

# Extension Connection

**AGRICULTURE NEWSLETTER**

**By: Katelyn Barthol**

**October 2016**

## Topics

**Updated Agricultural Economic Impact Reports by County Now Available**  
**Feeding newly-weaned calves**  
**Pruning Trees and Shrubs in the Fall**  
**Fall is a Good Time for Soil Testing**  
**Last Tomatoes of the Season**  
**Upcoming Events**

## Updated Agricultural Economic Impact Reports by County Now Available

By Steven Graham

The Kansas Department of Agriculture is committed to providing an environment that enhances and encourages economic growth of the agriculture industry and the Kansas economy. The department's interactive map of Kansas, showing the economic impact of agriculture broken down by county, has recently been updated to provide citizens with statistics adjusted for 2016.

Located on the KDA website, the interactive map can be used to find the agricultural economic facts for each of the 105 counties in Kansas. KDA annually updates the statistics on the map to give the state's driving economic industry the recognition it deserves. In the 66 sectors of Kansas agriculture that were recognized for this data compilation, the total output is approximately \$64.6 billion. Agriculture also supports more than 234,726 jobs statewide.

"Kansas agriculture contributes 42.8% of the state's total economy," said Kansas Secretary of Agriculture Jackie McClaskey. "Every county plays an important part in the state's agriculture industry."

The interactive map allows users to see detailed agricultural statistics including farm numbers, leading agricultural sectors and value-added data for each county. KDA utilizes facts from the 2012 census surveys conducted

by the U.S. Department of Agriculture's National Agricultural Statistics Service. The economic impact data is sourced from the most recent IMPLAN data available.

The county statistics map is available at [agriculture.ks.gov/ksag](http://agriculture.ks.gov/ksag). For updated information, click on a county and find the "2016 Full Report for County" after the county sector list.

## Feeding newly-weaned calves

As spring beef calves are beginning to be weaned, it is the producer's responsibility to help make that transition as smooth as possible.



Improper weaning can result in poor growth, which may stay with the animal through its life, according to Kansas State University animal scientist Justin Waggoner.

"I break down the weaning process into three stresses the calf is dealing with," said Waggoner, who is a beef systems specialist with K-State Research and Extension. The first and most obvious is maternal separation; the second is moving to a new environment and social structure; the third is the need for a calf to become accustomed to new and unfamiliar feedstuffs as it's transitioned from a diet of grass and milk to a total mix ration or starter pellet in a different environment.

He provided tips to help ease the transition.

\* Many calves are raised in a grassland environment. Getting them adjusted to a feed bunk is one of the most important things a producer can do in the weaning process.

If they do not eat properly there's an increased risk of disease.

\* Feeding both cows and calves a small amount of a supplement or the weaning ration out of a bunk prior to weaning when the calves are with the cows can be a good way to acclimate them to those feeds. The cows may consume most of the feed, but the calves are up there getting exposed to the bunk.

A study at the K-State Agricultural Research Center at Hays showed that where calves had exposure to a feed bunk, either through a dry lot or pasture method, a higher percentage of them approached and ate from the bunk in the critical first week of weaning than calves that had never been exposed to a feed bunk before, Waggoner said.

“The results tell us previous exposure to the feed bunk really matters,” he added. “This is especially important as newly-weaned calves are brought into a typical feedlot environment or even a set of pens. Just that adjustment can help in making that successful transition from being at their mother's side to being in a different environment.”

### **The ration**

Waggoner referenced a series of studies called the K-State Hays weaning feed management protocol, a step-by-step process used to wean calves so it would be standardized across different treatment groups. It transitioned the calves from a grass and milk diet to some sort of a total mix ration.

Weanlings are often used to feedstuffs such as grass and hay, which are not rich in nutrients, so producers must find a way to balance the familiar feedstuff with new, nutrient-rich feeds. The dry matter intake on calves is often about 1 percent of body weight, Waggoner said. The Hays protocol suggests that producers offer the calf 0.5 percent of its body weight of concentrate-based 75 to 85 percent total digestible nutrients or TDN ration. Try to limit silage and other familiar feeds. So, the calf is offered half of 1.0 or 0.5 percent of body weight of a weaning ration or pellet and half of 1 percent of body weight of good quality grass hay.

\* Positioning the feed is as important as the feed itself. Put the hay the calves are most familiar with on top of the feed ration on the first day.

\* The second day the ration should be increased to around 0.7 percent of the body weight and keep the hay the same. Put the hay on top of the ration.

\* On the third or fourth day, increase the amount of feed, but not the hay. At this time, put the ration on top of the hay.

\* Days seven through 10 of weaning, the goal is to have a calf eating 2 percent to 2.2 percent of its body weight – maybe even 2.5 percent.”

“We are trying to build a transition into the calves as they move into new feeding rations in a stabilized way,” said Waggoner, noting that this regimen balances the need to transition the calves and ensure they have enough nutrition. Often weaning calves are fed as much as they will eat which can lead to problems later.

“It is important to keep the calves eating because there are many times where we create more problems for ourselves in a weaning program by getting ahead of the calves and offering them too much feed,” Waggoner said. “The calves eat really strong one day and then the next day they back off and the intakes go up and down.”

Make sure calves are effectively prepared for the weaning transition, he said. Adequately preparing them to make that transition should pay back in terms of health and the ultimate lifetime performance of that calf as it moves to the next phase of the production cycle.

### **Pruning Trees and Shrubs in the Fall**



Though light pruning and removal of dead wood are fine this time of year, more severe pruning should be left until spring. Consider pruning to be “light” if 10% of

less of the plant is removed. Dead wood does not count in this calculation. Keep in mind that even light pruning of spring-blooming shrubs such as lilac and forsythia will reduce flowers for next year. We normally recommend that spring-bloomers be pruned after flowering.

Shrubs differ in how severely they can be cutback. Junipers do not break bud from within the plant and therefore should be trimmed lightly if you wish to keep the full shape. Overgrown junipers should be removed. On the other hand, there are certain shrubs that can be pruned back severely during the spring. Rejuvenation is the most severe type of pruning and may be used on multi-stem

shrubs that have become too large with too many old branches to justify saving the younger canes. All stems are cut back to 3- to 5-inch stubs. This works well for spirea, forsythia, pyracantha, ninebark, Russian almond, little leaf mock orange, shrub roses, and flowering quince. Just remember that spring is the correct time to do this, not now. (Ward Upham, KSRE Rapid Response Specialist)

### **Fall is a Good Time for Soil Testing**



Though we often think of soil testing as a spring chore, fall can actually be a better time. Soil-testing laboratories are often very busy

during the spring resulting in a longer turnaround from submission to recommendations. Also, soils in the spring are often waterlogged, making taking samples difficult. If your soil test suggests more organic matter, fall is a much better season because materials are more available than in the spring, and fresher materials can be used without harming young tender spring-planted plants.

Begin by taking a representative sample from several locations in the garden or lawn. Each sample should contain soil from the surface to about 6 to 8 inches deep. This is most easily done with a soil sampler. Many K-State Research and Extension offices have such samplers available for checkout. If you don't have a sampler, use a shovel to dig straight down into the soil. Then shave a small layer off the back of the hole for your sample. Mix the samples together in a clean plastic container and select about 1 to 1.5 cups of soil. This can be placed in a plastic container such as a resealable plastic bag.

Take the soil to your county extension office to have tests done for a small charge at the K-State soil-testing laboratory. A soil test determines fertility problems, not other conditions that may exist such as poor drainage, poor soil structure, soil borne diseases or insects, chemical contaminants or damage, or shade with root competition from other plants. All of these conditions may reduce plant performance but cannot be evaluated by a soil test. (Ward Upham, KSRE Rapid Response Specialist)

### **Last Tomatoes of the Season**



Cold nights are increasing in frequency now that we are into October. If you have tomatoes, you may have some that are approaching maturity. Leave them on the vine

until mature or until a frost is forecast. Tomatoes will ripen off the vine but must have reached a certain phase of maturity called the 'mature green stage.' Look for full-sized tomatoes with a white, star-shaped zone on the bottom end of the green fruit.

When harvesting fruit before a frost, separate tomatoes into three groups for storage: those that are mostly red, those that are just starting to turn, and those that are still green. Discard tomatoes with defects such as rots or breaks in the skin. Place the tomatoes on cardboard trays or cartons but use layers of newspaper to separate fruit if stacked. Occasionally a tomato may start to rot and leak juice. The newspaper will keep the juice from contacting nearby or underlying fruit. Store groups of tomatoes at as close to 55 degrees as possible until needed. (Ward Upham, KSRE Rapid Response Specialist)

### **Upcoming Events**

#### **October:**

**20<sup>th</sup>** : Master Gardener Training @  
Finney County Extension office

#### **November:**

**3<sup>rd</sup>**: Master Gardener Training  
**11<sup>th</sup>**: Office Closed - Veteran's Day  
**24 - 25<sup>th</sup>**: Office Closed - Thanksgiving

#### **December:**

**7<sup>th</sup>**: Crop Pest School @ Scott City  
**13<sup>th</sup>**: RAM Workshop @ Leoti

*If you would like to receive the Extension Connection in email form, please contact the Finney County Extension office (620-272-3670) or email ([fi@listserv.ksu.edu](mailto:fi@listserv.ksu.edu)).*