Weaning Methods for Beef Calves

Abby Dunn, Student Worker
Tyler Barlow, Assistant Extension Agent, Livestock and Forages

Introduction

Weaning is often considered one of the most stressful times during the beef cattle life cycle and can have long-term effects on their health and performance. In addition to being separated from their dam, calves typically undergo vaccinations, castration and dehorning around this time. These stressors can have both short- and long-term impacts. Decreased nutritional intake and immunosuppression during weaning is generally a short-term factor that is resolved with time, proper nutrition and health management. However, weaning can have a long-term impact on docility, immune system function and fertility. Taking extra precautions and time to ensure calves are prepared for this phase is crucial.

Weaning Methods

There are three main types of weaning methods. While all three are effective, different approaches may work better than others depending on the infrastructure available, location and current grazing methods and usage. Three of the most common methods are abrupt separation, fenceline weaning and two-stage weaning. Each of these could be modified to meet the needs of producers and cattle.

Abrupt Separation

Abrupt separation is the most traditional and most common method of weaning. This consists of an abrupt, total separation between the cow and calf. With this method, the cow and calf have no contact and cannot see one another. During the abrupt separation, calves are typically put into a different setting than what they were currently used to, such as a different pasture or dry lot. Over the next few days, cows and calves will unsuccessfully search for one another. Alterations in behavior, such as increased vocalization and pacing, are common during this time.

Abrupt separation allows producers to wean cattle without worrying about shared fencelines and the potential for those calves to get back with their dam. Producers also have the option to sell the calves quickly through direct marketing or at auction, which helps eliminate the cost of feeding and improves the utilization of pasture space. However, selling calves at weaning may cause some issues like high shrink loss and respiratory illness by the time of the sale. If abrupt separation occurs on site, it is best to transport the cows to the new pasture or location whenever possible, leaving the calves in a familiar environment. This can help to reduce stress on the calves.

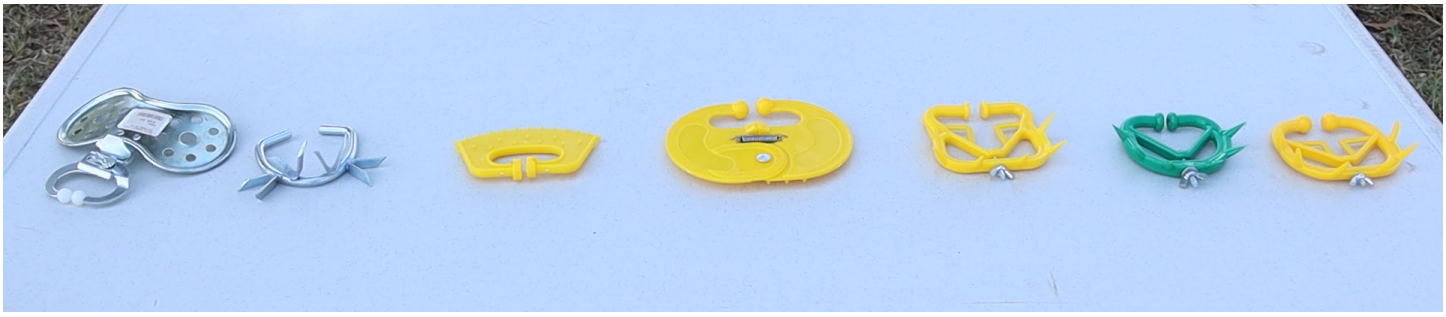
Weaned calves being hauled away from a working facility to a buyer. Photo by Ashley K. Edwards

Calves being fenceline weaned with net and electric wire. Photo by Ashley K. Edwards

Fenceline Weaning

Fenceline weaning separates cows and their calves from one another on opposite sides of a fence. With this method, they still have nose-to-nose contact, but the calf cannot nurse. A benefit of this method is that it allows calves to stay in a familiar environment while they adapt to separation. Less stress typically correlates to less weight loss. However, there are some struggles and challenges that come with fenceline weaning.

Possibly the most important thing is strong fencing. It is recommended to use at least four strands of hot wire or have sturdy, durable woven wire with one hot wire standoff. The second key to successful fenceline weaning is good grass. It is already established that good nutritional management is important to reduce overall stress. For calves being separated from their dam and kept in a familiar environment, the calves are more likely to receive compensatory gains if high-quality pasture is available. Remember that every farm is different, and some do not have appropriate facilities or fences to accommodate fenceline weaning. To successfully apply this method, producers must ensure that fencing is in good condition and that the cow or calf cannot get through to the other side.



Examples of various nose flaps available for two-stage weaning. Photo by Ashley K. Edwards

Two-Stage Weaning

Finally, two-stage weaning mimics natural weaning by first weaning the calf from milk and then physical separation from the dam. Stage one of the two-stage weaning involves the use of an anti-suckling device or nose flap. A nose flap is a metal or plastic device that is placed into the calf's nostrils to block it from nursing. Using this device allows the calf to remain at the side of the dam. The nose flap allows free range of motion by enabling the calf to continue its everyday activities such as drinking water and grazing without the need for nursing from the dam. Stage two of this method takes place after using a nose flap for approximately 10 to 14 days. The nose flap is removed, and the dam and calf must be physically separated. If facilities or pasture space is not available for fenceline weaning, this is an option producers may use.

Preconditioning Programs

An effective preconditioning program helps calves become adjusted to being weaned. Typically, calves are preconditioned anywhere from 30-60 days prior to being sold. These programs are designed to reduce stress, while optimizing both the calf's immune system and nutritional status during the transitional period of weaning. When done properly, preconditioning has shown to be effective at reducing shipping fever and bovine respiratory disease. In addition, preconditioning improves weight gain, enhances immune system function and promotes overall growth.

Summary

Weaning has a long-lasting impact on calf health and performance. When selecting a weaning method for your program, remember that each operation is different. To better prepare for successful weaning, ensure the calves have high-quality forage and/or feed, maintain your infrastructure well and avoid extreme weather conditions, such as heat. If you have questions regarding your weaning program, reach out to your local LSU AgCenter Extension office for more information.

References

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P3958-A (online) 10/25

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