

Wheat Pasture

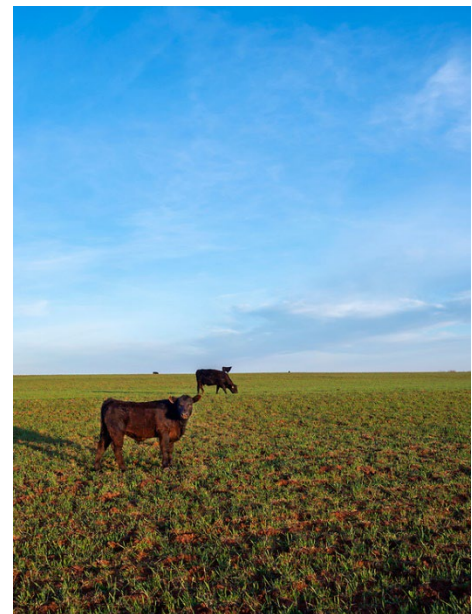
Josh Bushong, West Area Extension Crops Specialist

One of the concerns I have been talking to farmers about the past month has been seed wheat prospects this fall. These concerns have mostly been about availability, seed quality, and costs. Overall, there should still be plenty of options available but certain varieties could be harder to find. The first step is usually choosing a variety or varieties best suited for the farming operation.

The main characteristics when choosing a variety for wheat pasture are fall forage production, grazing recovery, disease tolerance, insect tolerance, acidic soil tolerance, drought tolerance, and high temperature germination sensitivity. Last fall planting date, or more accurately emergence date, had a significant impact on how much viral diseases impacted the wheat crop. Susceptible varieties that got established early had a higher risk.

The number one seeded wheat variety in Oklahoma last year was Doublestop CL+. Even though it's a Clearfield traited variety, many farmers choose it for the other agronomic traits and never planned to apply the herbicide Beyond. Gallagher was the top variety the previous six seasons mostly because it was another robust variety suitable for grazing. Choosing a variety can be a challenge as there are upwards of 100 different varieties to select from. Discussions with your Extension educator, agronomist, and seed dealer can help narrow down the list. A great resource is wheat.okstate.edu to find current research reports.

When growing wheat for forage one of the easiest ways to get more tonnage is to plant early. Research conducted from OSU has shown that more forage is produced the earlier we plant. Some trials show that sowing wheat the first week of September yielded about twice as much fall forage as a mid-late September planting date. When sowing wheat this early we can sacrifice some grain potential and some issues can occur.



When planting this early the potential for pests can increase. These pests include many viruses, root rots, foliar diseases, hessian flies, wheat curl mites, wireworms, army cutworms, and weeds. Some aid can be made through the use of seed treatments that include an insecticide and/or a fungicide. These seed treatments can reduce root/foot rots, bunt, smut, leaf rust, powdery mildew, hessian fly as well as reduce aphids that can transmit barely yellow dwarf virus. When selecting a seed treatment be cautious of grazing restrictions, which can range from 0-45 days depending on product used.

Mite-transmitted diseases (wheat streak mosaic, high plains disease, or Triticum mosaic) can greatly reduce spring forage production when an early fall infection occurs. The best management practice would be to prevent a “Green Bridge” prior to sowing the wheat. A minimum of two weeks of nothing green (including corn, sorghums, volunteer wheat and other grassy weeds) is needed to allow the wheat curl mite to starve out prior to wheat seeding. The wheat curl mite still might vector these viruses when invading from neighboring fields, but the viruses will cause less of an impact due to a later infection.

The next easiest way to increase fall forage would be to increase your seeding rates. Several field trials have shown that fall forage will increase with increasing seeding rates up to five bushels to the acre. Fall forage can be increased with higher seeding rates, but the economics start to become a little less favorable after a rate of two bushels to the acre due to seed costs. Increasing seeding rates as the planting season progresses can also assist in producing more forage, but increasing seeding rates hardly ever makes up for lost forage potential from seeding earlier.

Managing soil fertility starts with a soil sample. Acidic soils can limit forage production as much as anything else. The only solution to fix acidic soils is to apply lime, but variety selection and banding phosphorus fertilizer in-furrow can help offset the loss in forage production. Banding fertilizer with our grain drills is more efficient and economical because it is placed right with the seed and rates can be greatly reduced.

To find out more about variety selection and how to produce decent wheat pasture economically visit your local OSU Extension office.

Oklahoma Quality Beef Network – A Marketing Opportunity

Dr. Kelly Raper, Professor of Agricultural Economics

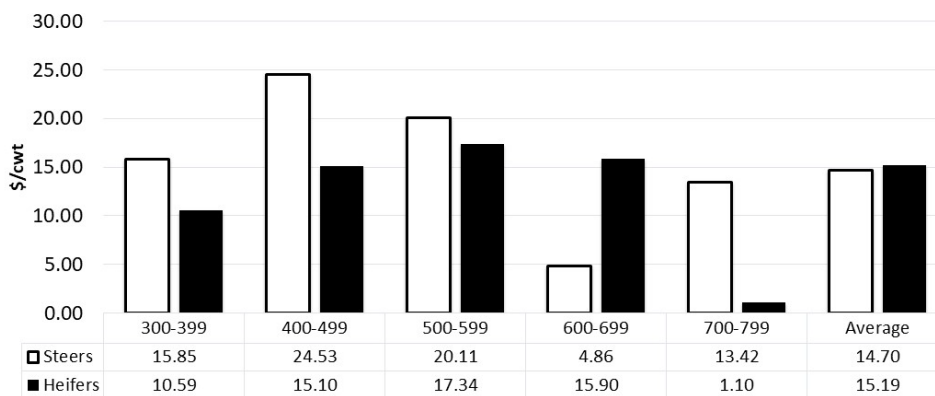
If you are looking for ways to market your management for higher revenues, consider marketing calves through the Oklahoma Quality Beef Network (OQBN). OQBN is a third-party certified VAC-45 preconditioning program offered through Oklahoma Cooperative Extension. Extension Specialists guide producers through the calf health management protocol to qualify for certification and eligibility to market through OQBN.

OQBN's 2021 fall marketing season included 10 fall sales across 7 Oklahoma livestock markets. Total enrollment included 2,674 head and 63 producers, with 1,633 head marketed through OQBN VAC-45 certified sales. Note that high heat and dry weather conditions in late summer and early fall led to fewer calves enrolled in the OQBN program in 2021 as many producers were without available resources to begin preconditioning programs.

Though OQBN numbers were smaller than usual, market premiums over nonpreconditioned calves averaged \$14.70 per hundredweight for steers and \$15.19 per hundredweight for heifers. Figure 1 illustrates average premiums per hundredweight as well as premiums by weight class for both steers and heifers. Premiums are calculated from data that included 11,027 head marketed in 1,352 total lots: 228 OQBN lots and 1,124 non-OQBN lots. Premiums appeared stronger at sales where more OQBN calves or other program calves were present, likely drawing in a larger audience of buyers to compete for preconditioned calves.

While there are no guarantees when it comes to markets and there are costs to preconditioning cattle, research on past OQBN data indicates that the probability of positive net returns for certified preconditioning is 80%. Those are pretty good odds. OQBN has no minimum requirement on number of head enrolled, so the program is accessible to all producers, large and small. More information about the OQBN protocol, past market premiums, upcoming marketing opportunities, program enrollment and Extension educator contact information can be found at <https://extension.okstate.edu/programs/oklahoma-quality-beef-network/>.

2021 OQBN Premiums by Weight Class and Gender*



*Relative to non-preconditioned calves at same sale.
Source: Kelly Curry Raper and Derrell S. Peel, OQBN data, 2021



Figure 1

Leasing Land for Wildlife and Recreation

Trent Milacek, West Area 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 make 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.

Effects of Weaning Method on Postweaning Performance by Early Weaned Beef Calves

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

Early weaning during periods of drought may be used by cow-calf producers to reduce grazing pressure on pastures by decreasing the nutrient requirements of cows. However, this practice may result in lower calf value at weaning compared with calves weaned at conventional ages. Retained ownership through a short-term backgrounding period may be used to improve the value of early-weaned calves. Beef producers who retain ownership of calves through finishing may be able to employ a low-cost preconditioning program involving grazing to minimize costs, while simultaneously experiencing similar finishing performance relative to a high-cost preconditioning program involving confinement feeding. Recent Kansas State University research evaluated the health and performance of early-weaned steers during a 56-day weaning period, a 56-day feedlot receiving period, and a 165-day feedlot finishing period.

In this study, 239 early weaned steers (128 days of age) were randomly assigned to 1 of 2 56-day weaning treatments: drylot weaning or pasture weaning. Pasture steers grazed mature, native tallgrass range (89.2% dry matter, 9.08% crude protein) without supplementation. Drylot steers were fed a diet (18.7% crude protein; 0.52 Mcal NEg/lb.) formulated to promote a 2.2 lb. average daily gain at a dry matter intake of 2.5% of body weight during the weaning phase of the experiment. Steers assigned to both treatments were monitored daily for symptoms of respiratory disease and infectious keratoconjunctivitis (i.e., corneal ulcers or obvious eye irritation).

Following the 56-day weaning period, all steers were weighed at their respective weaning sites, implanted with Revalor IS and transported via motor carrier for 4 hours to the Western Kansas Agricultural Research Center (Hays, KS) for a 56-day feedlot receiving period. At the beginning of the finishing period of the experiment, steers were implanted with Component TE-IS and adapted to a finishing diet over a period of 21 days.

After the 56-day weaning period, as would be expected due to the difference in overall diet nutrient composition, drylot steers were 126 lb. heavier than pasture steers (491 vs. 365 lb.). The incidence of undifferentiated fever tended to be greater in drylot steers than in pasture steers (6.7% and 0%, respectively). The incidence of infectious bovine keratoconjunctivitis (i.e., pinkeye) was greater for pasture steers (40.2%) than for drylot steers (0%). These researchers suggested that the "late-season pasture conditions of the study, having an abundance of mature forage, likely presented a greater risk for corneal lesions than drylot conditions which ultimately led to a greater incidence of infectious bovine keratoconjunctivitis".

Drylot steers maintained the weight advantage throughout the receiving period and were 144 lb. heavier at the end of this 56-day receiving period compared to pasture steers. Average daily gains during receiving were 3.06 vs. 2.78 lb./day, for drylot steers compared to pasture steers. However, pasture steers tended to have greater dry matter intake expressed as a percentage of body weight (2.51 vs. 2.47%) and improved gain efficiency (Gain:Feed; 0.214 vs. 0.189) during the receiving period than drylot steers. The incidence of undifferentiated fever was not different between treatments during receiving. However, the incidence of keratoconjunctivitis was again greater for pasture steers (14.3%) than for drylot steers (1.6%). These researchers speculated that there were “significant residual effects of the pasture environment on corneal health that lasted well into the receiving period”.

During the finishing period pasture steers gained weight at a greater rate (4.32 vs. 3.86 lb./day) and had more favorable gain efficiency (0.161 vs. 0.143) than drylot steers. However, harvest body weight was 64 lb. heavier for drylot steers. Days on feed did not differ between treatments. Hot carcass weight was about 40 lb. greater for drylot steers than pasture steers. Yield grade, marbling score, and 12th-rib fat thickness did not differ between treatments.

In conclusion, this research shows that growth and health during a 56-day weaning period and a 56-day receiving period were improved when steers were weaned in a drylot environment and fed a concentrate-based diet compared with non-supplemented steers weaned in a pasture. These authors noted that under the conditions of this study, steers preconditioned on mature, native, warm-season pasture for 56 days without supplementation were unable to compensate for previous nutrient restriction during finishing. They concluded, that “in light of the incidence of keratoconjunctivitis and significantly reduced performance during the weaning period, weaning beef steers in dormant forage pastures during the fall is not a viable option to maximize performance”.



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.



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