



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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Safe Handling of Eggs from Small Backyard Flocks

Dana Zook, NW Area Livestock Specialist

Interest in backyard poultry has increased substantially in the past few years. Much of this interest stems from an increase in food awareness and the farm to table movement. People are interested in agriculture and small flock poultry production is one way to take part. Typically, most people rear backyard flocks for the purpose of egg production. Many may remember the commercials on television about “The Incredible, Edible Egg”. I grew up in a household where a fried egg sandwich could be the center of any meal and thankfully my husband doesn’t mind the grand variation of egg dishes served at the Zook household. Not only are they delicious, eggs are extremely good for you. According to the American Egg Board, a large egg contains 70 calories, provides 6 grams of protein while also supplying 13 essential vitamins and minerals. It’s no wonder why so many people interested in having their own egg producers close at hand. Raising poultry for egg production is fairly simple, however, there are some steps one can take to keep their egg source healthy and safe.

Nesting Boxes and Roosts

Make sure there are enough suitable nesting boxes in your chicken coop. One nesting box for 4-5 hens is sufficient. Hens often prefer to lay eggs in nests that are in low light areas and this is sometimes why certain nesting boxes are preferred over others. Each nesting box should contain some bedding material such as hay or straw. This is not to provide hens with a comfortable sleeping place, rather, to help keep eggs clean when they are laid and to reduce breakage. Overtime, litter may accumulate in these boxes and the bedding should be changed to maintain cleanliness. Collect eggs from nesting boxes no less once daily. Roosts are a popular addition to chicken coops, giving hens a place to sit while not in the nesting box. To avoid hens from roosting on and soiling into the nesting boxes, provide a roost higher than the nesting boxes in a separate location in the coop.

To Wash or Not to Wash

In the U.S., Food and Drug Administration regulations require that USDA-graded eggs be carefully washed and sanitized. For this reason, consumers should know it is not necessary to wash your eggs purchased from a retail outlet. Washing eggs coming from small flocks is encouraged but measures need not be as extensive. To clean slightly soiled eggs, wash with running water that is slightly warmer than the temperature of the egg. If mild detergent is required, be sure to rinse thoroughly. All eggs should be allowed to air dry before packaging. Above all, do not attempt to clean excessively dirty eggs, rather look to make improvements within the coop to control this.

(Continued to Page 2)

(Continued from Page 1)

Is Refrigeration Important?

According to government regulations, eggs produced in the U.S. should be stored at 45°F or less. This recommendation is also for small flock producers. Clean eggs should be stored large end up in a clean carton on the refrigerator shelf. Some refrigerators have a nice slot on door for egg cartons, however frequent changes in temperature give reason to keep them in an area of the refrigerator with more consistent cooling.

For other questions about eggs or small flock poultry management, contact your local OSU County Extension Educator.

Consider Sesame

Tracy Beedy, Panhandle Area Agronomy Specialist

Sesame is an oilseed crop that has been occasionally grown in the US since the time of Thomas Jefferson. It became viable for US industry with the development of non-dehiscent varieties which can be mechanically planted and harvested and cleaned with equipment usually used for grain production. Sesame is drought-tolerant and well adapted to arid and semi-arid regions.

Most US sesame is grown in Oklahoma and Texas, west of I-35, and is contracted by Sesaco. Until recently it was difficult to insure, but USDA-RMA developed a pilot program in 2015 for insurance standards, and it is now considered a program crop. It is a short-season crop and can be planted as a double-crop behind wheat. It is a good rotational crop for cotton, as it is a non-host to nematodes, and usually provides a yield bump to the following cotton crop.

Sesame can be planted from mid-May to early July. It has a very small seed, and can be tricky to germinate, but once a stand is established it has few disease or insect problems. It is best planted on 15-inch rows to allow the sesame to quickly close a canopy for weed control. Dual Magnum is labeled for weed control in sesame production, however, sesame cannot be safely planted in less than 9 months following and SU herbicide.

Sesame can be produced with less water and lower inputs than many crops and is adapted for common farming practices and equipment. For information about contracts, please contact Jared Johnson at Sesaco: jjohnson@sesaco.com.

For further information:

Sunup report: <http://sunup.okstate.edu/category/seg/2016-second-half/081316-sesame>

Fact Sheet CR-2155:

<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-7607/CR-2155.pdf>

Growth and Development of Sesame--American Sesame Growers Association:

<http://www.sesamegrowers.org/farmer%20phenology%20080506.pdf>



First and Double-Crop Sorghum Production in 2017

Trent T. Milacek, NW Area Ag Econ Specialist

A wet spring can have advantages and disadvantages. Many Oklahoma sorghum producers were forced to delay planting this year due to wet field conditions in April. A general rule is that producers forgo May plantings in order to avoid summer heat at flowering. This will result in a large number of first crop and double-crop sorghum to be planted in early June.

Sorghum prices have moved lower with other commodities over the past few years. This coupled with a weaker basis due to reduced exports has driven prices down to a critical point. Producers looking to market sorghum in 2017 can currently lock in a cash price of \$3.00-\$3.25 depending on delivery location. Managing for large yields on highly productive land will help a producer remain profitable.

Planting in April can have several benefits. Plants are able to utilize early spring moisture during cool temperatures, which can result in larger yields than with late plantings. In addition, from an integrated pest management standpoint, early plantings have been able to mature early enough to avoid large sugarcane aphid infestations in recent years. Farmers planting in June need to be aware that sugarcane aphid infestations before the boot stage can decimate a sorghum crop and corrective insecticide application should be budgeted before planting.

Operating costs including seed, fertilizer, harvesting, pesticide, custom application, equipment, fuel, and cash rent could total \$200 per acre. Operations are different in their use of equipment and resources so those figures will vary with the producer. A single sugarcane aphid insecticide application is included in those costs.

Assuming these figures are representative of the average producer, a yield of 67 bushels per acre will be required to breakeven on operating costs at \$3.00 sorghum. Each producer must consider their fixed costs and determine the extra yield required to operate their business and to maintain equipment.

Grain sorghum in 2017 may be a good choice for Oklahoma producers. Acres have been reduced in favor of soybeans and other oilseeds, which may cause local buyers to increase basis bids in order to secure bushels. The current harvest-time basis ranges from -91 to -65 cents at area terminals. Two years ago, when sorghum demand was high, basis bids were as high as +50 cents at times. To market this crop, a producer can use the corn futures price. Any weather events that jeopardize the Midwestern corn crop will likely provide support for grain sorghum prices. Consider purchasing puts on rallies to limit downside while leaving basis open. This will allow producers to realize potential increases in local demand.

Producers are encouraged to utilize the Oklahoma Cooperative Extension Service Enterprise Budgeting software in order to help them make decisions on their farms. For more information, please contact your local county extension educator.

Does Implanting Nursing Calves Pay?

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

**Oklahoma Panhandle Research & Extension Center
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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. In a more recent study, using data from more

(Continued to page 4)

(Continued from page 3)

than 5 million beef calves sold through a video livestock auction service 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 225 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 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 day old. Read the label for the specific implant.
- Do not implant bull calves.
- 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.

2017 Oklahoma Crops Conference

Josh Bushong, NW Area Agronomy Specialist

In recent years, interest has slowly increased in crops other than wheat in the region. The past year this interest almost feels forced as some producers find it ever challenging to stay economically feasible with a continuous wheat farming operation. To help diversify their operations, some have begun to try their hand at new crop rotations, or at least try something they have not tried in a while. Oklahoma Cooperative Extension Service will be hosting four Conferences across Oklahoma to help Oklahoma producers make sound agronomic and sustainable choices for their farming operations.

Be sure to save the date of July 17th for the northwestern region conference, which will be at the Northwest Technology Center in Alva, OK. The program will start at 9 a.m., include a lunch, and last till 3 p.m. It is recommended to call 580-327-2786 and RSVP to ensure that enough lunches and refreshments are provided.

The other three locations and dates include Ardmore on July 10th, El Reno on July 13th, and Afton on July 20th. All four conferences have been tailored to each hosted region to mainly focus on current production issues and challenges.

One common choice for many NW Oklahoma farming operations would be grain sorghum. Roughly half of the program scheduled for the Alva Conference will focus on grain sorghum. Dr. Arnall will discuss soil fertility recommendations. Dr. Lofton will provide insight on how to optimize yield potential by utilizing best management practices throughout the season. Pest management options including weed control and sugarcane aphid control will also be highlighted at the conference. Dr. Royer will provide control strategies for the sugarcane aphids based on recent findings from field research trials.

In addition to the vast amount of detailed information provided by the OSU Extension Specialists, there will be an experienced Producer Panel on the program. These growers will share some of their experiences and how they manage the crop on their farming operations in order to optimize yields while being economical. After introductions, there will be time for question and answers with the producer panel.

While grain sorghum will consume half of the program in Alva, there will also presentations about other cropping options for NW Oklahoma as well as some wheat insights. Dr. Lofton will provide some best management practices needed to know to become more successful with soybean production in NW Oklahoma. Dr. Warren will provide some insight on including winter cover crops in a summer cropping system. There will also be a good discussion on whether or not winter canola is still a good cropping option for NW Oklahoma. Dr. Marburger will also provide some insight on what producers need to start thinking about for the 2018 wheat crop.

Producers that are interested in learning more about grain sorghum, soybeans, cover crops, canola, or even wheat are invited to attend one of the upcoming inaugural Oklahoma Crop Conferences coming up in July. Please contact your local County OSU Extension Office for more details and how to RSVP.



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