

# Osage County Agriculture Newsletter



**OKLAHOMA COOPERATIVE  
EXTENSION SERVICE**

September/October 2022

## **Cow/Calf Corner** **Cattle Imports and Exports in North America**

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

The integration of beef and cattle markets in North America includes trade in live cattle between Canada, Mexico, and the U.S. The most recent monthly trade data adds to the picture of cattle flows for the period January – July this year. For the year to date, U.S. cattle imports total 951,910 head, down 6.3 percent year over year. Total cattle exports thus far in 2022 are 192,415 head, down 36.7 percent from the record cattle export total last year. Net cattle imports for the January – July period are 759,495 head, up 6.7 percent year over year.

Cattle imports from Mexico for the year to date are down 30.2 percent year over year. The seven-month year to date total of 488,449 head is the smallest for the period since 2009. Over 99 percent of cattle imports from Mexico consist of feeder cattle, which includes 84.6 percent steers and 15.4 percent heifers thus far in 2022. Cattle exports to Mexico for the year to date include 64,226 head, up 73.7 percent year over year, of which 79.9 percent are feeder cattle, with the remainder purebred beef and dairy animals. Net cattle imports from Mexico are down 36.0 percent from last year.

Cattle imports from Canada include both slaughter and feeder cattle. For the January – July period, total cattle imports from Canada are 463,461 head, up 46.7 percent year over year. This total includes 307,302 head of slaughter cattle

consisting of 40.1 percent slaughter cows/bulls and 59.9 percent fed steers and heifers. Imports of slaughter cows/bulls are up 13.8 percent year over year and imports of fed cattle are up 28.4 percent over last year. A total of 146,845 head of feeder cattle have been imported from Canada in the first seven months of the year, with heifers making up 78.9 percent of total feeder imports. Feeder cattle imports are up 152.6 percent year over year for the January – July period.

U.S. exports of feeder cattle to Canada account for 96.2 percent of the total 120,594 head of cattle exports to Canada in the January – July period this year. This is down 52.7 percent from the record level of cattle exports to Canada in 2021. Combined net feeder cattle imports from Mexico and Canada are down 2.7 percent year over year for the first seven months of 2022.

Although cattle imports and export totals sound large in absolute numbers, the role of imported cattle is rather modest in domestic markets. Imports of slaughter cows/bulls for the first seven months of 2022 accounted for 2.8 percent of total cow and bull slaughter in the U.S. during the period. Imported fed cattle accounted for 1.2 percent of total steer and heifer slaughter during the same period. Net imports of feeder cattle from Mexico and Canada from January – July represented 1.3 percent of the estimated feeder supply on July 1.

**Ask for a Feed Analysis Report on  
Hay Before Buying or Feeding**

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### **TIMELY TOPICS OSU EXTENSION- NORTHEAST DISTRICT**

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By David A. Hillock, Brenda Simons

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

Winter is coming. Drought, deteriorating pasture conditions and short hay inventories in REPORT of the hay before you agree to buy. Oklahoma and the surrounding states of Texas, Missouri and Kansas, has most cow-calf operations scrambling to secure hay supplies for the coming winter. Given the current situation it can come as a relief to just find hay to purchase. That being said, it is still important to ask for a FEED ANALYSIS REPORT of the hay before you agree to buy.

Among the consequences of wide scale lack of moisture is fields planted to produce a cereal grain crop become drought stressed and are reduced to a hay crop. The hay resulting from these intended cereal grains is potentially of excellent quality and feed value but sorghum (corn or milo) hay needs to be evaluated for nitrate levels. [OSU Cooperative Extension Service Fact Sheet PSS-2903](#) offers a closer look at Nitrate Toxicity in Livestock. This fact sheet explains the levels of nitrates that are considered safe or dangerous, as well as feeding strategies for forage and hay supplies of varying nitrate levels.

**Additional information gained through testing hay for nutritional content includes:**

- Dry Matter and Moisture Content
- Crude Protein (CP%)
- Total Digestible Nutrients (TDN%)

measuring the Energy level. Other estimates of energy obtained include Net Energy for maintenance, lactation and growth.

**Relative Feed Value (RFV)**

This information can be used to compare “apples -to-apples” when

buying hay. Forage quality varies not only among different plant species, but also within forage species. As well, forage quality of a specific variety can vary based on conditions such as soil fertility, drought stress and stage of maturity at harvest. For example: Bermudagrass hay can vary widely in nutritional content. If you had the opportunity to purchase Bermudagrass hay at \$200/ton that tested 18% CP and 60% TDN or Bermudagrass hay at the same price that tested 7% CP and 55% TDN, which is the better buy? Both may appear the same to the naked eye but a nutrient analysis permits you to make the better buy. Furthermore it permits you to plan a feeding program knowing how much cows should consume and how much is needed to meet cows nutritional requirements. The same advantages hold true for hay you already have on inventory. The best single measure of forage quality is animal productivity. To ensure animal productivity, assess your forage supply and modify the animal diet before consumption. OSU Cooperative Extension Service Fact Sheet PSS-2117 offers deeper insight to Forage Quality Interpretations.

**References:**

<https://extension.okstate.edu/fact-sheets/print-publications/pss/forage-quality-interpretations-pss-2117.pdf>

<https://extension.okstate.edu/fact-sheets/print-publications/pss/nitrate-toxicity-in-livestock-pss-2903.pdf>

**Vaccine Handling**

Brian Freking, SE District Extension  
Livestock Specialist

Studies from the University of Arkansas<sup>1</sup>, the University of Nevada<sup>2</sup>, and the University of Idaho<sup>3</sup> have indicated that veterinary vaccine product efficacy is at risk due to improper handling and storage. Most animal vaccines require maintenance at refrigeration temperatures of 35-45°. Yet these

studies showed that anywhere from 25% to 76% of refrigerators used for vaccine storage in the livestock industry failed to maintain these temperatures.

In addition, other improper handling and storage procedures, including exposing vaccine to ultraviolet light from the sun or to temperature extremes and using improper injection techniques, can render vaccine less efficacious or even useless. Livestock do not gain immunity from vaccines that are damaged, destroyed, or altered through improper handling and storage practices.

Two common types of vaccine are killed (K) and modified live (MLV). Killed vaccines are made by growing an organism that is inactivated or killed by utilizing chemicals or heat. Modified-live vaccines are made with a virus or bacterium that is attenuated, or weakened, so the organism will not cause disease in most healthy animals but will still stimulate immunity. Killed vaccines are considered safer but typically not designed for long term immunity. Modified-live vaccines need to be reconstituted as they are not stable in solution. Therefore, when mixing MLV you should use the product within 2 hours and kept cool thus the need for a cooler as a good management practice for storing syringe guns as shown. The advantage of MLV products is they generally promote a longer active immune response.

Refrigeration temperature monitors can be a good investment. Monitor and record temperatures at least weekly. Consider the age of the appliance and the location (barn, porch, or other storage areas) of the refrigerator. Refrigerator location can have a substantial impact on how efficiently the refrigerator operates. For example, a refrigerator kept in a non-insulated barn may be adversely affected by high and low ambient temperature

extremes can damage products stored inside the refrigerator.

#### **BQA Tips to remember:**

1. Do NOT use vaccines that are or have been frozen
2. Never enter the vaccine bottle with a used needle
3. Practice good sanitation of equipment and the working environment
4. Triple rinse repeating syringes with boiling water and don't use a disinfectant as this may inactivate vaccines following cleaning
5. Record product lot numbers, administration dates, and withdrawal times
6. READ AND FOLLOW LABEL INSTRUCTIONS
7. Maintain vaccination records for a minimum of 3 years

#### **References:**

- 1 Troxel, T.R., and B.L. Barham. 2009. Case Study: The temperature Variability of Refrigerators Storing Animal Health Products. *The Professional Animal Scientist* 25:202-206.
- 2 Torrell, R. 2006. Back to Basics: Frozen Vaccines. *Angus Beef Bulletin* Oct.:72, 74
- 3 Fife, T.E., J.B. Glaze, Jr., K.S. Jensen, N.Rimbey, S.L. Kane, S.D. Baker, J. Church, S.J. Etter, D. Gunn, G. Keetch, S. Nash, S. Williams, and R.L. Wilson. 2013. *Animal Health Product Handling and Management by Idaho Producers and Retailers. The Professional Animal Scientist* 29:313-320.

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## **TIMELY TOPICS OSU EXTENSION - NORTHEAST DISTRICT**

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### **Alternative Feedstuffs**

Earl H. Ward, Area Livestock Specialist

As feed prices remain high, it leaves more people looking for alternative feeds and forages for their animals. The first question that needs to be asked is what is available? To get that answer you will have to step out of the common mindset of feedstuffs, because like humans, animals can capitalize on the nutrient value of an enormous array of products and byproducts. For instance, dairies in Kansas feeding chocolate, a Nebraska grower using ice cream sprinkles and french fries, or an Illinois feeder using discarded candy from a nearby candy factory. These may be extreme examples but for some producers these untraditional feedstuffs may provide a viable option for supplying nutrients. Once options have been identified, it is time to look at a guaranteed or sample analysis and costs. The cheapest feedstuff available is not always the most cost effective.

Below are some concerns that need to be considered when looking at alternative feeds or forages.

**1. Economics** – be sure to look at the total cost, initial cost plus freight, on a dry matter basis. Break those costs down even further to cost per pound of CP and per pound of TDN.

**2. Nutritional value** – the variation in the nutrient composition is great between byproducts but also within

a byproduct. For instance, if you were to look up the nutritional CP of corn gluten feed it would say about 22%, *Alternative Feedstuffs* Earl H. Ward, Area Livestock Specialist *TIMELY TOPICS OSU EXTENSION - NORTHEAST DISTRICT* September 2022 – Volume 42 – Issue 9 3 but the truth is that that value is an average and it could vary from load to load of product as much as 19% to 32%.

### **3. Additional Nutrients Required**

– most byproducts tend to be high in phosphorus, therefore it would be required to add additional calcium to the ration to keep the appropriate Ca:P ratio of 2:1.

**4. Limitations** – most ingredients have feeding limitations associated with them, either due to a toxicity, palatability, moisture content, etc.

### **5. Handling and Storage**

– ingredients can be offered in any shape or form. Be sure to have the equipment and facilities to handle alternative feedstuffs. Feeding alternative feeds can be an economical relief, but it is highly suggested to do your homework on the ingredients and have samples tested before making a financial investment. If you need any help evaluating your feed options, contact your county's OSU Extension office.

# Fall Gardening

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By David A. Hillock, Brenda Simons

## Vegetables for the Fall Garden

To some extent, the selection of crops will be influenced by what is presently in the garden and producing, family preference, space, water available for irrigation, and crops adapted for fall production. Some crops that were planted in the spring garden that may continue in production are tomato, okra, pepper, sweet potato, cowpea, and New Zealand spinach.

These plants may produce excellent yields in the later fall season if given proper care. If tomato, okra, or New Zealand spinach plants are too large for the space, prune them to reduce their size and also stimulate growth. If they are cultivated, it should be done very shallowly and used primarily to remove grass and broadleaved weeds. They should also be fertilized, watered, and mulched.

## Fall Gardening Suggestions

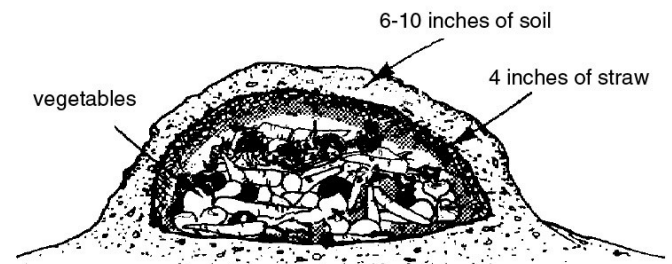
- Seeds left over from planting the spring garden may be used in planting the fall garden if the seed is stored in a cool, dry location or in a refrigerator or freezer.
- Seeds that are stored in the freezer properly should remain viable for many years. Immediately following planting, return surplus seed to the freezer.
- In order to get early established growth, supplemental irrigation is desirable. Most vegetable crops will benefit from supplemental irrigation. Information on drip irrigation may be available from garden centers and county Extension centers. This technique allows an efficient method of irrigation.
- In order to conserve on water usage, water only the furrows or rows and wait for rainfall for general watering.
- Soak seeds overnight for planting (except beans and peas). This will hasten germination and seedling emergence when soil drying is most critical to plant growth.
- Cover seeded rows to reduce soil temperature and drying (Figure 1d and 1e). Conditions that favor the germination of planted

vegetable seed and luxuriant growth also favor the growth of grass and broadleaf weed plants. Mulch the soil or cultivate when the grass and broadleaf weed plants are very small and more easily destroyed (Figure 1f and 1g). This is a more critical problem than in spring gardens.

Insect pests may come into the fall garden and seriously damage plants within a week. Frequent checks and immediate protective measures must be used. In order for control to be effective, determine what kind or kinds of pests are causing damage. Use the proper kind of control material as recommended in fact sheet EPP-7313.

## Harvesting and Storing Vegetables

Vegetables such as carrots, beets, rutabagas, turnips, and Irish potatoes, when harvested, may be stored in a cool, moist location and remain in usable condition until late winter. Place the vegetables in ventilated plastic bags in a cool basement cellar, or “store” them in place in the garden. Once produce reaches maturity, it will “keep” in place through early January. For protection during the cold of December, January, and February, the soil layer over the mound should be six to 10 inches thick. Limited quantities of vegetables may be kept in the refrigerator in order to reduce the problem of



frequent removal from the soil mound.

Other crops that produce and store easily include winter squash and pumpkin. These require cool, dry storage conditions.

Figure 2. Mound storage of vegetables.



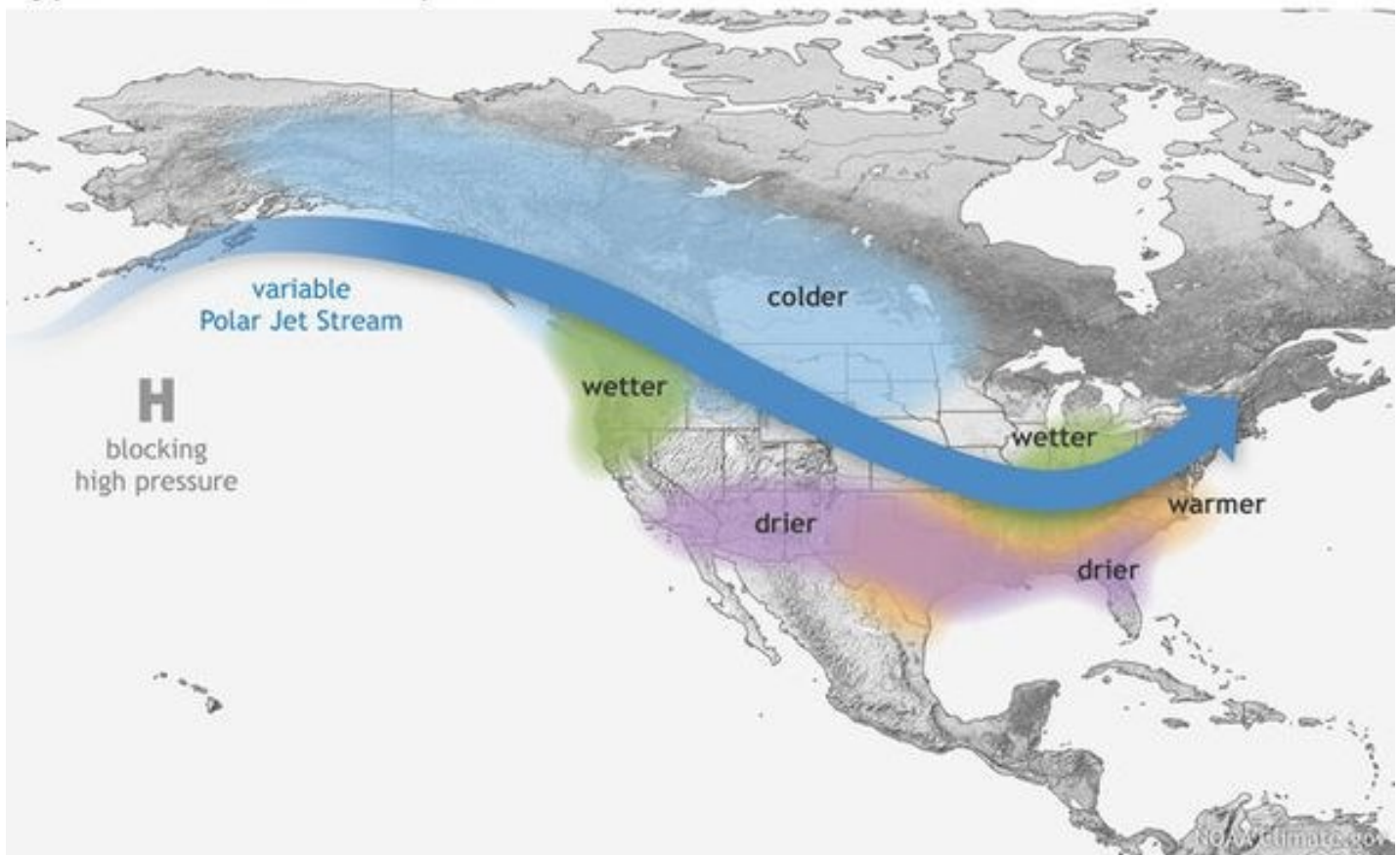
## Mesonet 3 Month weather forecast:

# OCTOBER-DECEMBER OUTLOOK

- Third straight (triple-dip) cool season with La Nina
- Above normal temperatures across entire state
- Below normal precipitation, especially SW two-thirds
- Drought persists and expands across entire state



## Typical winter La Niña pattern



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Watch for Master Cattlemen's schedule, it will be out soon.

## UPCOMING EVENTS:



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