



# River Valley Veterinary Clinic

## August 2016 Newsletter

### Why the Long Tail?

In recent years, the welfare of agriculture animals has entered the public eye, and consumers expect that the animals producing their food are well cared for and treated humanely. The routine practice of tail docking cattle would then come as a shock to the uneducated eye and seem incredibly unnecessary and inhumane. Tail docking cattle has been in practice for a hundred years, but just as so many other aspects of animal agriculture have changed in the last century, tail docking can now easily be avoided given current practices of facility design and management, vaccination and cow hair care.

Routine tail docking began in the early 1900's in New Zealand as a method of reducing the incidence of leptospirosis in milkers. Additional goals of docking included improved worker comfort, improved udder cleanliness, reduced incidence of mastitis and improved milk quality. In the 1990's, research began to focus on the rationale of tail-docking, and the popularity of the practice began to decline around the world. It's no longer common in New Zealand, its country of origin, and it is prohibited in Denmark, Germany, the Netherlands, Norway, Scotland, Sweden, Switzerland, the United Kingdom and some Australian states. In the United States, it has been banned in California, Ohio, Rhode Island and New Jersey. A 2007 survey from the National Animal Health Monitoring System found that only 38.8% of cows in the US have docked tails and 14.6% of farms had all tails docked. In the western states, 81.3% of herds have no docked tails and 48.4% of dairies in eastern states are not docked.

The research that has farms changing their stance on tail docking has addressed each of the goals behind routine tail docking. In a study performed on eight Wisconsin dairies in 2002, there was no difference in the somatic cell count between groups of cows with docked or intact tails, nor was there a difference in the prevalence of mastitis-causing microbes between groups. It was concluded that there was no difference in udder or leg cleanliness or milk quality associated with tail docking. Another study came to the same conclusion based on four measures of cow cleanliness and two of udder cleanliness. Tail or not, clean cows are more a result of routine facility

management like scraping stalls, alleyways and the parlor. A properly designed freestall or tie-stall will position cows to defecate in the alley or gutter and away from their legs and udders.

The public health concern of cows transmitting leptospirosis to workers remains relevant. The infectious leptospire is shed in the urine of an infected animal and infect a new target, be it another cow or a worker, through scrapes or mucous membranes. When tail docking was first introduced and for a long time thereafter, leptospirosis was so highly associated with dairy workers it was called 'Dairy Farm Fever' and 'Milkers' Fever.' While it is still present in US herds, it is not common largely due to routine vaccination starting in calves and is boosted yearly or with every lactation. Even if a cow is infected, vaccination reduces or even prevents leptospire from entering the urine thus eliminating the chance of transmitting infection regardless of how the urine comes in contact with a worker. A key study performed all the way back in 1982 found that the leptospirosis titer in workers was not associated with tail docking. It was suggested that transmission in infected herds occurred in other ways than direct contact with a tail, such as being near a cow when she decides to urinate regardless of the length of her tail.

Other researchers focused their work on how many times a docked, complete or switch-trimmed tail came in contact with milkers in a rotary parlor. Overall, they found that there were very few instances of tails contacting milkers: 1 in 10 cows brushed the milkers' arms and 1 in 1000-1500 cows brushed the milkers' faces. From the standpoint of transmitting infectious disease, this is infrequent, but these cows should be vaccinated anyway so the chance infection goes down even more. Being swatted by a dirty, wet tail even once can be disgusting, but wearing a long-sleeved shirt or arm protectors allows for easy clean-up and ease of mind. If the parlor is properly ventilated for cow comfort, the extra layer of fabric on the arms shouldn't pose a problem. As for the tail-to-face contact, the face would have to be positioned just so for contact to happen, which would call into question why the face is there in the first place.

Another important consideration - possibly the most important - is the welfare of the cow herself. At the time of banding, which is the most common method of docking the tail, a cow experiences minor discomfort for a short time. However, there is the risk of chronic, or neuropathic, pain from damaged nerve endings growing into a disorganized bundle called a neuroma. Neuromas are associated with chronic pain including the phantom limb pain experienced by human amputees. They have been found in docked cattle at slaughter as well as in lambs, pigs and dogs that were tail-docked for various reasons.

Fortunately, the process of banding does not cause a significant amount of stress in heifers as measured by the changes in levels of the stress-related hormone, cortisol. For calves, the associated stress of docking is similar to that of being handled or bled. However, the necrotic tail tissue is prone to infection, especially with clostridial strains, causing local and systemic infections which are stressful and painful.

On a daily basis, an intact tail is very important in fly control. Cows with docked tails will have twice the flies on their rear legs compared to intact tails. The presence of Stable Flies is associated with increased stress, decreased milk production and weight gain and disrupted grazing behaviors.

The best method to transition away from routine tail docking is by trimming the switch, which is the recommended alternative from the National Milk Producers Federation and the National Dairy FARM (Farmers Assuring Responsible Management) program. There are many hair-trimming options, some of which are already on farm. Scissors or sheep shears are cheap, easy, fast and likely already on farm where they can also be sharpened. The only downside is they are sharp and can injure the cow or the operator; so don't run with scissors! Also, the switch remains on the side of the tail. The next step up is a hose or tube cutter which has the same benefits as scissors but they can make the trim in one cut. There are similar disadvantages as well, along with the risk of accidental finger amputations. Electric clippers are easy to find or already on farm but they are slower and blades dull quickly on dried manure and sand and are difficult to sharpen.

The fastest, but most expensive, option is a trimmer attachment for a cordless drill. It will trim the tail in 3-4 seconds with no pre-trimming required and minimal risk of operator injury. In addition to being expensive, it can't be sharpened on farm, burns through drill batteries quickly and the drill is not provided.

A few modifications to a milking parlor reduce tail-to-arm (or face) contact. Most parlors already have some sort of manure shield/butt plate that deflects the majority of manure and urine to the ground, but can be modified to provide additional protection. A trough can be installed for the tail to rest in and be out of the milker's way. Wire grating over the gutters would allow manure to pass into the gutter but hold a long switch above the manure. In tie-stall or stanchion barns, a simple tail-tie made of bungee cord between the lower tail and the ceiling holds the tail out of range of contamination.

National quality assurance programs have developed and are implementing plans focusing on food safety, environmental stewardship and animal health. At the forefront is the National Milk Producers Federation which will require all member farms to end the practice of tail docking by December 31, 2016. This includes all participants of the National Dairy FARM program. Additionally, a number of veterinary associations have made statements strongly opposing the practice of routine tail docking. These include the American Veterinary Medical Association in 2014, the American Association of Bovine Practitioners in 2010 and the Canadian Veterinary Medical Association. The most compelling association to make a statement is the National Mastitis Council (NMC) in 2011 stating that the "[NMC] knows of no evidence that tail docking improves cow welfare, cow hygiene, or milk quality. NMC, in agreement with other professional organizations, opposes the routine use of tail docking in dairy cattle." The NMC is highly respected in the veterinary community for the latest research, educational materials and protocols. If this organization that is, according to its mission statement, "devoted to reducing mastitis and enhancing milk quality," opposes routinely docking cow tails based on published, peer-reviewed research, it might be time to reconsider the practice.

*Sources available online at [rivervalleyvet.net](http://rivervalleyvet.net)*