

# Osage County Agriculture Newsletter



OSAGE COUNTY  
EXTENSION

March/April 2023

## Cow/Calf Corner March 13<sup>th</sup>, 2023

### Weak Beef Exports Raises Concerns

Derrell S. Peel, Oklahoma State University Extension  
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### Do You Have Ample Bull Power for Breeding Season?

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

### Bovine Leukemia Virus

Barry Whitworth, DVM, OSU Extension Specialist,  
Department of Animal and Food Sciences

## Weak Beef Exports Raises Concerns

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

Beef exports in January were down 15.7 percent year over year. Despite record beef exports in 2022, signs of a weakening beef trade picture were developing late in the year with beef exports down year over year in both November and December. A strong U.S. dollar peaked in late 2022 and has decreased, but remains high, provided export headwinds that appear to be taking a toll.

The biggest decrease in January exports was South Korea, down 36.8 percent year over year. The dollar appreciation to the South Korean Won was particularly acute in late 2022 but has moderated somewhat since last October. In 2022, beef exports to South Korea increased 3.2 percent to a new record level and giving South Korea a 22.8 percent share of total U.S. beef exports, remaining the number

two export market, but just fractionally lower than Japan.

Beef exports to China/Hong Kong were also down 24.2 percent year over year in January. Slower beef exports to China/HK were not an issue of exchange rates as much as the broader slowdown in the Chinese economy, perhaps aggravated by political tensions between China and the U.S. China/HK was the number three beef export market in 2022 with a 20.1 percent share of total beef exports. Beef exports to China/HK grew by 7.1 percent year over year in 2022, much slower than the previous two years but still the most growth among major U.S. beef export markets.

There was some good news in the January beef export data. Despite exchange rate headwinds, January beef exports to Japan were up 6.9 percent year over year. Beef exports to Japan decreased 1.9 percent annually in 2022. Japan remains the largest export market for the U.S., with a 22.9 percent share of total beef exports in 2022.

January beef exports to the number five market Canada were about equal to one year ago, up just 0.4 percent year over year. Canada represented a 7.7 percent share of total beef exports in 2022. Beef exports to the number six beef export market, Taiwan, were down 34.0 percent year over year in January. In 2022, beef exports to Taiwan were 5.7 percent of total U.S. beef exports. The top six beef export markets accounted for 87.2 percent of beef exports in 2022.

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Dana Zook, Northwest Area Extension Livestock  
Specialist

Challenges for beef exports are likely to increase in 2023 as the headwinds due to the strong dollar will continue. Additionally, anticipated decreases in beef production began in February and will decrease beef availability and keep wholesale beef prices strong. Beef demand, including international demand, remains a significant concern going forward as declining beef production will pressure beef prices to push even higher than current levels.

## Do You Have Ample Bull Power for Breeding Season?

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

For herds that plan to begin calving next January, breeding season begins in April. With that in mind, it's time to plan and manage bulls for breeding season. This week we address bull to female ratios for breeding season.

The three major goals of any breeding season should be:

1. Get cows settled as early in the breeding season as possible.
2. Get cows bred to bulls with highest possible genetic value.
3. Achieve both as economically as possible by getting cows bred to fewest possible bulls

A defined breeding season is important to permit meaningful record keeping, timely management and profit potential. Maintaining a 60 to 75 day breeding and calving season can be one of the most important management tools for cow calf producers. A uniform, heavier calf crop is an important reason to keep the breeding season short. Getting cows bred earlier results in calves born earlier. Missing an estrus cycle of a single cow is a significant

monetary loss in calf weight gain the following year. The extra 21 days until the next heat cycle translates into a younger calf at weaning that is 40 to 50 pounds lighter. Spread over several cows the losses can grow quickly. In addition, more efficient cow supplementation and effective herd health programs are a product of a short breeding season. How do we get more cows settled earlier in the breeding season? By having adequate bull power on hand to get cows pregnant.

### How Many Bulls Do I Need?

Can be answered with another question: How many cows should I expect my bull to cover? Depending on the age of your bull or bulls, and assuming bulls have passed a Breeding Soundness Examination (BSE), the general rule of thumb is to place about as many cows/heifers with a young bull as his age in months. For example, a bull that is 12 months old should be able to cover about 12 cows in his first breeding season. An 18 month old bull should be able to settle 18 or 19 cows. While a two-year-old bull could be expected to cover up to 25 cows. Mature bulls normally should be expected to cover 25 to 35 cows per season. Remember there is normal "prime of life " for breeding bull. They need be sound, fit, and athletic to cover terrain and settle cows. Bulls past the age of six are more likely to breakdown.

It is beneficial that bulls to be combined in multi-sire pastures are penned together for at least a few weeks prior to turnout to allow time for a pecking order to be established. This also leaves enough time to secure replacements if injury occurs prior to turnout. Injuries occurring during breeding season can spell economic disaster if bulls aren't getting cows bred.

### Breeding Soundness Exams, Body Condition and Herd Health

It is suggested to have all bulls undergo a Breeding Soundness Exam (BSE) prior to turnout. A BSE includes a semen test as well as a physical exam of the entire reproductive tract, eyes, feet and legs, and teeth (if an older bull). Manage Body Condition Scores (BCS) on bulls similar to what is done with cows. Optimum BCS for bulls being turned out at beginning of breeding season is a six. Now is the time to manage herd health, deworming and nutrition to have bulls fit and ready at turn out.

## Bovine Leukemia Virus

Barry Whitworth, DVM, OSU Extension Specialist,  
Department of Animal and Food Sciences

Prevalence of Bovine Leukemia Virus (BLV) appears to be changing in the United States. A recent study of cattle in eastern Kansas found that 42 out of 44 herds had at least one cow test positive for BLV. The same study found 55% of the cattle tested were positive for BLV. This is in contrast to the 1997 National Animal Health Monitoring System report in which BLV was found in 38.7% of the beef cattle operations and 11.5% of all cows tested were positive for BLV.

BLV is a retrovirus capable of causing cancer in cattle. The disease that is caused by the virus may be referred to as Enzootic Bovine Leukosis (EBL), malignant lymphoma, or lymphosarcoma. Most cattle infected with the virus remain asymptomatic or show no clinical signs of the disease. However, BLV is responsible for production losses due to increase veterinary cost, reproduction inefficiency, decrease milk production, deaths, and carcass condemnation at slaughter.

Cattle become infected with the virus when blood or body fluids is transferred between animals. Lymphocytes, a particular white blood cell, are the specific cells that are infected with the virus. Many different routes of transmission of BLV have been proposed, but more research is needed to fully understand BLV transmission.

Cattle that are infected with BLV have three possible outcomes. The most common outcome is the animal appears normal. Another 30% of the cattle will have an elevated lymphocyte count that is referred to as persistent lymphocytosis (PL). The last outcome is cancer; however, less than 5% of the cattle with BLV will ever develop lymphosarcoma.

Common symptoms of lymphosarcoma include appetite and weight loss, fever, eye problems, digestive problems, problems walking, hind limb paralysis, and enlarged lymph nodes. Most cattle are three years old or older before tumors develop.

Currently no treatments exist for cattle that are infected with BLV. Eradicating the disease requires testing and culling infected cattle until no positive cases are found for 2 years. This may not be economically feasible in a highly infected herd. A less intense approach being studied is to eliminate cows with high viral loads. It is thought that these cattle may be super shedders.

BLV will continue to be a problem in the United States until a vaccine is developed or there is an economic incentive to eradicate the disease. Until that time, producers should follow proper biosecurity to do all they can to prevent the spread of the virus.

Barry Whitworth, Senior Extension Specialist, explains the benefits of testing bulls for BLV. <https://www.youtube.com/watch?v=Cr92SoWVFPm&list=PLgIOSpV-TcacCK4lymDiOmeKJoE7sAV-R&index=4>

#### References

Huser, S. M., et al. (2022). Cross-sectional study to describe bovine leukemia virus herd and within-herd ELISA prevalence and bovine leukemia virus proviral load of convenience-sampled Kansas beef cow-calf herds. *American journal of veterinary research*, 1–7. Advance online publication.

## Garden Tips

- Make sure to get your garden soil tested. You can come check out a probe here at the office or give Cheyenne a call and she will come out and do it.
- Your carrots, lettuce, onions, potatoes and peas should already be in the ground, but do not worry you still have time.
- Make sure to avoid planting too closely together, this can lead to disease spreading and can interfere with normal plant development
- Check out this link to find more information on when to plant and how to properly manage your home garden!

<https://extension.okstate.edu/fact-sheets/oklahoma-garden-planning-guide.html>

# Springtime: A Season for Baby Chicks!

Dana Zook, Northwest Area Extension  
Livestock Specialist

Spring is in the air and that means many farm stores in the area will be advertising chicks for sale. Raising chickens appeals to many people as a good project for kids and family in addition to providing a good source of protein from the eggs and/or meat. Proper preparation before bringing chicks home is the key to success in effectively raising young chicks to adults. Whether you are raising broilers, laying hens, or are just looking for a few feathered friends to keep the bugs down in your garden, there are a few things to keep in mind.

Before starting a flock, it is important to check the city ordinances in your area. Some towns allow chickens, but many do not. If chickens are allowed in your area, look for reputable places from which to purchase chicks. Chicks can usually be obtained from the local farm store this time of year. However, if you would like to start with a more specific breed, there are a number of hatcheries around the United States that allow online orders and will ship live chicks directly to your door.

Chickens can be raised for meat or egg production, so depending on the overall goal, select the breed according to the production goal. Chickens breeds are specific to egg laying, meat production, or dual purpose which have traits for both laying eggs and meat production. However, most backyard chickens are raised for egg production. Some popular egg laying or dual purpose breeds include Rhode Island Red, Orpington, Wyandotte, and Leghorn.

Egg color can range from white to dark brown, however some people enjoy getting more colorful eggs. The Ameraucana and Araucana breeds are both high producing and lay different shade of blue and green eggs – perfect for Springtime!

Prior to bringing chicks home, prepare a brooder for the young chicks to live in for their first 6-8 weeks of life.

Depending its size, chicks can remain in the brooder until they are 6-8 weeks old. Chicks will need approximately 1 square foot of floor space per bird in the brooder. For a small number of chicks, a simple brooder can be made from common things such as a small livestock water tank, a kiddie pool, or plastic storage tub. You will also need a heat lamp, watering trough, and feed pans. Bedding material for the brooder is also very important. Choose an absorbent, non-dusty bedding such as pine shavings, rice hulls, or peanut shells. Never house chicks on smooth, slick surfaces such as flat cardboard or newspaper, as it can lead to leg problems. During the time the chicks are in the brooder, add litter as necessary to keep the chicks warm and dry as moisture is a chick's worse enemy. It is also important to ensure the brooder is also built to keep predators out. Never underestimate the ability of a farm cat to find a way to your chicks!

At this age, chicks will not be able to mediate their own body heat and an artificial source will need to be provided. Chicks that are 1 week old should be able to bask in warmth of around 90-95°F. After the first week, the temperature may be lowered 5° each week until a temperature of 70°F is reached. To accurately gauge temperature within the brooder, place a thermometer at the chick's level. If the brooder you have chosen is large, a brooder guard (a plastic, cardboard, or wire barrier) may be used for the

first few days to encircle the brooding area so the chicks don't wander too far from warmth. Place the heat lamp 1 – 1.5 feet above the chicks to provide adequate heat to start with. The lamp can be raised or lowered slightly to adjust the heat if needed. The chicks are the best indicators of the amount of heat needed. Chicks that are scattered throughout the brooding area often indicate a level of



PAWNEE COUNTY  
EXTENSION

# HERB & CONTAINER GARDENS

**APRIL 11TH AT 5:30 PM  
AT THE OSAGE COUNTY EXTENSION OFFICE**



The Osage County OSU Extension Service will be hosting a class on how to grow herbs as well as how to use a container garden

**PLEASE RSVP TO THE OSAGE CO EXTENSION OFFICE AT 918-287-4170 OR TO CHEYENNE AT CHEYENNE.PATRICK@OKSTATE.EDU**

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# UPCOMING EVENTS

**We finished up the Osage County junior livestock show on March 3rd. We want to thank each and every supporter for their continued support to the Osage County youth!**

- April 11th is the Herb and container gardening class at the extension office starting at 5:30pm. Please RSVP to the Extension.
- March 17th and 22nd the Osage County horse club will be hosting a ride night fundraiser at the Clarence Brantley Arena starting at 5 pm. Even if you do not ride, come on out and get a hotdog and a pop from the concession.
- April 4th is the Cimarron Ag Conference in Perry. This is a good opportunity to get your CEU's for your private applicator license. 8:30 to 4:00 pm Please RSVP by March 31st to the Osage County Extension office.

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