



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 will always be the foundation. Using new tools and traits greatly helps but can't be solely relied upon for the future of your farming operation.

Contact your local OSU Extension Educator to discuss weed management options for your operation.

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!

Weaning Management to Reduce Stress

Britt Hicks, Ph.D., Area Extension Livestock Specialist

For spring-calving herds, weaning season is right around the corner. Weaning is one of the most stressful events in a calf's life. Minimizing weaning stress should improve calf health and weight gain. Beef calves are traditionally weaned by abrupt remote separation from their dams, kept in a lot and fed. Fence-line weaning has gained popularity in recent years over traditional methods because calves show less behavioral stress, vocalize less (bawling), spend more time eating and gain more weight following weaning. With fence-line weaning, calves are separated from their mothers but are allowed to see, hear, and smell their mothers. Depending on the fencing used, physical contact may also be possible (place in adjacent pastures).

University of Arkansas research from 2012 evaluated the effects of weaning method (fence-line vs. traditional) and time of day (morning vs. evening) on behavior and performance of fall-born calves. In this study, crossbred fall-born calves were allotted to the following weaning treatments: 1) fence-lined weaned in morning, 2) fence-lined weaned in evening, 3) traditional weaned in morning, and 4) traditional weaned in evening. The calves assigned to the morning weaning treatments were gathered at 7:30 am, separated from their dams, weighed, and either placed in 4-acre paddocks adjacent to their dams (fence-line weaning) or in 1-acre drylots away from their dams for 14 days (traditional weaning). The calves assigned to the evening weaning treatments were gathered at 5:30 pm and handled the same as the morning treatment groups. During the weaning period, all groups had ad libitum access to water, trace mineral salt, and were offered 2 lb per head per day of dried distiller's grains. In addition, the traditional weaned groups were offered medium quality hay. Each treatment group was evaluated for vocalization and behavior (walking rapidly, running, standing, or lying down) at approximately 12, 24, 48, and 72 hours after weaning. After the 14-day weaning period, the calves were gathered and reweighed.

These researchers reported that the percentage of calves walking rapidly, standing, or lying down did not differ across treatments. However, the percentage of calves vocalizing were greater for morning weaning compared with evening weaning (67 vs. 42%) and for traditional weaning compared with fence-line weaning (62.5 vs. 46.5%). In addition, during the 14-day weaning period, evening weaned calves gained 86% faster than morning weaned calves (2.70 vs. 1.45 lb/day and fence-lined weaned calves gained 59% faster than traditional weaned calves (2.55 vs. 1.60 lb/day).

The results of this study suggest that weaning fall-born calves in the evening may reduce the number of calves vocalizing and may increase calf gains over the weaning period. These researchers suggested that this might benefit producers that sell calves to a cash market shortly after weaning. Fence-line weaning might also result in fewer calves vocalizing during the weaning period and improve performance compared with traditional weaning. Virginia (2008) and California (2003) research showed that fence-line contact between mother and calf for seven days after weaning resulted in less stress on calves than that associated with the traditional abrupt separation of the calves from their mothers which minimized reductions in weight gain associated with weaning.

Fence-line weaning takes good, well maintained fences and adequate water supplies for both sides of the fence since a large number of cattle are going to be congregated in a small area for several days. Even though fence-line weaning is not always possible or feasible, minimizing stress is still important. Tips to minimize stress from weaning to shipping include.

- Provide calves access to the weaning area (pen, trap, or pasture) a few weeks prior to weaning so calves do not undergo the stress of an environment change at weaning.
- Allow fence-line contact between calf and dam for four to seven days following weaning. Fences should be sturdy and allow nose to nose contact while preventing nursing.
- If fence-line contact is not practical, move cows far enough away that they cannot hear the calves bawling.
- Move the cows to a new location when cows and calves are separated at weaning. Do not move the calves.
- If weaning in a drylot or corral, place feed bunks, hay, or water troughs along the fence to minimize perimeter walking.
- Do not castrate, dehorn, or brand calves at weaning. These practices should be completed at least three weeks before weaning and preferably prior to three months.

Remove those spent fly tags!

Dana Zook, Area Extension Livestock Specialist

We have reached another fall season according to the calendar, although I'm not Mother Nature is paying attention. After living here for almost a decade, the crazy OK weather still surprises me! One issue with the proliferation of warm temperatures in the fall is the continued population growth of horn flies on cattle. At this point in the year, much of our fly control options have run out, especially if producers have already used a combination of fly controls such as sprays or tags. Even though there is little we can do for flies this time of year, there are a few action items producers can achieve this fall to help with better fly control next summer.

1.) Remove spent fly tags!

In Oklahoma, producers should expect to achieve about 90 days of control with a fly tag. That is, if proper chemical rotation has been practiced in the past. Producer applying tags with no heed to rotation may get less effective fly control. Also, most fly tags are applied in the early summer. When fall rolls around, those same tags have reduced efficacy and should be removed. You may be wondering, "Why remove the tags, it's just as easy to do it in the spring?" Prompt removal is important because there is still a small amount of chemical on the tag – not enough to control the flies but just enough to allow living flies to build resistance to that chemical. In Oklahoma, mild temperatures allow some fly growth to continue through the winter. If fly tags are left in till next spring, there is the potential for several generations of horn flies to develop resistance to the chemical in that tag.

2.) Dispose of spent fly tags properly

Removal of spent fly tags is very important but so is their disposal. Instead of leaving the old tags littered around the chute, bag them up and put them in trash. Old tags on the ground are still a reservoir for flies to create resistance over the winter.

3.) Record what fly control was used

Fall is the perfect time to make record of what fly tags, pour-on's, and sprays were used for both flies and other internal parasites (worms). Take a picture of the boxes with your phone or file a label to reference when you purchase products next season. Rotation of both internal and external parasite control is essential for the effectiveness of future products. By ignoring rotation, livestock producers are losing control options. Internal and external parasites are animal welfare issues and producers should heed label directions so that the products are still effective in the future.

OSU Extension has several useful references for fly control including chemical rotation guidance. County extension educators also have the resources to help you make the

right fly control choice. Take advantage of the slower pace this fall and winter and make fly and internal parasite control decisions now.

OSU Ranchers Thursday Lunchtime Series: Winter Management **Donald Stotts, Agricultural Communications Services**

STILLWATER, Okla. – [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.

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.

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.

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Extension Experience – Insights into Oklahoma Agriculture

The Northwest Area Extension Staff would like to announce the creation of our new podcast *Extension Experience*. The *Extension Experience* podcast is brought to you by Josh Bushong, Trent Milacek, and Dana Zook. Each week they 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.

