



The Wisest Pursuit



MARSHALL COUNTY RESEARCH EXTENSION

January/February 2021

Agricultural Improvement Act of 2018 (Farm Bill 2018)

Elections need to be made by March 15.

Marketing Year Average (MYA) is a weighted average of the national price throughout the marketing year.

- Corn, Sorghum & Soybeans MYA starts September 1, 2021-August 31, 2022
- Wheat MYA starts June 1, 2021 – May 31, 2022

ARC-County (ARC-CO): You can think of this program as a revenue based crop insurance program that is tied to national prices and county yields, with a 14% deductible. However the 10% payment cap makes these payment max out very quickly. They only cover a small amount of revenue loss in the event of low county yields or low national prices. Pays on 85% of base acres. We typically describe this as the shallow revenue loss option. If you think prices are going to only go down a small amount and want to protect yourself against yield losses; enroll in this program.

PLC: There is no yield protection in this program. It pays on your established yield with FSA when the MYA falls below the reference price for the crop. If prices fall this program will not be subject to payment caps until it falls below the FSA loan rate. Generally we say "Payments won't max out until you hit \$125,000 if single or \$250,000 if married." Pays on 85% of the base acres. If you think prices can really drop again, then you will want to enroll in PLC.

What programs to select for 2021/2022?

As of 1/26/2021

Wheat (All): estimated 2021/2022 MYA price \$5.32*

- **ARC-CO** – The ARC-CO payment based on the Olympic average MYA & county yields would be \$0/acre. County average yields would need to drop to trigger a payment. In an average yielding year, prices would need to drop down

to \$4.67 to trigger a payment, which would be substantially less than PLC.

- **PLC** – At the estimated price and a FSA yield of 42, a producer would receive \$9.33/acre. A payment is triggered because the MYA is below the reference price of \$5.50.

Grain Sorghum (All): estimated 2021/2022 MYA price \$4.48*

- **ARC-CO** – At the current MYA predicted price and average yields, a producer would receive \$0/acre. In an average yielding year, prices would need to fall below \$3.36 before an ARC-CO payment would be triggered (PLC would be paying much more at this price). Choose this program if you think prices will stay high. Small payments could be triggered if county average yield is low.
- **PLC** – At the current MYA predicted price, a producer with a FSA yield of 92 bushels would receive \$0/acre. Traditionally grain sorghum has been enrolled in this program because the MYA has been below the reference price of \$3.95. China is buying a lot of milo right now, doesn't mean they will continue in the future.

Soybeans (Non-Irrigated): estimated 2021/2022 MYA price \$9.50*

- **ARC-CO** – The ARC-CO payment based on the Olympic average MYA & county yields would be \$0/acre. There is a better chance for a payment in ARC-CO if a drought happens and yields are down.
- **PLC** – At the current MYA predicted price, a producer with an FSA yield of 40 would receive \$0/acre. There has never been a PLC payment in soybeans because the price hasn't been below the reference price of \$8.40 for the marketing year.

Corn (Non-Irrigated): estimated 2021/2022 MYA price \$3.81*.

- **ARC-CO** – At the current MYA predicted price and average yields, a producer would receive \$0/acre. If you think prices will NOT go below \$3.70. ARC-CO non-irrigated corn will not pay in an average yielding year UNTIL prices fall down to \$3.15 (at that price PLC would be paying better). However, if there is a drought, small payments could be made if the COUNTY average yield is down.
- **PLC** – At the current MYA predicted price, a producer with a FSA yield of 129 bushels would receive \$0/acre. This offers the most protection against prices falling. Choose this program if you think prices have the chance to go below the reference price of \$3.70.

**These MYA are still in the marketing year and are subject to change based on when grain is sold.*

Reminders Regarding ARC-County:

ARC-County payments will be calculated based on the physical location of the farm, not the administrative county.

USDA Risk Management Agency (RMA) yields per planted acre will be used as the first source of county-yield information to set revenue guarantees and calculate payments.

The benchmark yield to set the ARC-County guarantee will again be an Olympic average of the last 5 years of county yields, but low years will be replaced by 80% of the transitional yield, AND a trend-adjustment factor will be applied.

Marshall County now has designated irrigated and non-irrigated for corn and soybeans.

ARC-Individual (ARC-IC) - only pays on 65% of the base acres. Producers will want to consider changing out of this program if enrolled in it previously.

Additional Insurance Options with the Farm Bill

Supplemental Coverage Option (SCO) and the Enhanced Coverage Option (ECO) are available on your underlying crop insurance contract.

- BOTH are triggered by COUNTY average revenue NOT individual revenue. Payments are then based on the producer’s insurance liability.
- A producer can purchase one and not the other, or both.

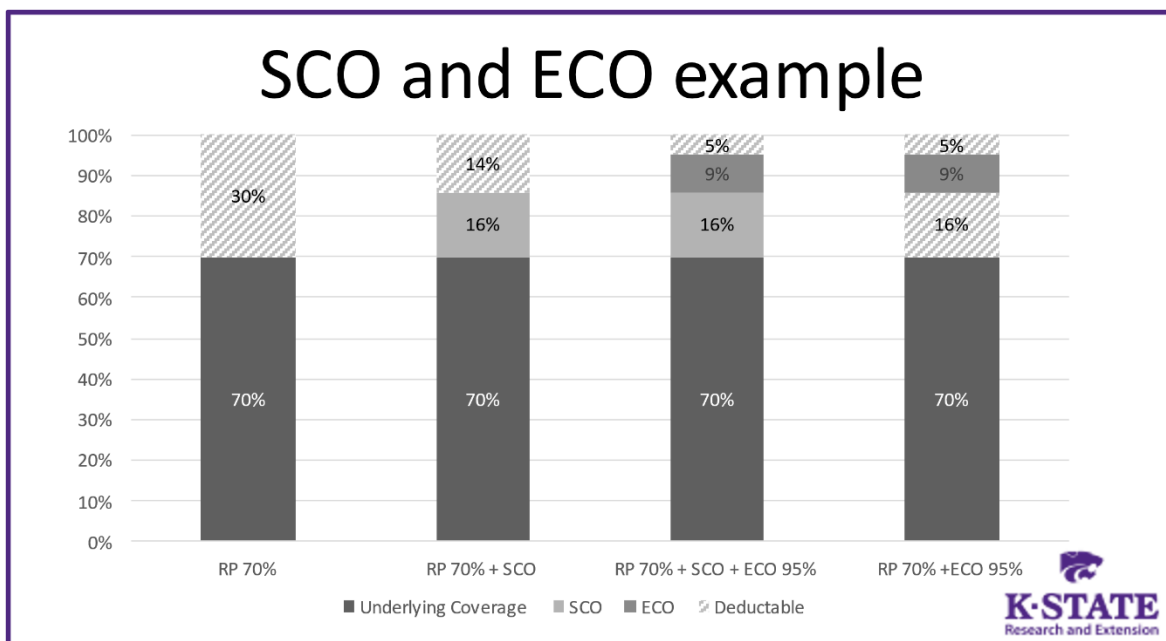
**Talk to your insurance agent for rates and more information regarding SCO & ECO.*

Supplemental Coverage Option (SCO)

- MUST be enrolled in PLC to purchase
- Coverage from 86% down to individual coverage level
- 65% subsidy rate

Enhanced Coverage Option (ECO) *NEW*

- Can be used on all insured acres
- Coverage from 95% or 90% down to 86%
- 44% subsidy if used with RP
- 51% subsidy if used with RP



Cold Stress: What is Cold to a Cow?

By: Justin Waggoner, Ph.D., Beef Systems Specialist

Most cattle producers know and appreciate that cold weather increases nutrient requirements.

Cattle are most comfortable within the thermoneutral zone when temperatures are neither too warm nor cold. The upper and lower boundaries of the thermoneutral zone are referred to as the upper and lower critical temperature. During the winter months, cattle experience cold stress anytime the effective ambient temperature, which takes into account wind chill, humidity, etc., drops below the lower critical temperature. The lower critical temperature is influenced by both environmental and animal factors including hair coat and tissue insulation (body condition). The table lists the estimated lower critical temperatures of cattle in good body condition with different hair coats. In wet conditions cattle can begin experiencing cold stress at 59°F, which would be a relatively mild winter day. However, if cattle have time to develop a sufficient winter coat the estimated lower critical temperature under dry conditions is 18°F.

Cold stress increases maintenance energy requirements but does not impact protein, mineral, or vitamin requirements. The general rule of thumb (for a cow in good body condition, BCS = 5 or greater) is to increase the energy density of the ration by 1% for each

degree (Fahrenheit) below the lower critical temperature. The classic response to cold stress in confinement situations is an increase in voluntary intake. However, it has been documented that grazing beef cows may spend less time grazing as temperatures decline below freezing, which reduces forage intake (Adams et al., 1986) and makes the challenge of meeting the cow's nutrient requirements even greater. In many cases, feeding a greater amount of low-quality hay may not provide sufficient energy. Therefore, providing additional energy by feeding a relatively higher-quality hay or grain may be required. More information on cold stress and nutrition may be found in "Beef Cow Nutrition Guide" available at the extension office.

Estimated lower critical temperatures for beef cattle	
Coat Condition	Critical Temperature
Wet or Summer Coat	59°F
Dry Fall Coat	45°F
Dry Winter Coat	32°F
Dry Heavy Winter Coat	18°F

Balanced Nutrition Helps Minimize Calving Difficulty

By Jaymelynn Farney, Beef Systems Specialist, Parsons

The most commonly dreaded period in cow-calf production for spring calving herds is about to occur – calving out heifers. There have been many strides from a genetic perspective that have reduced the proportion of heifers that need calving assistance. This has been primarily accomplished by using high calving ease sires, high accuracy sires through AI, and heifer selection tools such as pre-breeding exams to evaluate pelvic size and shape. All these tools help minimize the chance of calving difficulty. However, if nutrition and body condition are not appropriate at calving, even if you made the best genetic decisions, you can be setting yourself up for a wreck at calving.

When calving heifers, the ideal situation would be heifers that complete parturition quickly and with no-to-minimal assistance. If assistance is needed, the

earlier the better. Research shows that a greater percentage of heifers were cycling at start of breeding and a greater percentage were bred if assistance was provided early during parturition as compared to delaying assistance.

There are multiple reasons that calving difficulty can occur which may include calf too big, pelvis too small, abnormal presentation, lack of uterine contractions or fatigue, and twins to name a few. Abnormal presentations cannot be eliminated by genetic selection or nutritional management, so be prepared for these scenarios a minimum of 3 weeks before your first calf is expected.

Calf birth weight is often blamed as the sole culprit of calving issues. Calf birth weight can be affected by several factors – genetics, gestation length, and to an

extent dam nutrition. High calving ease sires typically have a shortened gestation length, hence the reason that most of those calves are a bit lighter in weight. On average, calves will gain between 1.5-2 pounds of body weight in late gestation. For example, if the average gestation length is 283 days and if a calf is born a week early it will often weigh 10-14 pounds less. Dams that experience cold stress in the last trimester may have calves that are heavier in weight. Typically birth weights are greater for calves born in the spring or winter as compared to fall born counterparts. A Nebraska study that evaluated 6 years of data found for each 1-degree F lower than the average winter temperature (December through February) calf birth weight increased 1 pound (Deutscher et al., 1999). The increase in birth weight is most likely due to the needed increase in nutrient flux through supplementation to off-set cold stress events. Now you might think, it is a cold winter and I do not want to deal with calving problems, "I will just make that cow survive on the same diet she has been on and not account for added maintenance requirements due to cold stress." That thought will lead to a plethora of other issues, that can extend through that calf's entire productive life.

Many producers and researchers have tried to manage calf birth weight through dam nutrition. The thought is that by restricting feed the calves will be lighter at birth and have fewer calving issues. This concept turns out to create more calving issues than appropriately feeding heifers. A study done at Kansas State in the 70s found that heifers that were fed 67% of nutritional requirements as compared to 100% of nutritional requirements had 7% fewer calves born alive; half as many return to estrus within 40 days of calving; calves 25 pounds lighter at weaning; and heifer calves that reached puberty 20 days later (Corah et al., 1975). Additionally, restricting heifer diet in the last trimester can result in potentially lower quality and quantity of colostrum; reduced absorption of immunoglobins from colostrum potentially driven by



weaker calves that were slower to nurse; an increase in calf scours; and reduction in overall weaning weights. A review article evaluating the effect of supplementing either energy or protein to heifers found that feeding appropriate to slightly higher nutrient content than required to heifers did not affect calving difficulty. In 9 studies where energy was supplemented to heifers, 7 of the studies showed no change in calving difficulty; whereas the others showed a slight increase in the number of heifers that needed assistance at calving. In the years where the heifers needed assistance, the winters were incredibly cold and wet. As mentioned above, typically in long periods of extremely cold weather, calf weight will be increased. When evaluating excessively supplementing a protein feed to heifers, 1 out of 5 studies showed an increase in calving difficulty with no changes in the other 4 studies.

It is very important to appropriately balance a diet for 1st calf heifers. These heifers need appropriate energy to help with the birthing process or they will "quit" on you as they just run out of steam going through parturition. Additionally, the calves need enough energy to quickly get up and nurse and if dam energy is restricted, calves will be lethargic. Proteins are essential for colostrum quality which has major lifetime effects on that calf. As you are preparing for this spring calving season, please "don't starve the calving difficulty out of your heifers".

Be sure to like our Facebook page "Marshall County Extension Service" for timely information.

Don't forget to order conservation trees from the Kansas Forest Service.

The Kansas Forest Service offers low-cost tree and shrub seedlings for use in conservation plantings. Plants are one to two years old and sizes vary from 5 to 18 inches, depending on species. Orders are accepted from now through the first full week in May each year, but order early to insure receiving the items you want.

Orders are shipped from the second week of March through May. Approved uses for these plants include windbreaks, wood lots, riparian plantings, wildlife

habitat, and Christmas trees. They may not be used for landscape (ornamental) plantings or grown for resale.

All items are sold in units. Each single species unit consists of 25 plants. For example, a unit of Eastern red cedar has 25 trees per unit. Though a single species unit is most commonly purchased, four special bundles are also available. If you want to order, come into the office and pick up a form.

Extension Farm Management Membership Available

The North Central Kansas Farm Management Association (KFMA) serves eighteen counties in north central Kansas. With the recent downturn in the farm economy, the assistance and analysis provided by a Farm Management Economist could provide producers with the decision tools to successfully navigate these trying times in agriculture.

The association economists work with farms of all shapes and sizes. Large and small, experienced operators and new, crop only, combination with livestock, & livestock only; all kinds of operations can be members of farm management. So no matter the enterprise make-up or legal configuration of your farming operation, KFMA has a program to fit your needs.

Here are some benefits of membership:

- Standardized Record Keeping System
- On-Farm Economist Visits (Twice a Year)
- Annual Farm Profitability Analysis Report
- Enterprise Profitability Analysis
- Summary Meetings
- In-Office Recordkeeping (If Needed)
- Tax Management Meetings
- Business and Economic Consulting

If you have questions about any of the Kansas Farm Management Association programs, please call either the Abilene Office at 785-263-3421 or the Beloit office at 785-738-6418 for additional clarification.

Kansas Agricultural Mediation Services (KAMS)

Kansas Agricultural Mediation Services is known for providing services including but not limited to:

- Mediation
- Financial Counseling
- Legal Assistance
- Farm & Ranch Succession

KAMS works with financial analysts from the K-State Research and Extension Farm Analyst Program, Kansas Legal Services attorneys and certified mediators to better aid the agricultural community of Kansas. KAMS helps anyone from an individual dealing with stress, a farmer looking for job placement to a family needing dispute and conflict resolution. To find out how KAMS can serve you in your current situation or help resolve issues you are facing please call the KAMS hotline, 800-321-3276.

Calls are free and confidential.

