifestyle choices to reduce your risk of developing prostate cancer. Eat a diet rich in fruits, vegetables, and whole grains. Get at least 5 to 6 cups of fruits and vegetables daily. Engage in at least 30 minutes of moderate exercise five days a week. Limit your sugar, saturated fats, processed meat, and alcohol intake.

National Prostate Health Month reminds you to take care of yourself or remind someone you care about to get screened. Talk with your healthcare provider about screening and lifestyle choices. Early detection can be a lifesaver.



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

No news article this week.