



**TCI**  
**GlenBred**  
protect | preserve | enhance

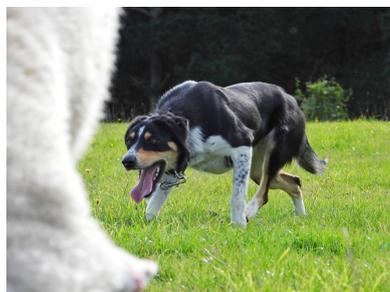
*puppy  
chatter!*



# TCI PHOTO COMPETITION WINNER!

**Thank you Teresa for submitting this great photo, taken from a sheeps prospective of TCI heading bitch "Liz" working the sheep.**

Thank you so much to all the people who emailed in photos for the competition and for us to use in publications. It is great to be able to show case your beautiful TCI puppies and dogs.



## OTHER STORIES INSIDE THIS ISSUE:

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Bloodline Forever

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# Exciting new venture

## Welcome to TCI GlenBred!

Wow! What a September we have had. I never would have imagined when we started TCI Vets, just 6 years ago, that we would now be TCI GlenBred. MVS GlenBred have been a team I have looked up to with immense respect on our own journey in the canine reproduction field, so I couldn't be more chuffed that we have inherited the knowledge, resources and history of such a New Zealand institution. Some of the semen we have received in the transfer is from the early 1990's frozen by the founder of GlenBred, Dr Marion Wilson. Pretty neat!

Prior to MVS's successful management of GlenBred for 10 years, it was run by Dr Marion Wilson in the Manawatu. Many of you may recall the perilous drives up to Marion's facility in back country Feilding. Marion is a pioneer of canine reproduction and we are so very honored to be able to continue with the work she so diligently started many years ago.

As you may be aware, the Totally Vets building was purpose built just 10 years ago and we take advantage of their state-of-the-art equipment such as DR x-ray and ultrasound scanner and have direct access to a range of specialist veterinarian services such as EyeVets and Apex Cardiology.

TCI GlenBred are pleased to advise that Dr Andrea Hesser, an American Veterinary Specialist in Reproductive Medicine & Surgery, will provide remote specialist input.

TCI GlenBreds' combined expertise, experience and state of the art equipment makes us New Zealand's' only dedicated canine reproduction practice.



**PROTECT THEIR BLOODLINE FOREVER:**

# **COLLECT & FREEZE YOUR DOG'S SEMEN**

## WHY SHOULD YOU FREEZE YOUR DOG'S SEMEN?

- 1: As insurance against loss, death or infertility.
- 2: Protect their bloodlines forever. A stud dog can sire puppies in 20–50 years time long after he's gone!
- 3: Facilitate the transport of your male's genetics all over the world.

## WHEN IS THE OPTIMAL TIME TO FREEZE YOUR DOG'S SEMEN?

- 1: Two years of age is optimal for semen freezing in all breeds.
- 2: From 5 years of age onwards, the incidence of prostate disease and testicular degeneration increases, which has an adverse effect on semen quality and fertility.
- 3: We can do semen collection and assessments for older dogs to check if the quality will be good enough for freezing.

## WHAT IS INVOLVED WITH COLLECTING CANINE SEMEN?

At TCI GlenBred, we use an 'open hand' technique to collect an ejaculate. Furthermore, most dogs will perform better if a 'teaser bitch' (female in standing heat) is present at the time of collection. A teaser bitch can greatly facilitate the collection of a better sample for freezing in regards to both quality and quantity of sperm in the ejaculate.

Once an ejaculate is collected, a sample of semen is removed and assessed under the microscope. At TCI GlenBred, we project your dog's semen onto a large monitor for you to see.

## THE SEMEN FREEZING PROCESS:

At TCI GlenBred we use the Minitube Semen Freezing technique and media.

Semen is frozen in 0.5 ml straws using this technique. There are many different types of canine semen freezing extenders and canine semen can also be frozen in pellets & vials.

After a gradual cooling and freezing process, one "partial" straw is thawed and examined for motility and quality.



*Email Jody!*  
REPRO@TCIVETS.CO.NZ  
TO BOOK YOUR APPOINTMENT

## STORAGE OF FROZEN CANINE SEMEN

Once the semen is frozen, it is stored at  $-196^{\circ}\text{C}$  in a specialized tank containing liquid nitrogen.

Once frozen, semen can be stored indefinitely for use long into the future for generations to come.



# Mastitis

You've planned the breeding, found the perfect stud dog, done the progesterone bloods, perhaps the artificial insemination or natural breeding, waited patiently for the 4-week scan to show those glorious puppy blobs, then even more patiently for the puppies to arrive 5 weeks later. Everything has been going to plan, until you notice the pups not gaining weight quite as well as they should be, or perhaps some swelling or inflammation of the dams' mammary gland, or a blood or pus coloured discharge from her nipple. In severe cases, she may become very unwell, and the mammary gland may turn dark purple/blue or black. Uh-oh, mastitis.

Mastitis is the inflammation of the mammary gland tissue and is caused by a bacterial infection in most instances. *Escherichia coli*, *Streptococcus* sp. and *Staphylococcus* sp. are normally responsible. Trauma to the nipple can permit bacteria to travel up the teat canal into the mammary gland tissue to seed infection. Trauma is not required however, in some cases if there is a high bacterial burden in the environment, along with other irritants ascending infection can take hold. Not as commonly, trauma to the gland or milk engorgement can result in mastitis without bacterial infection.

Mastitis most commonly occurs in the post-partum period.

There are four categories of mastitis: acute, gangrenous, chronic and subclinical. Acute mastitis involves the caudal mammary glands which are hot and painful, swollen, and reddened. The bitch may have a high temperature and there may be puppy loss from "toxic milk syndrome". Severe acute mastitis can lead to gangrenous mastitis with abscesses and necrosis (cell death) within one or more glands which appear very dark and/or ulcerated.

The bitch often has systemic signs of septacemia (blood poisoning by bacteria). Gangrenous mastitis is extremely serious and requires urgent attention.

Chronic and subclinical mastitis are much more subtle and often only suspected when there is an increase in neonatal mortality or when puppies don't gain weight as expected.

Diagnosis is typically straightforward. Ideally, the veterinarians will perform a culture and sensitivity of the milk to determine what type of bacteria is present, and which antibiotic it is sensitive to so that the appropriate choice of antibiotic can be made.

The onset and progression of mastitis can be rapid, so its important to seek veterinary care as soon as you notice any changes as described above. Checking the bitches' mammary glands several times a day should alert you to changes early in the process. Take note of the texture, temperature, colour, sensitivity and thickness and colour of milk.



# Mastitis cont.

Treatment typically involves the appropriate antibiotic, and pain medications. It is important that the bitch stays home with her puppies as much as possible, so inpatient treatment is typically reserved for those severe cases only. Hand milking of the affected gland can take the pressure off the tissue, promote blood flow and encourage healing. This should be done every 6 hours or so. Gangrenous mastitis may require surgical drainage.

Cabbage leaf compresses are not just an 'old wives tale'! Studies in women have shown significant reduction in pain and engorgement associated with mastitis after the application of cabbage compresses, especially when they are chilled. It has not been conclusively demonstrated how cabbage leaves work, but one common theory is that cabbage contains glucosinolates which are converted to pungent isothiocyanates which have anti-inflammatory properties. A fitted t-shirt or loose bandage can be used to secure the leaves to the affected glands. Leave this in place between two and four hours, then remove for three to four hours before reapplying. Puppies can nurse in the uncovered periods.

Puppies are built to remove milk from the bitches glands, however if she is too sore, or there is a concern about the antibiotic used being transferred to the puppies in which case supplementary formula feeding may be needed. The decision to remove puppies from the bitch can be controversial. It is generally recommended to continue normal feeding, except in cases of abscesses or gangrenous mastitis.

Galactostasis is the excessive accumulation of milk along with a lack of milk let-down. The condition may progress and lead to sterile or septic mastitis. So those females which have significant milk production during a false pregnancy, or who have experienced rapid weaning especially with a large litter, need to be closely observed for this condition. In this case, massage of the glands is not recommended because it can stimulate milk production. Diuretics and glucocorticoids can be useful symptomatic treatment.

As with any medical condition in the bitch, particularly when neonates are involved, rapid veterinary attention is essential for a good outcome.

Article by Dr Becky Murphy BVSc BSc, reprinted from September Dog World.

Look out for an article on gangrenous mastitis by Jody, in the next newsletter!



**WE HOPE YOU ENJOYED OUR NEWSLETTER!  
PLEASE EMAIL JODY, [REPRO@TCIVETS.CO.NZ](mailto:REPRO@TCIVETS.CO.NZ) IF YOU HAVE ANY  
SUGGESTIONS FOR TOPICS OR STORIES FOR FUTURE NEWSLETTERS**