

Beef Calf Weaning

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Weaning the calf involves the separation of the pair. Cattle at the David M. Barton Agriculture Experimentation Center (BARC) initiate the weaning process at approximately 205 days of age for the calf. Weaning stimulates dramatic changes for both the cow and the calf. Cows and calves can spend days aimlessly walking the fences and paddock striving to find each other plus the continual bawling.

Dr. Ellis is very positive concerning the University's calf weaning program. However, he has visually observed what he felt was calf weight loss the first seven to ten days following installation of the nose device. Thus, Dr. Ellis conducted a study to determine the weight loss or gain per week. The University utilizes a 21 day weaning program. The table above displays the actual calf weight on day one (original), day eight, 15, and 21 days of the process of the study. The calves in the study were 25 steers and 27 heifers. The genders were pooled for the study. The table starts with the initial weight on day one of the 21 day weaning procedure. The data is in pounds.

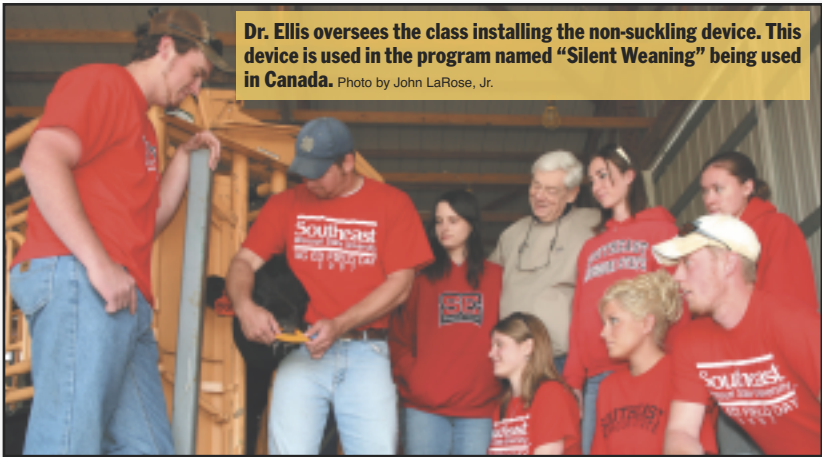
Original Weight Day 1	Weight Gains Day 1 to 8	Weight Gains Day 8 to 15	Weight Gains Day 15 to 21	Total Weight Gains
562	13	13	42	68

This activity requires lots of energy and results in weight loss, especially with the calf. The calves do not eat during this period and more weight is lost. Calves display depressed performance and some will become ill and require more expense and labor.

Weaning at the BARC has changed and improved over the life of the Southeast cow herd. Initially the cows and calves were merely separated out of sight and sound.

Calf stress and weight loss was significant. The Center followed this procedure with across the fence-line weaning. Fence-line weaning is the separation of the cow-calf pairs and placing them on opposite sides of a very good fence. This method did reduce the stress of weaning, however some still experienced calf weight loss, bawling and some degree of illness. This showed Dr. Ellis that the bawling and aimless walking was a definite result of the separation of the cow calf pairs. In 2001 Dr. Ellis learned of a weaning program named "Silent Weaning" being used in Canada. Through further research it was learned that this method involved installation of an anti-suckling nose device in each calf. This device prevented the calf from nursing their dam. Following the installation of the non-suckling device, calf vaccinations, and calf worming the cows and calves are turned back together in their paddock with the creep feeder the calves have been using for several days. It was a surprise to Dr. Ellis when pairs were returned the behavior of the pair was very similar to that prior to the anti-suckling device. The BARC staff observed no bawling or aimless fence walking. Studies conducted at other universities published that bawling was reduced by 85 percent and walking was 80 percent less. Plus the calf spent 25 percent more time grazing and eating from their creep feeder. The anti-suckling device does not prevent the calf from consuming feed from the creep self feeder.

Dr. Ellis finds that calves will start consuming creep feed quicker if the initial feed is pelleted. The University uses MFA's Cattle Charge. The second time the creep feeder is filled the University uses a non-pelleted roll and mix diet to reduce the cost of creep feeding. The balance of the creep feed is from Performance Blenders and is 20 percent rolled corn, 17.5 percent Corn Gluten, 15 percent Distillers Dried Grain with Solubles, 40 percent Soybean Hulls, 7.5 percent minerals and vitamins, 50 grams per ton Aureomycin for a growth promotion, and Bovatec. The later ration is from Performance Blenders.



Dr. Ellis oversees the class installing the non-suckling device. This device is used in the program named "Silent Weaning" being used in Canada. Photo by John LaRose, Jr.

The weight loss that Dr. Ellis thought he observed during the first few days of this process did not occur for these calves. The calves average growth was 68 pounds during the 21 day period of this weaning process.

In conclusion the present weaning program recommended by the staff at BARC is to vaccinate the calf for IBR, PI3, BVD, BRSV, 7 – way Clostridia, and Pasteurella plus worming day one of the procedure. The cost of these vaccinations, worming and booster is \$4.70 per calf. Calves receive their booster for each vaccine on day 21. Vaccinations were all modified live virus. The vaccination site is the calf neck. Producers should pay attention to the vaccine label for proper injection, subcutaneous or intramuscular. The calf is wormed and checked to be certain it is castrated. University students band the calves prior to 30 days of age and occasionally a bull calf is missed. The anti-suckling nose device is then placed in the calf and the calf is returned to its dam on day one. Milk intake has been removed from the calf's diet by the anti-suckling device, however they are with their mother and have access to the grass and creep feeder they have been consuming for the past several weeks. Dr. Ellis states again that "the anti-suckling device does not hinder consumption of creep from the feeder". The University typically will place the creep self feeder with the pairs when the average calf age is 150 days. Thus, the calves have been consuming creep feed for fifty plus days.

The University has weaned 917 calves utilizing the enclosed process since 2001. The University has had one death loss associated with the weaning time period. Produces that have further questions please contact Dr. Ellis (wellis@semo.edu or 573-270-4734). The University does not recommend nor support the usage of the commercial products used in this research, they are sited as part of our, project research.

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