



Major County OSU Extension

October/November 2021 Newsletter

Oklahoma Cooperative Extension Service - Division of Agricultural Sciences and Natural Resources - Oklahoma State University

Management Practices for Winter Annual Grasses

Josh Bushong, Area Extension Agronomist

Grassy weeds continue to be problematic in winter crop systems in the region. Obviously, that's not new, but it seems as if the situation continues to only worsen with specific weed species. I would put feral rye, Italian ryegrass, and rescuegrass towards the top of the list with cheat and jointed goatgrass not too far behind. Bromes were thick last year, but we seem to still achieve adequate control with timely applications. Wild oats as a whole are few, but can be found in northwest isolated parts of the state.

Italian ryegrass continues to gain more northern acreage year after year. Heavy reliance on Axial XL and Bold, Group 1 type herbicide, has resulted in intensified selection of herbicide resistance within the central corridor of the wheat belt of the state. Dr. Misha Manuchehri, OSU Small Grains Extension Weeds Scientist, has confirmed Group 1 resistance in Kingfisher, Caddo, Grady, Comanche, and Cotton counties. Widespread Acetolactate Synthase (ALS), Group 2, herbicide resistance was confirmed in 2008 around the time when PowerFlex was hitting the market. Our best recommendation now relies on delayed preemergent herbicides such as Zidua, Anthem Flex, and Axiom (not to be confused with CoAXium).

True cheat is a old enemy of wheat. ALS products such as Outrider (previously named Maverick) and Olympus have been excellent products to keep cheat managed. Unfortunately, these days are numbered. ALS herbicide resistant cheat was first confirmed in Kay county in 2010. Strong suspicion of resistance are continuing to be reported throughout north central Oklahoma.

The herbicide chemical families of Sulfonyurea (SU) and Imidazolinone (Imi) both belong to the ALS herbicide group (same site of action). As such, what we've observed is that once cheat becomes resistance to SU products the Imi products, like the herbicide Beyond, will also prove to have resistance. Meaning that if the SU herbicides are not controlling the cheat, using Beyond in a Clearfield production system will not work either.

Here are some management practices for this scenario in no particular order 1. use the new herbicide trait system CoAXium with the group 1 herbicide Aggressor 2. Go winter fallow (with or without a summer crop rotation) 3. Rotate to canola 4. Graze-out or hay-out the next wheat crop. Other management practices that can reduce cheat and other winter grasses include cleaning tillage and harvest equipment to avoid spreading, planting weed-free seed wheat, delay sowing, increase seeding rate, deep tillage, narrower row spacing, using a competitive wheat variety, and burning wheat stubble.

Feral rye was plentiful in all too many wheat fields last year. The Clearfield Plus system has shown improvement with the addition of Metholated Seed Oil (MSO) adjuvants. It's not perfect by any means, but can still be a viable option to greatly reduce rye if applied correctly. Sequential applications of 4oz/a of Beyond tank-mixed with MSO and a nitrogen source applied in the fall and spring also has shown more consistence results. Applications made prior to the rye reaching the tillering stage usually results in better efficacy and the second application in early spring helps reduce any escapes and late emerged rye.

The new herbicide tolerant trait system, CoAXium, is another great tool to control feral rye, jointed goatgrass, and bromes including rescuegrass and cheat. There are some differences when comparing the cost of the Clearfield and CoAXium systems. As of right now, the seed cost is less expensive in Clearfield but the herbicide is more expensive. Conversely, CoAXium seed wheat is more expensive but the herbicide is less. At a 90lb/a seeding and sequential fall and spring applications with full rates of products and adjuvants, the seed and chemical cost of the Clearfield Plus system will be around \$70/a and the CoAXium system about \$50/a. When using a single max use rate the seed and chemical cost for the Clearfield Plus system will be around \$55/a and the CoAXium system about \$40.

Integrated weed management is using all the tools in our toolbox. We are currently in a time when it takes every management practice to produce clean wheat. Many cultural practices, as mentioned earlier, and continuing to rotate crops and herbicide sites of action

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OSU Ranchers Thursday Lunchtime Series: Winter Management

Donald Stotts, Agricultural Communications Services

[Oklahoma State University Extension](#) is hosting a new lineup of Ranchers Thursday Lunchtime Series events in October. The group of free Zoom webinars will kick off with insights about how much to cull beef cattle herds and focus on ways to best manage winter feed costs while providing livestock with needed nutrition.

Zoom webinars are scheduled for Oct. 7, Oct. 14, Oct. 21 and Oct. 28. The weekly series is free to the public, but [registration](#) is required for each event. Questions and feedback are encouraged. All October webinars will begin at noon central time and end about 1 p.m.

“Join our [Beef Cattle Extension](#) team, experienced ranchers, scientists and others to learn and share useful tips about beef cattle production, management and marketing,” said Dave Lalman, OSU Extension beef cattle nutritionist. “The series is like one-stop shopping. We cover pretty much everything over time. Spending lunch with us is an investment that can provide real-world benefits for ranchers and their operations.”

Of paramount importance to ranchers this year are ways to manage feed costs, which are 30-40% more compared to 2020, Lalman said. There have been a number of reasons for higher feed prices, from bad crop weather shrinking world harvests, to an increased demand for beef, to supply chain disruptions caused by the COVID-19 pandemic.

“Anything we can do to help livestock producers mitigate negative effects of higher feed costs translates to benefits for the entire industry, and that includes consumers who have been paying more for their meat products,” Lalman said.

The Zoom webinar format is designed for participants to interact with beef cattle specialists from across the country. October sessions will showcase experts from OSU Extension, Montana State University, the University of Arkansas and more. Visit OSU Beef Cattle Extension’s Ranchers Thursday Luncheon Series [online webinar pages](#) to learn more or watch past Zoom sessions.

For additional information, contact Lalman by email at david.lalman@okstate.edu or by phone at 405-744-6060.

Leasing Land for Wildlife and Recreation

Trent Milacek, Extension Area Ag Econ Specialist

If producers are interested in increasing revenue from land assets, one way is to explore recreational leasing. One of the most common recreational leases in Oklahoma are hunting/fishing leases. It is important to determine the landowner’s liability and to protect their assets when allowing outside parties access to their land. If a tenant is interested in subleasing land for recreation, they must determine if they have that right in their current lease with the landowner before engaging with a third party.

Hunting leases are a form of recreational leasing. Those interested are encouraged to read the OSU factsheet NREM-5032 for detailed information on developing and marketing a hunting lease. The factsheet can be found at the following web address: <http://factsheets.okstate.edu/documents/nrem-5032-lease-hunting-opportunities-for-oklahoma-landowners/> It is important to seek legal counsel before entering into any lease to ensure your rights are protected.

A good hunting lease outlines appropriate use of the land and facilities so that the lessor and lessee are aware of each party’s expectations. Native wildlife are publicly owned, so hunting leases only grant access and use of the property in which these resources can be pursued. These makes it understood that a landowner does not guarantee any wildlife to be present on the property. A “hunting lease” only grants the lessee the right to make specific and limited use of the property. Therefore, this lease is more easily revoked if the need arises.

There is no “standard” hunting lease. Multiple-year leases are less common than one-year leases. Multiple-year leases may be more attractive to organizations or groups and could be more valuable to lessees looking for consistency. One-year leases are flexible for landowners if they are unsure of their future intentions or if they want to change the use of the land in the future.

Reducing liability to landowners when leasing land for hunting is a serious consideration. From NREM-5032, “Oklahoma’s recreational use statute and Oklahoma Limitation of Liability for Farming and Ranching Act may offer protection from liability for landowners when guests use their property without fees, when lessees pay less than \$10 per acre, or when the lessees and guests sign a properly executed liability waiver.”

Hunting leases can be a good way to gain revenue from agricultural land. They can also help reduce trespassing, vandalism and theft due to increased activity through the presence of lessees. However, landowners will need to consult an attorney when developing a lease and must work with lessees throughout the lease. Landowners may also lose some use of their land as is necessary for lessees to utilize the land. If these potential positives outweigh the negatives, both parties can benefit. For more information or to obtain a copy of the factsheet NREM-5032, please contact your local county extension educator.



Reducing Stress at Weaning

Dana Zook, Area Extension Livestock Specialist

I recently sent my daughter to Pre-K. As a mom who typically encourages her kid's independence, I was unprepared for my own "first day of school experience". Norah was all smiles and couldn't wait to start the day while I was trying to hold it together. I felt better when I noticed that a variety of emotions were widespread on the school yard. Some kids like Norah were excited to start their day and others could not understand why their beloved parents were dropping them off at this scary place. I was not alone in my emotional state, with a lot of parents giving extra hugs before sending them on their way. With this crazy experience under my belt, I feel like I have a whole new understanding of weaning season in the cattle industry. Without proper transition, the dramatic parting at the school door or weaning a calf from a mother cow can be stressful for both parties involved.

Traditionally, the cattle industry has employed weaning methods involving total separation of cow and calf, often moving them miles apart. As one could expect, this causes a great deal of stress. Stress compromises the immune system which can have a negative effect on health, feed intake, and weight gain. To reduce stress during this crucial time, a contrasting form of management that has gained traction is fence line weaning. Fence line weaning is a management process that allows fence line contact between cow and calf up to 10 days following weaning. This transitions the calf to their new environment and allows cow and calf to visually see one another. On a recent SunUp episode, Dr. Mark Johnson reported that fence line weaning reduces bawling and walking in newly weaned calves. In studies using this method calves were more rested and consumed more feed, gaining weight even through the transition.

Another way to reduce stress for calves is to wean them in proper facilities. Initially putting calves in a familiar pen or trap with some shade will help smooth the transition. This way, calves are accustomed to the feeding, watering, and grazing areas. There is nothing I hate more than seeing newly weaned calves in a hot, dusty dry lot. Even the best quality calves have trouble succeeding in this environment.

As someone passionate about cattle nutrition I understand the value of weaning nutrition. Producers should be prepared to provide calves with familiar feeds that are palatable and provide a greater concentration of nutrition to compensate for low intake. Rations should be highly palatable with high energy/high fiber-based commodities such as alfalfa, soybean hulls, and wheat midds. Whole corn is also a good partner with these feeds and is often locally available. Start calves on a palatable ration at 1% of body weight and adjust slowly from there.

Initially, complete feeds that include fiber components are preferred over free choice hay. When free choice hay is provided, calves may forgo the ration and eat only hay, leaving them undernourished. Early on, confirm that calves are consuming the ration fully and then provide some good hay by hand. After calves are through the initial few weeks of weaning, introduce free-choice hay. Timely feeding practices twice daily is important to keep cattle coming to bunk; this also allows for easy identification of calves showing signs of illness. After calves are adjusted, stick to the nutritional plan. What amount of feed has been budgeted for weaning? While tons of feed make beautiful, shiny, fat calves, excess weight gain is not rewarded at sale time. Don't break the budget on feed that is not needed.

Whether you are sending your kids off to school or weaning calves, transitions are important. For calves, remember to consider aspects of using fence line weaning, familiar facilities, and providing high quality nutrition. If you have any questions about weaning management or nutrition, contact your local county OSU Extension office for assistance. Happy Fall!

Free Pesticide Disposals

Josh Bushong, Area Extension Agronomist

The Oklahoma Department of Agriculture, Food, and Forestry (ODAFF) and Oklahoma Cooperative Extension Service are teaming up once again this year to offer two more opportunities for applicators, farmers, or citizens to properly dispose of any unwanted pesticides. ODAFF funds this Unwanted Pesticide Disposal Program to provide a free service to prevent unlawful disposal of pesticides.

The first event will be in Blackwell at the Blackwell Fairgrounds and Event Center on October 12th, 2021. The second event will be in Guymon at the Texas County Fairgrounds on October 14th, 2021. Both events will be held between 8am and 1pm. These are the last two events planned for 2021, but any future events will be posted at the OSU Pesticide Safety Education webpage, www.PestEd.okstate.edu.

Oklahoma commercial and non-commercial applicators and pesticide dealers may participate. Oklahoma farmers, ranchers, and homeowners can use this program as well. There is no cost for the first 2,000 pounds of pesticides brought in by a participant. Anything more than 2,000 pounds will be charged to the participant.

Applicators, homeowners, farmers, and ranchers are not required to pre-register. Dealers are asked to voluntarily pre-register with the OSU Pesticide Safety Education Program. Dealers are asked to pre-register to allow the hazardous waste company to properly plan for larger quantities.

So, what are unwanted pesticides? When pesticides become unusable as originally intended for various reasons, they are considered unwanted. Unwanted pesticides can result from both good and bad management practices. Leftover pesticides that have a limited shelf life may undergo changes rendering them unusable. Pesticides also become unusable when they are no longer registered in the state of Oklahoma. Unwanted or waste pesticides can also result from lost labels on the container making them no longer identifiable.

The word pesticide is a general term for any chemical or product that is used to destroy, prevent, or control a pest. Herbicide, insecticide, fungicide, defoliant, desiccant, miticide, rodenticide, and nematocide are all examples of pesticides. Products that participants are not allowed to bring include fertilizers, micronutrients, waste oil, or any other non-pesticide material.

Transportation of the unwanted pesticides to these events is the responsibility of the participants. Wearing appropriate personal protection equipment is always recommended when handling pesticides. Inspect all unwanted pesticides to see that they are securely packaged. Do not transport pesticides in areas occupied by passengers. Lining the storage area or trunk with plastic sheeting is a good practice to prevent spillage. Containers 5 gallons or smaller can be placed in a bucket or plastic storage container if they show signs of leakage.

The Unwanted Pesticide Disposal Program has been very successful. Since 2006, this program has collected about a million pounds of unwanted pesticides. The program is a service designed to remove unusable pesticides from storage and reduce the potential threat to public health and the environment and participants in the program will not be prosecuted for illegal management practices.

For more information visit your local OSU Extension office or visit the OSU Pesticide Education Safety Program webpage www.PestEd.okstate.edu.

Selection and Management of Replacement Heifers Based on Cowherd Data Collected at Weaning

Mark Z. Johnson, Oklahoma State University Extension Beef Cattle Breeding Specialist

Over the past several weeks we have discussed how the data collected at weaning can help to cost effectively manage the cow herd. At a time of continued high grain prices, Oklahoma cattle producers also suffer from a lack of rainfall which is jeopardizing the potential of cool season grass pastures. This week we take a look at the selection and development of replacement heifers.

In order to maximize profit potential it is important to have heifers calving at two years of age. The time period required for replacement heifers to pay for their development and maintenance is referred to as the payback period. On average, six calves are necessary for the female to pay for her development and maintenance expenses. That is, a 7-year-old female weaning her sixth calf at the breakeven point. If the female misses producing a calf one year. The payback period extends to 9 calves. Research shows heifers becoming pregnant early in their first breeding season, (specifically the first 21 days) remain in the herd longer and produce more total calf weaning weight over their lifetime in production.

How do we select and manage replacement heifers so that they are having fertile heats and ready to conceive by 14-15 months of age? Genetics, photoperiod, level of nutrition and growth rate all influence when beef heifers will reach puberty; that being said, heifers that have reached 65% of their mature weight by this age should have reached puberty and be ready to breed. Obviously age should be taken into account, (along with other selection criterion), when selecting replacements, with older heifers having an advantage. Heifers calves born earlier in the calving season, are produced by cows that conceived earlier in the breeding season.

After heifers are selected, how do we arrive at the target weight they need to gain from weaning until their first breeding season? First we need an accurate estimate of the average mature cow weight. By using the weights taken at weaning time on the 4 to 7-year old cows and adjusting to a Body Condition Score of 5 (Chapter 20 Beef Cattle Manual) we can calculate average mature weight of the cowherd. For example:

- Average Weight of Mature Cowherd = 1300 lb.
- Average Weaning Weight of Selected Heifer Calves = 527 (Weaning Weights taken on October 1st)
- Beginning of breeding Season planned for May 1st, corresponding to a calving season starting approximately February 8th.
- 212 Days from October 1st to May 1st.
- Target Weight = 1300 lb. Mature Weight x .65 = 845 lb. by May 1st.
- Gain Needed = 845 – 527 = 318 lb.
- Average Daily Gain Needed from Weaning to Breeding Season = 318/212 = 1.5 lb./day

What is the best way to feed to reach that Target Weight? In a normal Oklahoma year, spring born heifers weaned in October are old enough to make good use of wheat pasture available by late November and gain 1.5 lb. per day (or better) to reach targeted weight. This would typically be the most cost effective way to develop replacements. The way this year is shaping up, cool season grass pasture looks iffy. The good news?, it is documented that heifers can be rough it and be grown very slowly through the winter months and fed harder for the couple of months going into breeding season in order to reach target weight by breeding season. This is the development method referred to as SLOW-FAST in Chapter 29 of the newest edition of the OSU Beef Cattle Manual. The SLOW-FAST feeding method for replacement heifers can also be a more cost effective means of reaching the target weight than feeding for a consistent daily gain over the entire feeding period.

Additional Management Advice for Developing Replacement Heifers:

- Don't use growth implants. While it may be tempting to get the improved gain, replacement heifers should not be implanted at weaning (or later) as it will decrease fertility and pregnancy rates.
- Use ionophores (monensin or lasalocid) when possible, they are proven to cost effectively improve growth with no downside to fertility.

Target a Body Condition Score of 6 by the beginning of breeding season. It's not only important that heifers reach target weight but also important they don't get overly fat as this can reduce fertility as well.

Extension Experience – Insights into Oklahoma Agriculture

The Northwest Area Extension podcast *Extension Experience* is brought to you by Josh Bushong, Trent Milacek, and Dana Zook. Each week we provide perspective on Agriculture topics and offer insight from our experience working with Extension Educators and Producers across Oklahoma. The *Extension Experience* podcast is available on Spotify, Google Podcasts, and Apple Podcast platforms. You can also access the episodes on spotlight <http://spotlight.okstate.edu/experience/>. We hope you consider listening to Extension Experience.

