



Ag Insights

From the Desks of Your Northwest Area Ag Specialists

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

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Economics of Double-Crop Sesame

Trent T. Milacek, NW Area Ag Econ Specialist

Producers looking for a drought tolerant crop to plant behind wheat or grazeout may consider sesame. Sesame can perform well on difficult acres not suitable for soybeans. It is particularly useful where a broadleaf crop will fit into the rotation to help alleviate grassy weed pressure. Acres are contracted through Sesaco, so producers should plan to contact their local Sesaco representative before planting. In northern Oklahoma producers can call Jared Johnson at (405) 531-7840 and southern Oklahoma producers can contact Joe Guzman at (806) 781-5908.

Sesame contracts at a flat rate for any production a producer delivers. Currently, double-crop acres will receive \$0.33/lb. There is not a minimum production requirement, which is useful to producers who are learning the crop and those that have variable yields on dryland.

Yields will vary with moisture and soil quality, but with normal rainfall and adequate fertility producers could plan for 550 lbs./acre. At \$0.33/lb. that gives a gross revenue of \$181.50/acre.

Costs can be difficult to predict given varying degrees of weed pressure and burndown chemistries, so producers will need to adjust the following numbers to fit their farm. Examples provided give a starting point when determining if the crop can work for an operation.

Seed is \$350 per 50lb. bag and producers starting out will likely plant at least 3 pounds per acre to ensure good emergence. This brings seed cost to \$21/acre. Adding \$15/acre for planting results in planting costs of \$36/acre.

For a 550lb. yield goal producers will need to provide 50lbs. of nitrogen per acre. Assuming there is not residual in the soil, nitrogen at \$0.35/lb. will cost \$17.50/acre. The sesame crop will require 20lbs. of phosphorus and at \$0.60/lb. of P adds \$12.00/acre. Few fields will require potassium, but the crop will need 30 units of K/acre. If these nutrients are custom applied, factor in another \$5/acre. This brings total fertility costs to \$34.50/acre.

Weed control is essential to produce a crop since sesame has difficulty competing early in its growth. Burndown, pre-emerge and in-season products will cost \$50/acre per Sesaco agronomist recommendations. Consult with your area agronomist in order to determine what products your farm will require.

Budget in \$25/acre to harvest if you do not have your own equipment.

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Totaling the above costs brings production expenses to \$145.50/acre. Remember to factor in land, machinery and labor costs when developing your own budgets. At \$181.50/acre gross revenue, net income after variable costs is \$36/acre. If no other costs are included, producers can cover the above costs with a yield of 441 lbs./acre to breakeven.

If you would like more information on budgeting or growing sesame, please contact your local county extension educator. Enterprise budgeting software is available to producers so that individual costs and production goals can be used. This will assist producers in adopting new enterprises on their operations.

Wildfire Recovery Assistance is Only a Phone Call or Website Away

**By Donald Stotts, DASNR News and Media Relations
Agricultural Communications Services**

WOODWARD, Oklahoma – The wildfires that raged across western Oklahoma in April may have passed, but questions continue to come into the Oklahoma Cooperative Extension Service about who to call for specific assistance services.

Oklahoma State University Cooperative Extension has been working closely with the State Office of Emergency Management and is the organization to contact for agricultural-related relief efforts. To request assistance or make a donation, call 405-590-0106.

Dana Bay, Woodward County Extension agricultural educator, said OSU Cooperative Extension is still getting calls for items such as hay, supplemental livestock feed and fencing supplies to restore boundaries and protect wandering animals.

“If you need these types of items, or wish to donate them or your time, energy and effort in helping producers to rebuild their operations, please do not hesitate to call us,” she said.

Monetary donations for agricultural enterprises are being handled by the Oklahoma Cattlemen’s Association Foundation. Information on how to make a donation is available online by visiting <http://www.okcattlemen.org>.

“Fully 100 percent of all received donations are going to impacted families,” said Michael Kelsey, OCA executive vice president. “It is our hope these funds will help families get back on their feet and keep their agricultural operations in business.”

In the wake of the April wildfires, the Oklahoma Farm Credit Associations – Farm Credit of Western Oklahoma, Oklahoma AgCredit, Farm Credit of Enid and AgPreference, along with Farm Credit of New Mexico, High Plains Farm Credit and American AgCredit from Kansas – established a \$200,000 relief fund to support those affected by the fires. Cobank matched those funds, contributing an additional \$200,000. Additional donations were made by the Woodward Elks Rodeo Association and private parties.

“As of May 9, \$368,000 has been disbursed to those affected,” said Kristin Zollinger, a 2003 OSU agricultural communications graduate and member of Farm Credit of Western Oklahoma’s Woodward office.

In addition to the fund for donations, Farm Credit of Western Oklahoma has rolled out a loan program specifically for wildfire victims. The program is offering zero-percent interest loans for six months to those operators who have been negatively affected by the fires and are in need of immediate operating funds. Additional information on this special loan program may be found by contacting local Farm Credit of Western Oklahoma branches, going to the online website at <http://www.farmcreditloans.com> or by calling the organization at 580-256-3465.

The Oklahoma Farming and Ranching Foundation, a 501(c)(3) non-profit organization, has created a matching program to partner with Oklahoma’s 4-H clubs and FFA chapters to raise funds for rural volunteer fire departments located in areas affected by the

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wildfires. The foundation has been matching donations up to \$1,000 from each 4-H club and FFA chapter. More information on the program is available at <http://okfarmingandranchingfoundation.org> online.

John Foster, director of claims for American Farmers and Ranchers, said the most expedient way for clients to make a claim is by either going to and following the directions on the AFR website at www.americanfarmersandranchers.com or by contacting their local agent.

Oklahoma Farm Bureau provides an easy-to-use website to assist those making claims. The online address is <https://okfbinsurance.com/claims-center>. As with other insurance providers, assistance also is readily available by contacting a local agent.

“There have been so many generous and talented individuals and entities stepping forward to assist agricultural families,” Kelsey said. “The OSU Cooperative Extension offices have been and continue to be critical in organizing much-needed resources such as hay and veterinary supplies. Oklahoma’s Extension educators have gone well above and beyond.”

Kelsey and Bay both point out that while American agriculture is a huge economic engine, agriculture itself is a small world that operates on a good neighbor policy when Mother Nature devastates an area.

“When it comes to Oklahoma and American agriculture, neighbors are not simply those living nearby but pretty much everyone involved in farming and ranching,” Bay said. “The generosity of people reaching out to help their fellow agricultural producers is always overwhelming.”

The Oklahoma Cooperative Extension Service is one of two state agencies administered by OSU’s Division of Agricultural Sciences and Natural Resources, and is a key part of the university’s state and federally mandated teaching, research and Extension land-grant mission

Should Nursing Calves be Implanted? Does it Pay?

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

Research over the last 50 years has clearly demonstrated the efficacy and cost effectiveness of growth-promoting implants in beef cattle. A 1997 review of research trials that evaluated the effectiveness of implanting nursing beef calves showed that implanting steer calves with zeranol (Ralgro, 23 trials reviewed) or estradiol-progesterone implants (13 trials reviewed) increased average daily gains by approximately 0.1 lb/day from the time of implant insertion to weaning. In this review, the gain response in heifers was slightly greater (0.12 to 0.14 lb/day). Hence, implanting suckling calves typically increases weaning weights by approximately 15 to 25 pounds. However, a 2007-08 USDA survey of U.S. beef cow operations (2,872 cow/calf operations from 24 states) found that only 9.8% of operations implanted some of their beef calves prior to weaning. Similar results were observed in Oklahoma studies (2007 and 2008) that surveyed 729 producers who received the Oklahoma Beef Cattle Manual. In these surveys, 37% of cow-calf producers with larger operations (more than 100 cows) indicated they implanted their steer calves, while only 9% of cow-calf producers with smaller operations (fewer than 100 cows) implanted their steer calves. In a more recent study, using data from more than 5 million beef calves sold through Superior Livestock Video Auctions from 1995 through 2009, the percentages of lots of beef calves that were implanted decreased from 64.3% in 1995 to 26.5% in 2009.

Most of the studies evaluating the impact of implants on nursing calves were completed over 30 years ago. Yet, beef cattle genetics have changed dramatically during this time period. This is illustrated by the fact that the mature body weight of beef cows has increased by 200 to 250 lb over the last 25 years and that calves have greater potential for growth. Thus, recent Oklahoma State University research revisited the issue of implanting suckling calves to determine if the response to growth implants has changed

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over time. The objectives of this experiment were to determine (1) the effect of a Ralgro implant (Merck Animal Health) administered at 30 to 90 days of age on suckling-phase growth rate and weaning weight and (2) the effect of reimplanting with a Revalor-G implant (Merck Animal Health) at weaning on post-weaning performance. In this experiment, a total of 194 suckling steer calves weighing 245 lb at branding (approximately 30 to 90 days of age) from 3 locations were used. At each location, steer calves were randomly assigned to two experimental treatments: implanted with Ralgro at branding and Revalor-G at weaning or not implanted. At one of the locations after weaning, the steers (40 head) were preconditioned for a 44 day period and then grazed winter wheat forage for 98 days. Steers from the other two locations were combined and preconditioned for 49 days and then sold.

In this study, average daily gain (ADG) was 5.7% greater for Ralgro implanted than non-implanted calves during the suckling period (2.47 vs. 2.34 lb/day). The increase in ADG of 0.13 lb/day is similar to the 23-study average (0.10 lb/day) reported in the 1997 review. As a result, implanting resulted in a 17 lb increase in actual weaning weight compared to non-implanted steers (564 vs. 547 lb).

At one of the locations, ADG was not different between the 2 treatments during the preconditioning phase. However, in a wheat stocker phase at this location, implanting increased ADG by 17.5% over non-implanted steers (3.55 vs. 3.02 lb/day) which accounted for nearly 49 lb of additional weight gain over the wheat-grazing stocker period. Final pay weight was increased by 68 lb by implanting. In the preconditioning period for the other two locations, implanting increased ADG by 35.7% (0.84 vs. 0.62 lb/day).

This data illustrates that pre-weaning and post weaning gain improves when beef steer calves are implanted at branding time and again at weaning. Ralgro growth-promoting implants remain an effective and economical method to increase performance of suckling steer calves, and the response is similar to research results previously reviewed (1997). Even though, the use of implant technology has declined in cow-calf operations, growth-promoting **implants appear to be as efficacious as they were over 30 years ago**. The cost of an implant is about \$1 to \$1.50 per head. Yet, weaning weight is typically increased by 15 to 25 pounds.

A few points to consider for implanting nursing calves include:

- Several different implants are available. Read the label instruction to determine the appropriate implant to use.
- Implants are not approved for calves less than 30-45 days old. Read the label for the specific implant.
- Do not implant bull calves. Some producers leave bull calves intact until weaning thinking that that natural hormones produced in the testicles increase gains and weaning weight of the calves. However, numerous research trials have shown that implanted steer calves gain at a rate equal to, or greater than, bull calves. Castrating bulls at younger ages (near birth), as opposed to when they are older, reduces overall stress on the calf. The stress and hormonal effects of castration at weaning can reduce post-weaning gain potential and the calf's ability to withstand diseases typically associated with weaning and marketing. Studies suggest that there is no lifetime performance advantage to waiting to castrate calves until weaning, but there is a high probability of receiving lower prices when marketing intact calves through conventional channels (about \$5 to \$10 per cwt lower prices).
- Most studies have demonstrated that implanting had no negative effect on future reproductive performance of heifer calves when a single implant was administered according to label instructions at 2 to 3 months of age. However, re-implanting replacement heifers increases the risk of reduced pregnancy rate.

Harvest, Summer Crops, and Fall Planning

Josh Bushong, NW Area Extension Agronomy Specialist

Harvest has begun in north central Oklahoma. While harvested acres are estimated to be extremely low this season, quality so far shows to be fair to decent. The harsh drought this winter and early spring has led to many wheat fields being terminated. A shortage of hay and a less than desired yield potential leveraged many producers to roll up their wheat fields. In an effort to either grow more forage or to grow another crop, some producers have been very active this spring in seeding or planting other crops.

Forage sorghums, brown midrib forage sorghum, sorghum-sudan, millet, crabgrass, and teff have been some of the warm season forage crops seeded throughout the region. Soybean, cotton, grain sorghum, corn, and sesame have been also been planted on significantly more acreage this year with high hopes for good returns.

Oklahoma crop producers always need to think about the future plans of their farming operations and to make current decisions that will affect what they can do down the road. Variety selection, crop rotations, cropping systems, herbicide plantback restrictions, soil fertility, and tillage systems all need to be part of the decision process.

Researchers at Oklahoma State University have been staying busy along with the producers in getting the current crops out of the field. Some of the most popular research reports will be the results from the variety trials. The wheat variety trial reports can be found at wheat.okstate.edu and the canola variety trial reports can be found at osucrops.com. Most producers will find the variety trial results very beneficial when they determine what varieties to plant this fall.

Variety selection can be a very daunting task as there are many available on the market. To choose a variety that best fits your operation first you will need to determine how you plan to manage the crop. For wheat, a producer will first need to decide if it's going to be grain only, graze and grain, or grazed out since some varieties recover better than others when grazed. Keep in mind if your operation has increased acreage towards a summer crop that early wheat pasture might not be available. Do not plan on a failed summer crop if your operation is focused on needing wheat pasture.

Knowing which varieties have better resistance to plant diseases is critical if a producer knows they won't spray a fungicide in late spring. If feral rye, jointed goatgrass, or herbicide resistant ryegrass or cheat are an issue look into either crop rotation or utilizing a Clearfield wheat variety.

When selecting a variety based on performance try to review data from more than one year. Often some varieties perform better under unique environmental conditions and performance over time should be noted. Since every year brings its own challenges, planting different varieties on multiple farms with different maturities is often the best management practice.

Producers that plan on harvesting their own seed wheat to plant this fall need to plan accordingly. I've noticed many fields in the region have thin stands. This has led to some fields becoming overtaken with summer weeds since sunlight was able to reach the soil surface. Even though a herbicide is labeled as a harvest aid in wheat caution needs to be used when applying some herbicides. Be sure to read the herbicide label to see if it might adversely affect germination of the seed wheat.

Planning for this fall starts now with harvesting the current winter crop and managing these summer crops. Since seed wheat will likely be less available this year, promptly selecting and ordering the particular variety you want will be very beneficial.

Knowing the producers future objectives is also highly valuable in determining herbicide programs. Usually herbicides are selected based on what needs to be controlled, but plantback restrictions are often over looked or underestimated when selecting an herbicide at the time of its use. Many crops (canola, cotton, alfalfa, etc.) can't be planted for several months depending on the herbicide mode of action, soil pH, soil texture, and rainfall amounts.

As with any farming operation, it is good to make objectives and plans for the future all while being flexible to change at the same time. Knowing what crop rotations and management systems are best suited for your operation is the first step at learning how to incorporate new and possibly better options to become more economically productive. Contact your local county educator to find out what options are available.



Small Flock Poultry Production Alive and Well

Dana Zook, Enid Area Livestock Specialist, Oklahoma Cooperative Extension

Small flocks of chickens have been present in rural America for decades. In fact, during World War I, the U.S. Department of Agriculture encouraged families to manage small flocks in an effort to reduce domestic food costs. This trend waned in the 1980's, but recently, interest in backyard poultry has increased substantially. According to a USDA survey conducted 2010 through 2012 of urban chicken ownership in four U.S cities, 4.3 percent of single-families living on more than 1 acre owned chickens. The survey also revealed that although less than 1 percent of households living on less than 1 acre currently owned chickens, nearly 4 percent of these households without chickens planned to get them within the next five years. This illustrates an increase in food awareness and the augmented appeal of urban farming.

Increased interest in backyard poultry has been recognized by Oklahoma Cooperative Extension and we have had a number of successful meetings to teach people about poultry production. If you are one of the many people contemplating small flock poultry production, consider some of the following topics prior to diving into this new venture.

To begin, it is important to define goals for poultry production. Is your goal to merely to produce eggs, teach your kids about responsibility, or harvest a few birds for the crockpot each year? Are you interested in exotic poultry breeds, exhibition, or a 4H/FFA project? It is hard to accomplish every one of these production goals at once. In my mind, simplicity is key so identify goals early on.

Breeds are a fun and exciting aspect to consider. Chickens breeds are specific to egg laying or meat production. There are also dual purpose birds which have traits for both laying eggs and meat production. Most small and backyard flocks contain egg laying or dual purpose birds.

When planning, don't forget to consider your local supplier of feed and other necessary equipment. Chickens are omnivores and require a balanced diet to maintain consistent egg production. A quality chicken feed targeted for their specific age (chicks vs. hens) and type of production (broilers vs. layers) is important to maintain consistent egg production. Most feed and farm supply stores carry a broad selection of poultry feeds.

Chickens are also good recyclers of kitchen waste. The most common kitchen scraps that can be provided to chickens include fruit and vegetable peelings and bread. It is important to avoid feeding more than 10% of a chicken's diet as kitchen waste, treats, or scratch. When fed at higher quantities, these extras can dilute a bird's diet that may cause decreased egg production and vitamin and mineral deficiencies. So how much is 10% of a hen's diet? Considering a laying hen will eat around ¼ pound of feed daily, extras should account for a very small amount of the total diet.

Most backyard birds are housed in a poultry house and run, however, poultry do enjoy periods of free- range to forage and eat bugs. Raising chickens in an enclosure allows for some protection from predators while free range birds have the opportunity to forage and eat insects. Consider city ordinances if you live in town or in a housing addition as this can determine the number and birds that can be owned. Chickens in confinement or free range can be equally productive as long as the birds have adequate space and are provided with the basic needs of shelter, food and water.

Keeping chickens is a great way to produce eggs, however do not expect it to be a less costly than the grocery store. Nevertheless, chickens are a fantastic project for kids and family, provide lessons in food production and a link to agriculture. I would say there is great value in this.

For questions regarding small flock poultry production, contact your local Oklahoma Cooperative Extension Educator for more information.

Horn Fly Control Demonstration Update from Northwest Oklahoma

Dana Zook, Enid Area Extension Livestock Specialist

Horn fly control demonstrations are in full swing in the NW quarter of the state! This summer there are demonstrations taking place in Alfalfa and Noble County. In these demonstrations, side profile pictures of cows are taken throughout the summer to measure the impact of various horn fly control treatments. In Alfalfa County specifically, we are testing the efficacy of the Tri-Zap Fly tag in three groups of cows tagged in April, May and June. I thought it would be interesting to report the efficacy thus far by looking at the horn fly populations on a cow from the May tagged group compared to a cow from the June group that has not yet been tagged.

In Figure 1, cow #88 of the June group has not yet been tagged and has approximately 893 horn flies on the side. In Figure 2, cow #31 is in the May tagged group and has 84 flies on her side. The threshold of mature cows is approximately 200-300 flies total and we can see that cow #88 definitely exceeds this level even in early June. It will be interesting to see the differences of efficacy between the three different tagging groups when we get into late July and August.



Figure 1. June Tagged Cow #88 - 893 flies on side - will be tagged week of June 11th



Figure 2. May Tagged Cow #31 - 84 flies on side - Tagged May 19th



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