Dairy Newsletter June 2023

CAMPERDOWN VETERINARY CENTRE

CVC CLINIC NEWS

Welcome to the June CVC Dairy Newsletter. We are starting to get close to the joining period for many of our farmers so this newsletter will focus on bulls. We also have some big news at CVC. Nessy has officially gone on maternity leave and we look forward to meeting her little one very soon. We don't think we will be able to keep her away from the clinic for long so we are sure you will be seeing her again very shortly!. We also have Gemma returning to the CVC team full time this month. Many of you would have already met her when she locumed for us earlier in the year. We are very excited to have her friendly face and expertise back in the clinic. Our clinic will also be changing our trading hours, offering routine late night consults for small animals and drug collection Monday, Tuesday and Thursday starting the 19th of June.

New trading hours starting 19 June

8am – 7pm Monday
8am—7pm Tuesday
8am– 5:30pm Wednesday
8am– 7pm Thursday
8am– 5:30pm Friday
9.00am – 12:00pm Saturday

Ring (03) 5593 1077 for emergencies

VIBRIOSIS

One of the main venereal diseases in cattle is Campylobacteriosis (aka vibriosis). Infection is caused by a bacteria called *Campylobacter foetus* which generally causes asymptomatic infection (no clinical signs) in bulls and reproductive failure in females. Reproductive failure can include **early abortion**, **extended breeding seasons** and **lower calving rates** in your herd.

Vibriosis is a venereal disease which means it is spread through mating. It can affect both bulls and cows however in most cases, your bulls are the primary carrier. Bulls can be infected for long periods of time with little to no clinical signs. Infected bulls then pass the bacteria on to dams during breeding resulting in poor fertility and reproduction losses. It generally lives in the crypts and folds of the prepuce of infected bulls and since it doesn't usually have clinical signs in bulls, you often may not know your bulls are carrying this disease prior to joining. Vibriosis is generally introduced to a herd though unsuspectedly buying in an infected bull. Vibriosis generally has greatest affect on naive cattle (so is most commonly seen in heifers).

When an infected bull joins with a naive cow (a cow who has not previously been exposed) bacteria will enter the vagina, sometimes producing a small amount of pus/discharge. Within a week, infection can spread to the uterus causing inflammation of the uterine lining. Generally infection will not stop the cow becoming pregnant but the irritation to the lining of the reproductive tract may stop the cow's ability to maintain pregnancy. In some cases, irritation can result in permanent damage to the reproductive system preventing the cow from becoming pregnant in the future. In the majority of cases however, cows will mount an immune response and eventually get in calf although pregnancy rates can be reduced up to 20% and calving periods can be greatly extended.

SIGNS OF VIBRIOSIS IN YOUR HERD

Abortion. Cows can become pregnant while infected but are unable to maintain the pregnancy and therefore vibriosis should be considered as a possible cause in any abortion cases, especially when more than one cow has aborted. Cows generally abort 2-4 months after joining

Poor conception rates. While vibriosis is generally self curing in cows, when bred with active infection, most cows will fail to conceive initially. Once they have developed some immunity to the disease, they may have better conception rates.

Drawn out calving periods. Some cows will eventually overcome the infection and become pregnant later in the breeding season, whereby extending your calving periods which are harder to manage.

TREATMENT: *Campylobacter foetus* can be susceptible to certain antibiotics. Double vaccination 4 weeks apart has also been reported to help cure vibriosis.

PREVENTION: *Vaccination*: Two vaccinations one-month apart are required for protection and should be completed at least one month before intended joining time. Both bulls and cows should be vaccinated initially and in herds with confirmed infection, annual vaccination of bulls and replacement heifers should be performed.

Decreasing Bull Age: Carrying younger bulls and culling older bulls reduces the risk of infection with vibriosis. Bulls over the age of eight should be culled.

Annually culling dry / empty cows: This will remove any cows or heifers from the herd that may be carriers of infection or are unable to conceive permanently from an infection.

Don't share bulls: while it can be tempting to help a neighbor or friend out, lending them a bull or two might severely impact your future conception rates.

Whole herd AI: this will eliminate transition of disease.

VETERINARY BULL BREEDING SOUNDNESS EXAM

Its coming to that time of the year again when we need to start talking bulls.

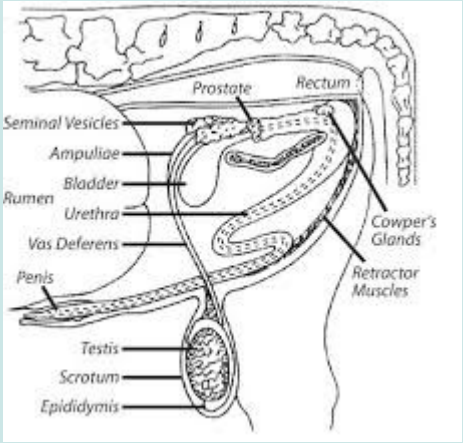
We recommend bull testing be performed at least 6 weeks prior to your mating start date in case any abnormalities are detected or replacement bulls need to be sourced.

JOKE OF THE MONTH...

How do you stop a bull from charging other bulls?

The Veterinary Bull Breeding Examination (VBBSE) is a standardised procedure designed to determine a bull's risk for reduced fertility. By determining their fertility risk we can make recommendations about a bull's ability to get cows pregnant.

The VBBSE consists of the following steps:



Physical examination—This includes examining the bull's locomotion from a distance and in the crush. Body condition, eyes, teeth, legs, feet, testes, prepuce and internal reproductive organs are all assessed for any abnormalities that may affect their fertility. Scrotal circumference is measured using a Reliabull device. Scrotal circumference is used as an indication of a bull's daily sperm output and is highly heritable. It has been found to be correlated with the age of puberty in the bull's offspring.

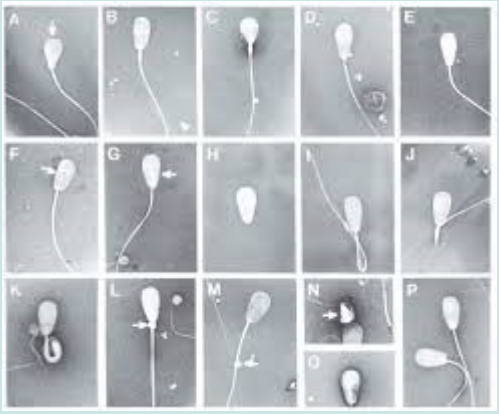
Penis examination— An electroejaculator or rectal massage is used to get the bull to exteriorise the penis for assessment of anatomical abnormalities or disease.

Crush-side semen evaluation — A sample of semen is collected using the electroejaculator and examined using our iSpem device or a microscope. The iSperm device is a device which attaches to an iPad and allows immediate analysis of semen concentration and motility.

Semen morphology—Semen may be submitted to a specialist laboratory for morphological examination. Morphology can identify microscopic abnormalities which may prevent sperm from fertilising an egg and resulting in a pregnancy.

Recommended Minimum Scrotal Circumference for Bulls	
Age	**Minimum Circumference**
Yearling	32cm
2-year-old	34cm
>2 years old	38cm or 36cm provided the tone of the testes and turgor of the tail of the epididymis are both good.

Vibrio vaccination & BVDV testing—Bulls can be vaccinated to prevent Vibriosis, a bacterial disease causing infertility and abortions in cattle. An ear notch can also be collected from each bull to determine if they are a carrier for Bovine Viral Diarrhoea Virus (Pestivirus).



Serving ability assessment— This is performed in a yard with heat synchronised cows to observe the bulls successfully mating. Serving ability tests are used to identify bulls that have difficulties mounting, poor libido or penile defects that prevent successful mating's. This step may not always be performed depending on the situation.

If you would like to book in your bull testing or speak to one of our vets about your bulls, please do not hesitate to contact us on 5593 1077.

TIPS FOR MANAGING BULLS IN YOUR HERD

Reproductive performance and semen production can be affected by any lameness or disease which causes an increased temperature or inflammation. Therefore any bull which is unwell or lame should be removed from the herd immediately and veterinary advice sought.

One of the most common reasons a bull may not want to work is lameness. Our vets can place blocks on their feet prior to joining to provide additional support and minimise lameness during the joining period. Where possible, avoid bringing bulls into the dairy as they are very heavy animals and will quickly wear down their feet if made to walk to and from the dairy each day.

We always suggest having extra bulls available so that joining is not impacted negatively if a bull breaks down or is injured.

Answer: you unplug it!