

Osage County Agriculture Newsletter



**OKLAHOMA COOPERATIVE
EXTENSION SERVICE**

June 2021

COW/CALF CORNER

The Newsletter

From the Oklahoma Cooperative Extension Service

May 31, 2021

In this issue:

Meat Markets Hotter than Summer So Far

Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

Reproductive Tract Scoring in Replacement Heifers

Dr. Daniel Stein, Oklahoma State University Extension Reproduction Physiologist

Heroes Among Us

Paul Beck, Oklahoma State University Extension Beef Cattle Specialist

Meat Markets Hotter than Summer So Far

Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

Protein markets are red hot. With the economy opening up and growing rapidly, meat markets of all types are enjoying strong demand. In numerous cases, wholesale prices for specific meat products are at record levels, exceeding the levels provoked by the pandemic disruptions one year ago; and unlike last year, lack of supply is not the issue. Year to date production of beef, pork and broilers is higher, not only compared to last year but also higher than 2019 levels.

Broiler breast meat price has been at record levels in May, fueled no doubt by the chicken sandwich wars in quick service restaurants (QSR). Chicken leg and leg quarter prices have risen sharply since the beginning of the year. It is likely that export demand is helping to drive these markets. Chicken wing prices did not drop after the "Super Bowl Bump" but have continued to increase to record levels, passing the \$3/lb. mark for the first time in the last month.

Wholesale pork carcass cutout prices have risen steadily all year, pushing past the levels of the pandemic spike last year to the highest values since 2014. Pork tenderloin prices have increased since the beginning of 2021 but have remained below the pandemic levels of one year for several weeks. Wholesale ham prices increased from the first of the year until late April and have retreated slightly in the past month. Hams are a popular export item and pork exports jumped sharply in March. Pork belly prices peaked recently in April at the highest levels since 2017. Pork spare rib prices reached record levels recently, pushing above \$3/lb. for the first time. Spare ribs are often exported but the recent strength in spare rib prices may also be related to a rebound in BBQ restaurants. Pork cold storage holdings were drawn down sharply one year ago and remains at very low levels. In part, this is likely due to the surge in pork exports to China that began in 2019 and resulted in China being the largest pork export market in 2020.

The boxed beef cutout price has pushed higher since the beginning of the year. Middle meats have led the way with wholesale beef tenderloin and ribeye prices setting new records in the most recent data with tenderloin over \$17/lb. and ribeye over \$13/lb. Tenderloin is almost exclusively a restaurant item while ribeye is popular in restaurants, at retail grocery and for export. Strip loins are very popular at retail grocery and prices have also increased sharply this year but failed to exceed the pandemic levels from last year. Brisket prices have increased dramatically since January, averaging over \$7/lb. in May; another indication that BBQ is back. Chuck and round products are higher, though less so than the middle meats. End meat demand is driven by retail grocery use for value cuts and for ground beef, as well as export demand. The price of 50 percent trimmings is higher compared to January but has dropped back from recent peak prices in mid-April. The supply of fatty trimmings is relatively large due to increased slaughter of heavy fed cattle.

Cont. pg. 2

Osage County Extension Office

1039 Old Hwy 99

Pawhuska, Ok 74056

(918) 287-4170; Office

Osage County Agriculture

Educators

Rick Clovis

Osage/Pawnee County

rick.clovis@okstate.edu

Cheyenne Patrick

Osage County/Osage Nation

cheyenne.patrick@okstate.edu

Go like us on Facebook & Instagram at Osage County Extension for News and Updates



In This Issue:

COW/CALF CORNER

The Newsletter

From the Oklahoma Cooperative Extension Service

Meat Markets Hotter than Summer So Far
Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

Reproductive Tract Scoring in Replacement Heifers

Dr. Daniel Stein, Oklahoma State University Extension Reproduction Physiologist

Osage News

Quarantine Drenching
Barry Whitworth, DVM Area Food/Animal Quality and Health Specialist for Eastern Oklahoma

Supplementing Vitamin A to Beef Cattle

Published ed Jan. 2018|Id: AFS-3036
By Brian Freking, David Lalman

The price of 90 percent lean trimmings remains strong with high demand for lean to match supplies of 50s. Trimming are mostly used for food service ground beef.

Reproductive Tract Scoring in Replacement Heifers

Dr. Daniel Stein, Oklahoma State University Extension Reproduction Physiologist

Reproductive Tract Scoring (RTS) is a subjective measurement which involves the rectal palpation of the heifer reproductive tract (uterine horns and ovarian structures) and the subsequent assignment of a reproductive tract score, ranging from 1 to 5 (1 = immature; 5 = presence of a corpus luteum), to assist the producer in making replacement heifer decisions. Since age at puberty is difficult to measure directly, RTS can estimate pubertal status, and if performed before the onset of the breeding season, can be a predictor of heifer reproductive performance allowing for heifers with a poor breeding potential to be removed from the breeding group before any further costs are incurred. The RTS system has been shown to a repeatable measure between and within practitioners and to be moderately heritable (0.32 + 0.17).

A RTS of 1 is refers to a prepubertal heifer, a RTS of 2 or 3 is refers to a peripubertal heifer (transitional stage), and a RTS of 4 or 5 is refers to a pubertal (cycling) heifer. The reproductive performance of heifers with an RTS of 1 or 2 is less than that of heifers with an RTS of 3 or greater. Heifers with a RTS of 1 or 2 are less likely to be cycling at the beginning of the breeding season and therefore are less likely to become pregnant or if they do become pregnant, do so later in the breeding season suggesting that heifers with a RTS of 1 should possibly be eliminated from the breeding group. It is worth mentioning, that some heifers do not exactly fit a particular RTS score and it is up to the producer and/or practitioner to decide on which of the measures are to be given the most emphasis.

RTS should be done about 1 month or less prior to breeding if the score is to be used as a culling tool as an indicator of a heifer's ability to conceive early during the first breeding season. If RTS is to be used as a selection tool to place pressure on age at puberty, the best time to evaluate the heifers is when approximately 50% of the heifers are thought to be cycling based on age, weight, and occasional observations for estrus.

Another possible application of the RTS

system is to assess the nutritional program being utilized by the producer. If RTS is taken within a sufficient time before the start of the breeding season (approximately 30 to 60 days); based on the results of the tract scores, the producer can adjust the ration to help the heifers reach developmental goals prior to the beginning of the breeding season *or* the beginning of the breeding season can be adjusted.

The uterine and ovarian dimensions for each of the reproductive tract scores are described in Table 1. The reproductive tract score is based on the degree of uterine horn development and ovarian status (size of dominant follicle and presence or absence of a CL).

Table 1: Description of uterine and ovarian measurements for different Reproductive Tract Scores (RTS)

Reproductive Tract Score	Uterine Horns (diameter, mm)	Ovarian Length (mm)	Ovarian (Height) (mm)	Ovarian Width (mm)	Ovarian Structures
1	Immature, < 20 mm, no tone	15	10	8	No palpable Follicles
2	20-25 mm, no tone	18	12	10	8 mm Follicles
3	20-25 mm, slight tone	22	15	10	8-10 mm Follicles
4	30 mm, good tone	30	16	12	> 10 mm Follicles, CL possible
5	> 30 mm	>32	20	15	CL present



Osage News.

The WahZhaZhe Cultural Center and the Osage Language Department bring you the Osage Cultural Connection Series. Together, and produced by Buffalo Nickel, they have produced 30 cultural videos. A new video will be released each week and can also be found on the Osage Culture website

<https://www.osageculture.com/>

Quarantine Drenching

Barry Whitworth, DVM Area Food/
Animal Quality and Health

Specialist for Eastern Oklahoma

With the overuse of anthelmintics (dewormers) in livestock production, gastrointestinal nematodes (GIN), which are commonly referred to as worms, have developed resistance to many dewormers. According to the United States Food & Drug Administration, anthelmintic resistance is the ability of a GIN to survive a treatment that was effective in the past. For decades, anthelmintic resistance has been a problem with small ruminants; however, this issue is starting to occur more often in cattle. In order to combat this resistance, livestock producers will need to realize that dewormers alone will not solve their parasite problems. Producers will need to take a “holistic” approach to controlling parasites. This will require the use of many practices to decrease parasite burdens. One strategy that is recommended by parasitologists to combat GIN resistance is “quarantine drenching”.

Sheep and goat producers know that anthelmintic resistance is a major issue for small ruminants. *Haemonchus contortus*, which is better known as the barber pole worm, is one of the worms that is a major contributor to health issues in sheep and goats. Several studies have demonstrated that *H. contortus* is resistant to many of the dewormers available in the United States. In cattle, *Osterta-*

gia ostertagi is the internal parasite which can cause the most damage; however, *Haemonchus* spp. and

Cooperia spp. can cause production issues with young cattle. Studies have demonstrated anthelmintic resistance to these worms as well in the United States.

Livestock producers can get resistant worms in one of two ways. They can develop them on their operation by frequent deworming. Deworming eliminates susceptible worms and allows the resistant worms that survive to pass their genetics on to future generations of worms. Over time the farm has nothing left but resistant parasites. The other way to get resistant worms is to buy them. When selecting replacement animals, a producer may unsuspectingly bring in resistant worms to their operation.

If a producer wishes to avoid bringing home problems, they need to adhere to sound biosecurity. One step in biosecurity is isolating new purchases. This will allow time for the producer to assess the health of the new animal. The animal should be isolated for 30 days. During this isolation, a fecal egg count (FEC) should be performed to evaluate worm burden. After gathering the fecal sample, the animal should be “quarantined drenched” with three different classes of dewormers. (Note! For information about classes of dewormers go to <https://www.wormx.info/dewormers>.) Usually, a benzimidazole, macrocyclic lactone, and imidazothiazole are the three classes of de-

wormers used. Producers should never combine imidazothiazoles and tetrahydropyrimidines classes together since toxicity is a possible outcome. It should be noted that the United States has four classes of dewormers. Not all of the dewormers are labeled for use in every species of animal. Producers should consult with their veterinarian for proper selection and dose of the dewormer. Two weeks after the “quarantine drench”, a second FEC should be performed. The two FEC should be compared (FEC pretreatment - FEC post-treatment/ FEC pretreatment x 100 = FEC reduction %). A 90% or greater reduction in egg count should have occurred. If the FEC reduction is less than 90%, significant resistant worms are present in the animal. The producer must make the decision as to whether that animal should be allowed to enter the herd.

Internal parasite resistance is a major issue in small ruminant production, and it is becoming more of a problem in the cattle industry as well. Livestock producers need to take a holistic approach to managing parasites in their livestock operation. The use of different strategies will be required to combat dewormer resistance. One component of that program is a “quarantine drench”.

For more information about “quarantine drenching”, producers should consult with their local veterinarian or the local Oklahoma State University County Agriculture Extension Educator.

Supplementing Vitamin A to Beef Cattle

Published ed Jan. 2018|Id: AFS-3036

By Brian Freking, David Lalman

Why is vitamin A important?

Vitamin A is considered by many to be the most important vitamin regarding the need for supplementation. Vitamin A is necessary for proper bone formation, growth, energy metabolism (glucose synthesis) and skin and hoof tissue maintenance, as well as vision. The vision function is associated with visual purple in the eye when animals are trying to adapt from light to dark.

Deficiency Symptoms:

- night blindness
- reproductive failures
- skeletal deformation
- skin lesions

The best source of this vitamin is beta-carotene, a pigment in green plants that animals convert to vitamin A. If cattle are grazing green grass, they will get plenty of vitamin A. During winter months or drought, vitamin A deficiencies are common because dormant plants don't contain the levels of beta-carotene needed compared to the green forage levels in the growing months.

How much vitamin A do cattle need?

Where other nutrient requirements are expressed as a percent of the diet or as parts per million (ppm), vitamin requirements are generally expressed in international units (IU). For example, one milligram of beta-carotene is equivalent to 400 IU's of vitamin A. The primary sources of vitamin A for the biological functions mentioned previously are 1) green, leafy forages, 2) liver stores and 3) supplemental sources such as commercial concentrate feed supplements and commercial mineral supplements. The liver stores vitamin A, however, it is thought that those stores can last only two to four months if a severe dietary deficiency exists. Table 1 shows vitamin A requirements for different classes of beef cattle.

Table 1. Vitamin A requirements for beef cattle.

	Growing Steers and Heifers*	Stressed Steers and Heifers*	Gestating Cows*	Lactating Cows*
Vitamin A, IU/lb of 1000 feed DM	2250	1300	1800	
Vitamin A, IU per day	12500	15000	34000	5400

How much vitamin A is present in typical feeds?

Feeds vary substantially in beta-carotene concentration and therefore, in vitamin A equivalents. Lush, green, immature forages have the greatest concentration of beta-carotene. However, those same plants may contain near-zero beta-carotene during the winter when they are mature, dormant and brown. Bright colored, early harvested hay contains relatively high amounts of beta-carotene. Harvested forage beta-carotene concentration declines over time. While the rate of degradation is extremely variable, a conservative rule of thumb is that the beta-carotene concentration (and therefore vitamin A potential) declines by about one-third to one-half each year in storage. Feed grains and other concentrate feeds are generally low in beta-carotene. Table 2 shows a summary of rounded vitamin A equivalent values from one experiment where 85 feed and forage samples were analyzed for beta-carotene concentration.

Table 2. Approximate vitamin A equivalents in various feed sources.

Feed Source	Vitamin A Equivalents, IU/lb feed dry matter
Fresh grass pasture	18000
Orchardgrass hay	1400
Alfalfa hay	1300
Wheat/ryegrass hay	900
Corn silage	3000
Cracked corn	68
Dried Distiller's Grains	200
Wet Distiller's Grains	350
Soybean hulls	20

FATHER'S DAY WEEKEND!

BEN JOHNSON DAYS

THE WESTERN WAY OF LIFE AT IT'S BEST!

JUNE 16TH - 20TH

PAWHUSKA, OK

-WEDNESDAY JUNE 16TH-

6PM - BEN JOHNSON DAYS INVITATIONAL ART SHOW & SALE - OPENING NIGHT SHOW RUNS WED-FRI AT THE CONSTANTINE THEATER IN HISTORIC DOWNTOWN PAWHUSKA

-THURSDAY JUNE 17TH-

5PM - UNCORKED PARTY - PAWHUSKA CHAMBER OF COMMERCE

-FRIDAY JUNE 18TH-

10AM - BUDDY HARTNESS MEMORIAL STEER ROPING

11AM - OSAGE COUNTY CATTLEMAN'S ASSOCIATION LUNCHEON

1PM - DOORS OPEN TO THE JOHN ISRAEL COWBOY TRADE SHOW

BROUGHT TO YOU BY THE BEN JOHNSON COWBOY MUSEUM

7PM - WRCA RANCH RODEO - BROUGHT TO YOU BY...

JK COUNTRY FEED & RANCH SUPPLY & KELLY'S TRUCKS & MORE

10PM - RODEO DANCE - FEATURING THE TRENT CRISWELL BAND

-SATURDAY JUNE 19TH-

8AM - OSAGE COUNTY CATTLEMAN'S ASSOCIATION RANCH TOUR

9AM - JOHN ISRAEL COWBOY TRADE SHOW

10AM - JR. RANCH RODEO

11AM - DELBERT KYLER MEMORIAL STEER ROPING AT THE -K ARENA

2PM/5PM - MOVIE & DINNER WITH BARRY CORBIN - CONSTANTINE THEATER

7PM - WRCA RANCH RODEO

10PM - RODEO DANCE - FEATURING LUKE CHRISTENSON

TEXAS COUNTRY MUSIC ASSOC. COUNTRY SONGWRITER OF THE YEAR

-SUNDAY JUNE 20TH-

1PM - BEN JOHNSON MEMORIAL STEER ROPING



SATURDAY MOVIE & DINNER WITH

**-BARRY-
CORBIN**

MOVIE 2PM - DINNER 5PM
AT THE CONSTANTINE THEATER
IN HISTORIC DOWNTOWN PAWHUSKA
TICKETS - WWW.CONSTANTINETHEATER.COM

OSAGE CO. FAIRGROUNDS
**-JOHN ISRAEL-
COWBOY TRADE SHOW**
BUY-SELL-TRADE

COWBOY COLLECTIBLES & ANTIQUES
CUSTOM HAT & BOOT MAKERS. BIT & SPUR MAKERS
101 RANCH ITEMS. OVER 50 VENDORS!!

OSAGE CO. FAIRGROUNDS
**-WRCA-
RANCH RODEO**
SPONSORED BY

KELLEY'S
TRUCKS & MORE
BARNSDALL, OK

JK
Country Feed
& Ranch Supply



WRCA RANCH RODEO TICKETS ARE \$10 AT THE DOOR OR YOU CAN PURCHASE ADVANCE TICKETS FOR \$8.50 AT THE BEN JOHNSON COWBOY MUSEUM - (918) 287-9922
QUESTIONS? CONTACT CODY GARNETT (918) 429-6349
J.I. TRADESHOW QUESTIONS - CHARLIE KAUPKE 405-747-8618
WWW.FACEBOOK.COM/BENJOHNSONDAYS



Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations, does not discriminate on the basis of race, color, national origin, sex, age, religion, disability, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services. References within this publication to any specific commercial product, process, or service by trade name, trademark, service mark, manufacturer, or otherwise does not constitute or imply endorsement by Oklahoma Cooperative Extension Service.

UPCOMING EVENTS

June 18th: Osage County Cattlemen's convention kicks off with the tradeshow and luncheon.

June 19th: Osage County Cattlemen's Ranch tour will start at the Ag building. They will leave at 9:00 a.m. following the complimentary breakfast from 8-9. The tour will be going west and will end at Woolaroc with the barbeque lunch. For any questions call the Extension office at 918-287-4170

June 15th, 17th, 22nd, & 24th: We will be offering a Junior Master Gardener Program for any 3rd-5th graders that are interested. It will be held at the Osage County Extension office. It is free to attend and is from 10:00 a.m.-12:00 p.m.



OSAGE COUNTY
EXTENSION

Osage County Extension Office

(918) 287-4170 Office

1039 Old Hwy 99

Pawhuska, Ok 74056