

Spring 2025

AGRICULTURE NEWS

THE BEGINNING FARMER & RANCHER WEBINAR SERIES



Who and what: Anyone who is interested in starting a farm or ranch operation of any size is encouraged to attend the weekly Zoom meeting. Campbell will host the series through his experience as a county Extension educator of nine years and now in his role as state specialist for almost a year.

When and where: Wednesdays, March 5 through May 14, noon- 1 p.m. via Zoom.

Why: New farmers and ranchers need support and resources as they build their operations. These sessions are designed to create a relationship between the next generation of producers and OSU Extension.

For more information or to register for the free series,

contact Josh Campbell at 405-744-1721 or joshua.campbell@okstate.edu.

FARM FORWARD SERIES: FARM TRANSITION PLANNING

Dr. Shannon Ferrell - Oklahoma State University Extension

American agriculture is set for an unprecedented shift in the next twenty years, with a huge portion of our farm assets transitioning through one, if not two, generations in that time. Is your farm ready for that transition?

This seminar will cover the challenges of farm transitions, the six estate planning tools everyone needs, and strategies for passing on an agribusiness with the opportunity to keep both the farm and family together.

When: April 21, 2025, 7:30 - 9:00 am
Where: Fairview Community Center
RSVP by calling or texting 580-227-0754
Breakfast sponsored by Red Hill Watusi Ranch



IN THIS ISSUE

Beginning Farmer & Rancher Series 1
Farm Forward Series1
Corn Outlook & Total Cost Return Budget 2
Mixed Specie Grazing 3
Garden Corner4
Pruning Roses 5
New Distillers Cubes for Summer Supplementation 6
Spring Pasture Management. 7
Stay Connected 7

CORN OUTLOOK AND LOCAL COST RETURN BUDGET

Alberto Amador, Area Ag Economics Specialist

Global corn production remains solid. In the 2023/24 marketing year, production was 5% higher than the previous year, reaching 48.34 billion bushels. However, forecasts for the 2024/25 project a decline to 47.71 billion bushels, with no changes from the estimate last month. Foreign production is expected to decrease compared to the previous year, principally lower expectations in South America, particularly Argentina and Brazil, where unfavorable weather conditions and unusual precipitation have delayed corn planting. Additionally, yield expectations have declined in Mexico due to lower winter corn yield and in South Africa due to a reduced planting area. Despite these factors, the foreign production forecast for March was raised compared to the previous month, driven by an increased production expectation from India, Russia, and Ukraine.

Regarding demand, the forecast does not indicate a significant change in global consumption. However, global corn trade projections for 2024/25 show notable adjustments. Corn exports are expected to decline 3% compared to last year and 2% compared to last month, reaching 7.34 billion bushels in March 2025. The primary reason for this reduction is lower exports from Brazil and South Africa.

Although the updated report suggested Argentina could compensate this decline, a severe rain disaster impacted a key port just a day before the report was published. On the other hand, global corn imports are projected to be 9% lower than the previous year. While Turkey, Vietnam, Colombia, and Egypt have increased their import expectations, China and Taiwan have significantly reduced theirs. The largest impact comes from China, where imports have dropped from 905.5 million bushels to 393.7 million bushels. As a result of these shifts in global trade, Ending Stocks for 2024/25 are projected to be 8% lower than the previous year, totaling 11.37 billion bushels.

The U.S. has a strong corn supply, with a record-high yield of 179 bushels per harvested acre in 2024/25. Total production is expected to reach 14,867 million bushels, which, while lower than the previous year, is still higher than pre-COVID levels. Whereas the global trade faces uncertainties due to tariff implementations and geopolitical factors, U.S. corn exports are expected to increase by over 150 million bushels, reaching 2,450 million bushels. So far, trade relations with the largest buyers, Mexico and Japan, remain stable. Domestic consumption remains stable with 46% allocated to feed and residuals, 11% to food, seed, and industrial use (such as starch and alcohol), and 43% to Ethanol production.

In recent years, prices have fluctuated, rising from 2020 to 2023. However, during the last quarter of 2024, corn prices fell compared to previous years. While current prices remain above pre-COVID levels, they are trending downward. Given global trade expectations, prices are likely to experience a slight decline, potentially diminishing profit margins if input costs remain stable or increase marginally.

Break-Even point analysis and What-If tools are valuable for managing volatility. According to USDA, the market year average price for corn in 2025 is projected to be \$4.35, which is \$0.11 higher than the established reference price for corn. Therefore, it's crucial to stay updated on future price predictions and explore different scenarios, especially with the safety net programs' enrollment deadline approaching.

With the intention to provide a baseline for the break-even point, I calculated the cost per acre for corn with local input prices. Also, I explored multiple scenarios with different yields and prices. The price used in this analysis is based on the MYA price 2025, as estimated by USDA. The following tables present the returns over direct and total costs and the break-even price for each yield. I would like to emphasize that some input prices are subject to change, and fixed costs vary from farm to farm. However, this analysis provides a solid starting point for understanding the economic landscape.

Break-Even at bu./acre	70	80	90	100
Above Variable Costs	\$4.16	\$3.69	\$3.32	\$3.06
Above Total Costs	\$5.76	\$5.09	\$4.56	\$4.18

Returns above variable costs

		Prices \$/bu.			
		\$4.26	\$4.35	\$4.46	
	70	\$7	\$13	\$21	
Yields	80	\$46	\$53	\$62	
bu/acre	90	\$85	\$93	\$103	
	100	\$120	\$129	\$140	

ı	Returns above total costs						
		Prices \$/bu.					
		_	\$4.26	\$4.35	\$4.46		
		70	-\$105	-\$99	-\$91		
,	Yields	80	-\$66	-\$59	-\$50		
b	u/acre	90	-\$27	-\$19	-\$9		
		100	\$8	\$17	\$28		

MIXED SPECIE GRAZING

Kayla Hintze, Courtney Bir, Derrell Peel

Mixed-species grazing can include a variety of animal species combinations, such as sheep, goats, and even deer. Goats and cattle are the most often chosen combination because of the great spread of dietary differences. In short, goats and cattle eat different things, which allows for greater stocker rates and more woody plant control. The use of mixed-species grazing combined with patch burning may be even more effective than other control methods because browsers such as goats prefer to consume woody plants such as red cedar, whereas cattle prefer to consume grasses. Goats may increase profits because they can be sold for additional revenue and, depending on the level of woody species encroachment, will be able to improve rangeland productivity and potentially increase the stocking rate of cattle.

Because goats and cattle have different intake preferences, goats can usually be grazed alongside cattle without having to decrease cattle stocking rate. In general, goats consume more woody plants than cattle and can increase rangeland carrying capacity in woody areas by 70% due to the difference in forage preferences3. In general, two goats can be added per head of cattle without decreasing cattle stocking rate4. Therefore, in an operation with 20 cows, 40 goats can be added while maintaining the same number of cattle.

There are additional costs related to the use of mixed-species grazing. Initially, a herd of goats will need to be purchased, including a sufficient number of does and one buck for every 25 to 35 does. In general, the rule of thumb is one buck for every 35 does. The original purchase of goats will be a significant up-front cost, but if doe kids are retained as replacements, this will be a one-time cost.

The mixed-species grazing operation will be most effective if patch burning is utilized as well. There will be additional costs related to the use of patch burning, but if a producer is already performing prescribed fires, this cost may not change.

A large cost related to introducing a goat operation is the cost of building a new fence that can hold goats. The fence cost used in this study was about \$3 per foot for a 4-by-4-foot woven wire fence. The total cost to fence the 180-acre pasture in this study was around \$33,000. A 4-by-4-foot woven wire fence is a very effective fence for containing goats, but other fences, such as electric wire, can be used and may also be effective. Fence cost on a per-acre basis decreases with increased pasture size. Depending on the current state of the cattle fence, fencing may only need to be improved, or a new fence may need to be built. The cost of fencing may vary greatly based on your current farm setup.

The goats will also require medical care, feed, and labor, especially during kidding. Medical care needed can vary greatly between goat herds, but the cost for vaccinations will be around \$2 per head per year. It was assumed that each breeding goat would require three hours of human labor each year at \$10 per hour5.

A livestock guardian dog should be purchased to mitigate the losses due to predation of both kids and adult goats. The livestock guardian dog will have some monthly maintenance costs, such as dog food and medical care. The current cost to purchase a livestock guardian dog is \$1,000, and annual maintenance costs are about \$500. Budgets for meat goat

and stocker goat production are available on the OSU budget page.



Mixed-species grazing operations allow for increased profits due to the additional revenue from the goat operation, as well as improved rangeland. When using a breeding goat operation, kids born each year can be sold to increase the profits of the overall operation. Goats have a kidding rate ranging from 150% to 180%, therefore, a significant number of kids can be sold each year, and kids can be retained as replacements or to grow the goat herd.

ESTABLISHING A NEW VEGETABLE GARDEN

David Hillock Senior Extension Specialist OSU

GARDEN CORNER

In the past few years, there has been a surge in gardening activity and a desire to be outdoors. And why not? Gardening and being out in nature can be so rewarding and have proven to be therapeutic. If you are considering gardening for the first time or just want to get better at it, here is some information that will help get you started.

Site Selection

The following is a list of considerations when selecting a site for the vegetable garden:

- Sun exposure: Select a site that receives at least 6 hours of direct sunlight each day. Southern exposures are ideal for greatest sun incidence.
- Soil: Well-drained soils such as sandy loam provide ideal conditions for growing vegetables. Soil pH near 6.6 to 6.8 is optimal. Avoid steep slopes where erosion will be a problem.
- Air flow: Avoid low-lying areas, as these tend to collect cold air, which slows germination and plant development in spring.
- Avoid placing a vegetable garden near walnut trees. Walnuts exude a substance called juglone from their roots, which is allelopathic, meaning it can kill other plants. Tomatoes and other solanaceous plants are highly sensitive to juglone.
- Make sure the site is situated near a water supply.

Removing Vegetation

It is important to start with a clean slate when preparing a new garden bed. This means removing existing vegetation and controlling weeds. Usually, this is a chore for the summer before planting. There are several methods available to kill off vegetation. The most common method is to apply an herbicide, but there are other nonchemical methods such as solarization and smothering.

Solarization is a simple technique that captures radiant heat energy from the sun and uses that heat to kill seedlings and weed seeds, as well as some soil-borne disease organisms. Sheets of plastic are used to trap solar heat. Solarization is commonly used to kill weed seeds in areas where the vegetative layer has been removed.

To smother weeds, cover the soil with black plastic or several layers of newspaper. Carpet or boards have also been used for smothering.

Solarization can be combined with other control methods. For example, an herbicide may be used to make the initial kill, then solarize to control subsequent seedlings and kill seeds in the soil. Solarization can also be combined with the application of soil amendments and fertilizers. Solarization can speed up the decomposition of organic matter, releasing soluble nutrients into the soil.

Whatever method is used, it is ideal to control perennial weeds before establishing a new garden. It will be much easier to manage them before you have the area planted with vegetables.

Soil preparation

Once the vegetation is removed, till the soil to loosen it. This is a good time to add manure or other organic material. To preserve soil structure, avoid tilling when the soil is

too wet. To determine if the soil is too moist for tilling, grab a handful of soil and squeeze it slightly. If it sticks together in a ball, it is too wet. If it crumbles easily, it is ready.

Don't forget that even if you don't have a large space for an in-ground garden, container gardening can also be done successfully. For information about growing in containers, see our fact sheet HLA-6458 – Container Gardening.









Did you know... From a botanical standpoint, avocados and pumpkins are fruits, not vegetables, because they bear the plants' seeds. Rhubarb, on the other hand, is a vegetable.



PRUNING ROSES

Casey Hentges, Associate Extension Specialist & Bailey Singleton, Extension Asisstant

A common question that we often get is, "When do I need to prune my roses?" Unfortunately, it can be somewhat of a complicated answer and largely depends on the type of rose.

Hybrid Tea roses are some of the most popular roses. These are the roses that are most noted for having a large flower on each stem and are often grown for cut flowers. Hybrid teas are often considered to be higher



maintenance and require more severe pruning, mainly because winter can cause some of the canes to die back. Roses in northern Oklahoma will benefit from a heavy mulch layer of 8-10" around the plant during the winter. If they were mulched heavily this past winter, it is time to pull back that mulch as the temperatures begin to warm up.

Another popular type of rose is the shrub rose. These exploded in popularity with the low maintenance knock-out rose that was introduced into the market in 2000. These floribunda-type roses produce a vigorous shrub with prolific bloom clusters. Because they are often hardier than hybrid teas, we don't see as much winter damage on the canes.

Grandifloras, which are crosses between floribunda and hybrid tea roses, are also vigorous and hardier than hybrid teas but have even shorter stems than floribundas. Queen Elizabeth is a popular grandiflora. Going down in scale next are polyanthas and dwarf roses.

Regardless of type, for roses that bloom through the season, March is the best time to prune them. This is because new growth is beginning to emerge and is easy to see. Waiting until some of the vegetation begins to emerge can help identify if there are any dead canes that need to be removed first.

Hybrid tea roses can be pruned back to anywhere from 6-24 inches. We always want to promote an open canopy due to their susceptibility to fungal diseases. Having an open center will promote better air circulation and reduce moisture on the leaves.

The grandifloras, floribundas, polyanthas, and other shrub-like roses don't require as severe pruning. The most important consideration is to remove any dead or diseased canes to help maintain the overall shape and health of the plant. There is one disease that has drastically impacted the rose, and that is Rose Rosette. Because this plant virus is transmitted by sap, we want to make sure we are being cautious with our pruners and sanitize them between each shrub. To learn more about rose rosette and the symptoms, visit fact sheet EPP-7329 – Rose Rosette Disease.

For ramblers and other climbers that bloom mainly in the spring, wait until after they bloom to prune. Then, cut back the side shoots with spent flowers and any older canes, leaving enough new canes to cover the desired area.

The other thing to keep in mind is if the rose was planted in the last year, it is best to do minimal pruning to allow it to establish itself. Also, because we can still get freezing conditions, and we don't want to promote growth just yet, it is best to wait until April to apply fertilizer. For more information about rose maintenance, check out fact sheet HLA-6403 – Roses in Oklahoma.



GARDEN TIPS FOR APRIL

- Already preparing for this summer's garden? Maximize your harvest and save money on soil amendments by getting your soil tested with OSU Extension!
- Each year, more than 60,000 samples are submitted to the <u>Oklahoma State University</u> Soil, Water, and Forage Analytical Laboratory for analyses by thousands of farmers, ranchers, and gardeners.
- Once your soil has been tested, you will receive personalized soil guidance that comes from years of Oklahoma-based research.

NEW DISTILLER'S EXTRUDED CUBE FOR SUMMER SUPPLEMENTATION

Dana Zook, NW OK Area Livestock Specialist

It might seem a little early to be thinking about summer, but as the green grass makes its way out of our dormant range, it's a good time to consider summer feeding strategies. In the past several years, Oklahoma State University has been working on research evaluating a new form of a dried distiller's grains supplement. This supplement isn't new to Oklahoma Livestock producers. Dried distiller's grains are a byproduct of the ethanol industry, and this product has been available in Oklahoma for many years. This new form includes 100% Dried Distiller's Grains and has been "cubed" using a new extrusion process. Researchers from OSU have been working primarily with Masterhand Milling to supply this product to complement all different types of forages. Historically, DDG's (Dried Distiller's Grains) were available as cubes and pellets, but many of them had very poor quality, ending up being more of a "crumble". Due to its fine texture, this form was not ideal for feeding on the ground as 10-25% was often lost. Some producers utilized bunks for feeding this product, but this is not conducive to rotating feeding areas. Areas where bunks were used were often sacrificed, and the range was highly damaged due to trampling, mud, and overuse. This new extruded distiller's cube has a good structure, allowing it to be fed on the ground in all range conditions. The benefits of this feed product extend beyond the structure. Due to the heat extrusion process, there is a slight increase in measurable crude protein, energy, and fat. This was confirmed by a small research project that took DDG samples before and after the extrusion process. The final feed quality of the DDG Extruded cube in the study was 34% crude protein and 92% TDN.

In addition to nutritive quality, Oklahoma State researchers evaluated this feed product when fed in several different range conditions across the state. One such study looked at early and late summer supplementation to cattle at the Klemme Range Research Station in Bessie, OK and the ARS Station near Ft. Supply. At Klemme, cattle (~583 lbs.) were stocked at 7 acres per head and supplemented at 3 different levels: an unsupplemented control group, 2 pounds of DDG cubes daily, or 4 pounds of DDG cubes daily. In Ft. Supply, cattle (~651 lbs.) were stocked at 5 acres/head and also supplemented at these levels but also 6 lbs. of DDG cubes daily.

Cattle performed well across the board. At Klemme in early summer, calves supplemented at 2 and 4 pounds per day performed nearly equal at 2.22 and 2.24 pounds ADG. This gain was approximately 0.45 greater than the daily gain of calves receiving no supplement. In late summer, calves fed 2 pounds/day gained an average of 1.64 pounds/day, and calves fed 4 pounds DDG supplement per day maintained at 2.21 pounds ADG.

At Ft. Supply in early summer, cattle receiving no supplement gained 1.87 pounds daily. The groups being supplemented with 2, 4, and 6 pounds DDG cubes gained 2.91, 3.29, and 3.65 pounds, respectively. In late summer, gains were tempered, supplemented calves gaining no different than un-supplemented animals who gained 2.34 pounds per day.

In the past, the Oklahoma Gold and Super Gold Programs were the gold standard in supplying high and moderate protein supplements to cattle to maintain gains when grass quality decreases in the late summer. This study found that both early and late summer gains were complemented by the 34% protein DDG cube. The partnership of highly digestible protein and energy in the feed product offers an almost perfect package for supplementing on range. The late summer Ft. Supply data is puzzling, but more information is coming down the pike about these studies, so stay tuned! If you would like to hear more about this new supplement, tune into the recent episodes of the Extension Experience Podcast, where I interview Dr. Paul Beck about his findings. Listen on your computer at https://spotlight.okstate.edu/experience/ or subscribe to the show on Apple Podcasts and Spotify. Have a great April, and talk to you soon!



OKLAHOMA COOPERATIVE EXTENSION SERVICE DIVISION OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES - OKLAHOMA STATE UNIVERSITY

SPRING PASTURE MANAGEMENT

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

Much of Oklahoma finished the summer and fall of 2024 with drought-stressed pastures. As we approach the season when soil temperature and photoperiod are priming warm-season grasses to grow, it is important to assess damage to drought-stressed pastures and manage them accordingly. Following drought, stand damage is readily apparent, even on well-managed pastures.

Keep the following in mind this spring to aid in the recovery of drought-stressed, warm-season grass pastures:

- Damaged stands of grass CAN recover with weed control, proper fertility, and deferred grazing.
- The best post-drought management approach is to reduce competition and focus on moisture conservation and use. Aggressive weed control measures reduce competition for moisture and soil nutrients, allowing desirable plants the best opportunity for successful growth and re-establishment. Herbicides are best applied early!
- Fertilization will be most important for improved grasses (such as Bermuda grass or Old World bluestem) in tandem with weed control.
- Permit the desirable grasses to stay ahead of grazing pressure. Manage as if it is a new stand of grass to give time for root systems to grow and re-establish.
- It may be necessary to sacrifice specific grazing paddocks or pastures to let the majority of pastures recover by delaying grazing pressure.
- Make a plan now for warm-season grass pastures and hay meadows with the health of desirable plant species in mind.
- Considering the potential for a continued lack of moisture, make sure fertility, weed control, and grazing pressure permit your desired plant species to capitalize on the moisture when it comes.

Reference: Pasture Recovery Following Drought. Oklahoma Cooperative Extension Fact Sheet PSS-2592

STAY CONNECTED:

Facebook: Major County OSU Extension, Oklahoma State University Natural Resources Extension

Spotify & Apple Podcasts:

Blazin' Grazin' and other Wild Things Podcast (www.BlazinGrazinWildThings.com)

Extension Experience- Insights into Oklahoma Agriculture.

Wheat Text Group: Stay informed, get quick answers for wheat issues. Text "Wheat" to (855-452-0489)

Online Courses Available: Learn. Extension. OkState.edu

OKLAHOMA COOPERATIVE EXTENSION SERVICE DIVISION OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES - OKLAHOMA STATE UNIVERSITY

Oklahoma State University, as an equal opportunity employer, complies with all applicable federal and state laws regarding non-discrimination. Oklahoma State University is committed to a policy of equal opportunity for all individuals and does not discriminate based on race, religion, age, sex, color, national origin, marital status, disability or veteran status with regard to employment, educational programs and activities, and/or admissions.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President for Agricultural Programs and has been prepared and distributed at a cost of .05 cents per copy.

Shelby Robertson

Agriculture / 4-H Youth Development Extension Educator Shelby.Robertson13@OkState.Edu



MAJOR COUNTY OSU EXTENSION

500 E. Broadway, Courthouse Suite 3 Fairview, OK 73737 Phone: 580-227-3786