



Are Rump Structures Getting Worse?

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Are our rump structures getting worse?

Longevity is the key to profitability, especially when you bear in mind heifer rearing and replacement costs. The whole breeding cycle from calving to calving is geared towards cows producing milk economically getting back in-calf. Getting cows in-calf, especially high production cows, relies on meticulous attention to detail in all the potential affectors, such as nutrition, heat detection, diseases etc. This is a difficult enough task without having any conformation defects in the cow to contend with. Rump structure is one of the most influential direct traits on breeding (fertility and calving ease).

High pins, narrow pins and thurls, inset tail heads and advanced anus's all have a deleterious effect on fertility in one way or another. Rump structure also correlates strongly with locomotion. The tracking of cows is very dependent on pelvic width and thurl position, which will obviously affect longevity through the basic inadequacies of locomotion and cubicle handling. High pins can, but not necessarily, go hand in hand with inset tail heads and advanced anuses, plus the probability of elevated pin bones. With the abnormalities mentioned, the anus lies in front of the vulva, making the latter prone to contamination when the cow dung's. There is potential for local infection to set up, which is often accentuated by wind sucking due to this poor perineal conformation.

When the rump slopes up from hook to pin, the reproductive tract lies at a steeper angle than normal. This predisposes to urine pooling, as gravity will obviously cause urine to flow downhill, unfortunately towards the uterus and not outward. This urine pooling causes irritation and localised infection of the vagina, cervix and uterine lumen. Thus vaginitis, cervicitis and endometritis may result, what we commonly call whites. This will cause persistent infertility unless corrected or improved.

The urine pooling is made worse by excessive weight loss that occurs during early lactation and in aged cows, reducing the fat pad around the reproductive tract. This loosens and lowers the tract, and hence steepens the angle down to the uterus, predisposing to urine pooling. A similar problem is seen in horses where mares through advanced anuses, weight loss and other various causes will pool urine. We at Nantwich Veterinary Group are currently experimenting with a surgical technique on cows similar to that

used on mares. However, this will never be the answer, breeding policies need to be addressed. It is very pleasing that our society, after their classification workshop, is taking positive steps to sort out and prevent a problem that will be detrimental to our breed.

Canada also realised a similar problem 15-20 years ago, when a lot of the great old sires had a tendency to raise pin bones. It was so well recognised, the association of this with poor fertility, that their society took action in their classification to prevent it escalating. High pinned cow regardless of how correct elsewhere were not classified above GP.

Wind suckers, like urine poolers, are a cause of the repeat breeder cow. Although not the answer, we use an equine technique called Caslicks to part stitch the two vulva's together, preventing the vaginal vacuum and hence wind sucking. This certainly improves the conception rates on problem cows.

The show-ring, being the Black and White shop window, has been guilty for a long time in tending towards raised pin bones. We aim for cows with high rear udders and square level rumps. This all tends towards pushing the pins up slightly, which is usually well-hidden by strategic clipping. The tracking of these big cows must be monitored because, as far as I am concerned, cows must handle cubicles and it must only be the wishes of the owners that they don't use cubicles and not the requirement of the cow.

It has been proved many times that the size of a cow, width of pins, rump length and rump angle all affect calving ease. Rump score is a good comprehensive measure of rump desirability, involving width of thurls, hips and pins, rump angle, loin strength and tail head set. These are favourably related genetically to ease of calving. Nowadays, it is not only continental beef bulls that are prone to calving difficulty, but many Holstein sires with deep and wide chested offspring that can be a bit stiff to pull out. Pin and thurl width play a significant role in achieving easier calving.

Difficult calvings not only create problems at the time of calving but also in the following conception of the cow. Heifers, especially after a tough calving, can have extended calving to conception through damaged and resultant scar tissue in the vulval (causing windsucking), vaginal and cervical areas. Localised infection (whites) often occurs thereafter.

The very frustrating downer cow scenario, as we know, has got many potential causes and has seemed to have increased in frequency over the last decade. We are all pushing our cows for more milk to optimise profits, which if not balanced with a correct milking and dry cow ration can cause a multitude of problems. Narrow pins and thurls, as already mentioned, increases incidence of difficult calvings and will thus increase the likelihood of nerve damage around the pelvic area. This is made worse by a decrease in fat coverage/protection around these nerves, especially with cows pushed hard in the previous

lactation. So with a difficult calving, the increase in pressure on the nerves can too often result in nerve damage and then either a short term or long term downer cow.

We must be very careful when we select sires for ease of calving, as one day the resultant heifer calves will too have to be calved!

For the benefit of our breed and the dairy farmer, these problems need to be addressed in order to achieve a longer lasting cow, increasing dairy herds' profitability.