

## **Evaluating Fall Weaning Decisions and Value of Gain**

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Calf weaning is just around the corner for most spring calving herds. There are several different methods producers use to wean and market calves. Some methods are better than others when it comes to the health of the animal. Oddly enough, the methods that result in fewer health problems are largely desired by many cattle buyers and result in higher prices but not necessarily larger profits.

One of the most common methods is to market calves at weaning. Though this is a common method, it may not be the most profitable method, and it is definitely the hardest method on the calf as it creates significant stress. Stress makes the calf more susceptible to health problems which place the calves in the high risk category for producers purchasing the animal and thus a lower price. A less common method is to wean calves for a short period and then market calves. This reduces marketing stress, but many calves fail to gain much weight during the weaning period. Additionally, they remain high risk cattle if they have not participated in a complete vaccination program.

Another common weaning method is commonly referred to as a VAC 45 program. A VAC 45 program generally provides vaccinations for respiratory and clostridial diseases while also introducing calves to a feed bunk and water trough during a 45 day weaning and preconditioning program. Calves participating in VAC 45 programs generally have a lower risk of morbidity (sickness) and mortality (death) than calves not participating in such programs. Thus, calves produced utilizing a VAC 45 program generally receive a higher price than calves that are considered high risk. Some producers take a VAC 45 program a step further and background calves for as much as 120 days. The backgrounding period provides a producer the opportunity to grow the calves to heavier weight prior to marketing.

The question now, which method of weaning and marketing is the most profitable and most suited for an operation? Some producers may also ask which method they can take the most pride in. Pride is subjective so it will not be discussed, but profits are objective and will be discussed.

Several aspects must be evaluated to determine which weaning and marketing method is appropriate this fall. The first aspect to be evaluated is if there is a marketing method available that will allow the producer to capture the added value of weaning and vaccinating calves. Such marketing methods may include a marketing alliance, weaned sale, or special feeder calf sale. The second aspect is the availability of resources to wean cattle such as a lot or pasture to wean calves, feed availability, and capital to purchase feed if needed. The third aspect is to determine if the value of weaning, vaccinating and growing calves is greater than the cost to do so. Within the third aspect is how long calves should be retained and to what weight should they be grown.

How does a producer determine if weaning and growing calves to heavier weights is the correct decision, and how heavy should they grow those animals? The answer to this question hinges largely on the value of gain (VOG) and cost of gain (COG). COG will vary widely from producer to producer while VOG will be similar across producers with similar average daily gains. VOG is related to market fundamentals and is evaluated using the current price and weight of an animal as well as the expected price and weight of an animal at a future marketing date. It is fairly easy to determine the current price and weight while the future price and weight are more difficult to determine. To help with an expected price determination producers can use the

futures market price and Tennessee basis estimate tables found at <http://economics.ag.utk.edu/publications/livestock/2015/Basis2015.pdf>. To determine expected sale weight, the producer needs to have a good idea of how calves perform on the feed being used to grow the animal.

As of the middle of August, suppose a Tennessee producer is expecting to wean calves weighing 550 pounds on October 1 at \$215/cwt. Additionally suppose the producer will carry these calves for 60 days until December 1 to either 650 (sale price: \$195.5/cwt) or 700 (sale price: \$192.8/cwt) pounds. The value of gain using Tennessee basis values and futures market prices ranges from \$88/cwt to \$111/cwt depending on the average daily gain experienced. It is important to remember that COG is an important component of this evaluation. If the COG is expected to exceed the VOG then producers may want to evaluate other alternatives. A similar valuation can be utilized by stocker producers to determine the prospects of buying calves this fall.