



Herd This?



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Don't forget to call our office and set up appointments for:

- **Pregnancy checks for spring calving herds**
- **Bull tests for fall calving herds (recommended in the 30 days prior to the bulls going in)**
- **Herd health reviews for fall and winter calving herds**

Also don't forget to **TEST HAY** samples before beginning to feed hay (be sure to request nitrate testing)

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Focus on Weaning

Cow-calf operations are abundant and throughout southeastern North Carolina and for the majority of producers, this does not serve as a primary form of income. Cows are bred and calves are raised and sold with hopes that a nice bit of change goes into the producer's pocket or towards a tractor payment. My dad always called it "tuition on hoof," and for those of you who have children in college I am sure you can relate to this statement.



Since weaning time is just around the corner for lots of producers, this volume of *Herd This?* will focus on various methods of the weaning process. In addition, we will look at overall calf health including vaccinations, castration techniques, and deworming. We are also very concerned about the risk of nitrate toxicity this year so we have included an article on prevention, testing, and management of forages.

Weaning Methods

Weaning is a very stressful time for cows, calves and producers. The two most common methods used include fenceline weaning and abrupt weaning. There are two primary stressors that affect calves at weaning: social separation from their mothers and the movement from a familiar location to a new environment where they must develop new feeding and watering skills. Management practices that minimize stress by making this transition less abrupt can improve calf health and weight gain. Facilities, labor, and feed resources should be considered when deciding which weaning method is most likely to minimize stress on our calves while still preparing them for their next stage of production.

Calves are typically weaned around 7-8 months of age, however, the body condition of the dam as well as the environmental constraints on nutrition play primary roles in deciding when to wean your calves. During times of drought where pastures are sparse and hay is expensive, the dam's body condition may begin to fall faster than normal making early weaning of calves (< 5 months old) an option to consider. Keep in mind however, that early weaned calves do have underdeveloped

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Check out our New Website

Pineview Veterinary Hospital is dedicated to keeping our clients informed about current events and providing educational articles to assist you in the management of your large animals.

Therefore, we have created a NEW website that we hope you will find very user-friendly and educational. Not only does it give information about our business and the services we provide, but you will find links to all our newsletters as well as educational articles about particular conditions. It is a little weighted toward the horse side now but it is a work in progress and we are developing the cattle and small ruminant resources so check back often.

In addition, don't forget that we have a Facebook page that is listed as Pineview Veterinary Hospital. If you stay connected thru this venue, be sure to "Like" us for up-to-date news.

Additionally, if you have pictures you would like to post to our Facebook page or website, feel free to email those to us.

Our new website is listed below:
www.pineviewvet.com

“Cancer Eye”

“Cancer eye” is caused by a type of cancer called squamous cell carcinoma which forms growths on the eye, eyelids or third eyelid. Cows with white around their eyes or calves born to dams that have or have had cancer eye are more predisposed to getting cancer eye. If caught early, surgical removal of the mass is sometimes effective and later in the disease process, removal of the eye (enucleation) works well to remove the cancerous growth. These strategies buy time but ultimately culling should be heavily considered to decrease the incidence within a herd. Contact our office for more information or if you have any questions about cancer eye.



The success for removal of masses on the eye or the third eyelid while they are small is much better than when they are large and involve the eyelids as pictured below.



Castration Methods

Opinions vary as to the best time to castrate calves and right now research suggests little difference in final weaning weights between calves castrated early (1-3 months old) and those castrated late (> 5 months old). However I would suggest you use some method of castration by the time the calves are four months of age. Calves castrated later than this have greater setbacks from the surgical procedure and take longer to heal than those castrated earlier. The best time to castrate calves is in the spring, winter, or fall when the fly population is low and the likelihood of wound irritation and infection is decreased regardless of which castration method you perform. There are three commonly used methods of castration which are broken into surgical and non-surgical forms. The three most commonly used methods are surgical castration, banding (elastration) and crimping (emasculator). Each method has its own advantages and disadvantages.

Surgical castration is the preferred method of choice as it ensures 100% removal of all testicular tissue from the calf. This is performed by removing the bottom third of the scrotum and then removing each testicle in its entirety. We prefer this be done when the calf is processed at a day of age because there is minimal bleeding involved and recovery is rapid. This method of castration does require some experience and should not be performed on calves above the age of 5 months without a veterinarian present due to the possibility of hemorrhage from the cutting of large vessels.



The ideal time to castrate is at processing, when the calf is one day old.

Banding or elastration is performed by placing a particular type of rubber band around the neck of the scrotum which cuts off the blood supply to the scrotum causing the testicles to slough off in about three weeks. If both testicles are not felt below the band within the scrotum then this can lead to a retained testicle. When this happens, the animal can potentially breed and it is much more difficult to remove the retained testicle due to the scar tissue that develops after this method is used.

This is a bloodless or non-surgical method of castration and most commonly is used for calves less than a month old. There is a much higher risk of tetanus associated with banding compared to surgical castration, especially in calves older than a month of age. Therefore, we recommend calves be given tetanus antitoxin and toxoid at the time of banding, especially if they are older than one month of age and the Callicrate Bander is used.



The final form of non-surgical castration commonly performed is known as crimping which is performed using a Burdizzo emasculator. This is essentially where the neck of the scrotum is crimped over each spermatic cord. This crushes the nerve and blood supply to the testicles causing them to shrivel up and become non-functional after a week or two. This method is often not 100% effective at eliminating testicular function and because the testicles are still present, buyers may pay bull prices for your animals which will hurt your profit margin.



There are two forms of pain associated with the castration procedure. Acute pain, which is short-term and associated with the procedure itself and chronic, long-term pain, which lasts days following the procedure. Minimizing the long-term pain is important for providing appropriate animal welfare, enhancing growth performance, and minimizing immune suppression. Research out of Nebraska suggests that the stress associated with the surgical castration procedure lasts 3-8 hours, with calves not eating or drinking and spending large portions of their time laying down. After this time frame there is minimal pain and stress noted and, 35 days out, calves that were castrated were of the same weaning weight as non-castrated calves. When comparing castration methods, the research indicates that banding has a long-term pain period associated with it and therefore is not recommended as a primary form of castration especially if other forms are available for use.

Weaning Methods (continued from page 1)

immune systems putting them at risk of disease throughout the entire weaning process. Unfortunately, this is sometimes a risk we have to take during tough times, such as this year for many producers. One way to promote good health of your early-weaned calves is through proper vaccination of the dams. This ensures that calves will receive the proper antibodies through their first milk (colostrum) following birth. Having these antibodies on board helps jump start their immune system allowing them to be better prepared for viruses and bacteria they will be exposed to.

Fenceline weaning may be an appropriate choice for weaning your calves if you have plenty of fenced in, secure pasture space. Fenceline weaning requires cows and calves to be separated from each other by a fence of some kind for at least a week where they can still see and hear each other but the calves are unable to nurse. Performing fenceline weaning at least thirty days prior to the sale of your calves will give their immune system a chance to catch up and be strong once they reach their next level of production. It also decreases the stress associated with weaning by allowing the calves to see and hear their mothers. These calves are more likely to continue eating and exhibiting normal behavior throughout the weaning process.



Fenceline weaning appears to have the least impact on calf performance

Many producers are more familiar with the method of abrupt weaning. This is where calves are removed from cows and either moved to a location distant from their dams or loaded straight on the trailer for sale or shipment. This form of weaning is preferred by producers who have limited extra time on their hands and may or may not have extra fenced in areas in which to keep weaned calves. If this method is used, it is preferred to give the calves a 30-60 day backgrounding period on your farm where they are fed additional feed and appropriately vaccinated so that they are better prepared for the stress ahead. If abrupt weaning is coupled with immediate transport, the calf's immune system is unable to recuperate from the stress of weaning and prepare itself for the stressful events to come in the future (sale barn, trailering, comingling, new feed, new environment, etc.) and they are much more prone to develop disease and become unthrifty.

In 2003, California researchers published results from a three-year study that compared the behavior and post-weaning performance of calves that were either not weaned, fenceline weaned or abruptly weaned. Results of the study indicated that, aside from vocalization, fenceline weaned calves exhibited similar behavior to the non-weaned calves, and the fenceline weaned calves spent more time eating than did calves weaned abruptly. The fenceline weaned calves gained at least 50% more weight the first two weeks after weaning than calves weaned by other methods and they retained that weight advantage through at least 10 weeks post-weaning.

When considering when to wean your calves I encourage you to look at your environmental resources (pasture, hay supply, etc.) as well as the overall body condition of your cows nursing calves. As their body condition dips down it is important that it does not go below a body condition score of 4 out of 9 because after this point it becomes challenging for the cow to acquire that condition back. This leads to more financial cost to you, the producer, and in turn puts less money in your pocket or towards that tractor payment. Consider which method of weaning you think would work well with your calves and, as always, feel free to call our office with any questions or concerns you may have in the future about any herd related needs including weaning methods most appropriate for your herd.



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**So whether you eat or
drink or whatever you
do, do it all for the glory
of God.**

1 Corinthians 10:31

Pineview Veterinary Hospital is a large animal veterinary practice meeting the needs of large animals in southeastern North Carolina and northeastern South Carolina.

Our mission is to provide high quality service to our clients coupled with the most advanced and progressive veterinary care for our patients with an emphasis on preventive and herd health medicine.

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There is no one vaccination program ideal for every producer. However, working closely with your veterinarian will allow you to create the most appropriate and cost effective program that will protect your calves from the common diseases they will be exposed to following the weaning process. Ideally, calves should be vaccinated prior to weaning for the following diseases listed in bold:

IBR
PI3
BVD Types 1 and 2
BRSV

Clostridial diseases (7or 9-way)

Booster vaccinations for the above diseases should be performed no later than 3-4 weeks following initial vaccination and should ideally be completed 3-4 weeks prior to weaning. This will ensure an adequate immune response from the calves and provide the best protection going into the stress of weaning. Which product to use in terms of live vaccines or killed vaccines should be discussed with your veterinarian and depends on several factors including what your cows were vaccinated with as well as your facility design. Calves should also be dewormed at this time with a pour-on dewormer such as Cydectin or Dectomaxx or an oral dewormer such as SafeGuard. If you have any questions or concerns please contact the office and Heidi or I would be happy to work with you in creating your own unique calf vaccination program.

Other vaccinations that may be needed are:

Pasturella
Heamophilus
Leptospirosis (5-way)
Vibriosis

Watch Out for Nitrate Toxicity This Year

With the extreme drought conditions we had earlier in the summer, a condition that should be high on every cattle producer's radar this year is nitrate toxicity. This condition can be devastating to a herd by causing high rates of sudden death within hours of exposure as well as reproductive losses and reduced weight gain in growing cattle. While the drought may be over for most, the risk to your cattle is not over as the nitrate levels may be high in both the hay you baled as well as the forages you stockpiled.

The primary thing you can do to

prevent problems from nitrates is to test your hay and/or forage. NCD&CS tests for nitrates for free but the sampling method is important therefore please call our office and we can advise you on how to do this. Any hay with a nitrate level greater than 0.5% must be fed on a limited basis to your lower risk animals and any over 1% may need to be destroyed if the cattle are not adapted to high nitrates. In addition, there is a product called Bio-Vet Strain P5 Capsules that will convert the nitrate to ammonia and reduce the risk of nitrate toxicity to cattle. This product must be bloused to

cattle at least 10 days prior to consuming the high nitrate forage or hay in order to be effective and the cost of it is about \$8.60 per head.

Other prevention methods you should use are only applying nitrogen at appropriate levels, not allowing the cattle to overgraze since the nitrates are much higher in the lower six inches of the plant, and ensiling your forages (which decreases the nitrates some). Please give us a call to discuss an appropriate strategy for your herd to prevent this devastating condition from affecting your cattle.

An excellent resource if you would like more information is:

http://www.cals.ncsu.edu/an_sci/extension/animal/nutr/nitrate%20management%20in%20beef.pdf