BREEDING DOGS

Breeding from your bitch and raising her puppies can be an extremely rewarding experience or it may produce frustration and failure. Pet bitches are often torn between their instinctive desire to be with their young and the routines they have acquired with their owners. This can lead to problems and should be considered before breeding is contemplated. Raising a litter of puppies is an extremely time consuming exercise, expensive and one which should not be embarked upon without due consideration. You also need to ask yourself "Why do I want to breed from my bitch? Am I going to be able to find suitable homes for the pups?" Also taking into consideration if the bitch has problems during pregnancy and birth can you afford to have a vet look at her and treat as necessary? After considering all of these things extremely carefully, getting advice from your vet, you still want to breed, then there are a few things you need to know.

HOW OFTEN DOES A BITCH COME INTO HEAT?

A bitch comes into heat every six months on average, although very large breeds of dogs may cycle anything up to once in 15 months. Normally most dogs are on heat for about 3 weeks but this can vary from 4 to 43 days.

The breeding cycle consists of two parts, the first part is when you may notice significant vulval swelling and bleeding, the second part (often of equal time) is when the bitch will be receptive of a male and the bleeding should be replaced with a straw coloured discharge. Generally, a bitch will want to mate with a dog between 10 and 14 days after her heat cycle begins. However, the male will want to mate <u>all</u> through this period, and since the bitch will not be interested in the first part of her cycle, this can lead to some fighting so keep a close eye on them if they are together.

ARE THERE TESTS TO DETERMINE WHEN TO MATE MY BITCH?

There are some tests which can help to determine the best time for mating. Ask your vet for more details of these as the bitches reproductive cycle is very complicated.

WHAT SHOULD I EXPECT DURING MY DOG'S PREGNANCY?

Pregnancy (gestation period) normally ranges from 60-67 days with the average being 63 days. Remember to mark on the calendar when the bitch was mated and when to get ready for puppies. Pregnancy blood tests can be performed from 4 weeks after mating and ultrasounds can detect puppies by four weeks into the pregnancy but sometimes earlier than this. Counting pups however can only be done by x-ray when at least 8 weeks into the pregnancy.

FEEDING THE PREGNANT BITCH:

It is extremely important that the bitch is in good condition before she is mated, neither too fat or too thin. During the first six weeks of pregnancy she should receive a good quality complete adult diet. During the next three weeks the food intake should gradually increase by about 50% and meals should be split over the day as the growing puppies will take up a lot of stomach room. At the height of lactation, her food requirements may be as much as four times normal especially if she has a large litter. We recommend feeding good quality

puppy food to the bitch during lactation as this provides high energy balanced nutrition, vitamins and minerals, especially calcium, and is easily digested. With large litters we also recommend calcium supplements. Worm your bitch about 6 weeks into pregnancy and just after whelping.

PREPARING FOR WHELPING:

During the last week or so of pregnancy, the bitch will often start looking for a secure place for delivery. Pet bitches can become confused, wanting to be with their owners and at the same time wanting to prepare for the big event. It is recommended that you get the bitch used to the area where you want her to whelp at an early stage, however, some will still want to be near you. If this happens it is best to let her have her way and after the pups are born shift them then, with as little trauma as possible. If preparing a whelping box, it should be large enough for the dog to move around freely, low enough that she can see out and come and go easily, but high enough that the pups can't fall out. Line the box with thick layers of newspaper. These are disposable, absorbent bedding which the bitch can tear up and reorganise as she desires. The paper will absorb the fluids which are always more copious than you would ever expect at the time of whelping and is easily disposed of. You can carefully remove some layers during the birth if necessary, without disturbing mum.

The majority of deliveries are without complication; however, owners should attend first time mothers until at least one of two puppies are born. But remember do not interfere unless necessary and only if you know what to do. If you are unsure it is good to have your vets phone number in an obvious place so you can ring them with any questions (which we strongly encourage even in the middle of the night which is when most pups are born).

SIGNS OF WHELPING:

Signs of impending whelping include nervousness, panting and the bitch will often stop eating during the last 24 hours before labour beings. If you can take your dogs temperature, this will usually drop 24-48 hours before delivery also.

Labour can be divided into three stages, the first stage is when the bitch starts looking for a place to deliver, she may seem quite uncomfortable, agitated and restless. This is called nesting and the bitch will be having some contractions by the end of this stage. The second stage is when the bitch will actually start to push and the pups will be delivered. Stage three is the delivery of the placenta (afterbirth) which the bitch will often eat. The placentas usually follow each pup. Delivery of the first pup may take up to one hour. After the first pup, the bitch, especially a first time mum, may rest for up to two hours. Small dogs may deliver an entire litter within a few hours whereas a large dog may take many hours. If the bitch is straining and nothing seems to be happening, please seek advice.

After the pups are born, the bitch will have a dark green discharge for up to a week. If you notice blood or smelly discharge please contact your vet.

BIRTH POSITION:

Puppies are normally born head first with front legs next to their noses but tail first (posterior presentation) is also common. If the back legs are coming first, delivery is usually not a problem, however breech presentation where the legs are folded forward and

the rump comes first may cause a problem and if you feel this is the case, seek veterinary advice. Pups are usually delivered after several contractions in a few short minutes and then mum will lick the pup vigorously. This stimulates circulation, encourages the pup to breath and cleans and dries the newborns coat. If your bitch is a first time mum, she may be very nervous and unsure of what is happening when the first pup is born and you may need to break open the sac around the pup and clean it's face. Having a clean towel ready for this is a good idea. You may also need to have a small box or such to put pups into whilst whelping proceeds if mum is restless, to prevent them getting injured or becoming cold. A hot water bottle (with only hot tap water, not boiled water) under a towel is ideal to keep the pups warm.

Once whelping is complete, remove the soiled newspaper and put in some soft bedding for mum and babies, she should be ready to settle and nurse the pups.

WHAT HAPPENS IF MY DOG HAS TROUBLE DELIVERING HER PUPPIES?

Although most dogs deliver without need for assistance, problems do arise which require the attention of a veterinarian. Professional assistance should be sought if any of the following occur:

- Twenty minutes of intense labour occurs without a puppy being delivered
- Ten minutes of intense labour occurs when a puppy or a fluid-filled bubble is visible in the birth canal but does not deliver the pup
- The mother experiences sudden depression or marked lethargy
- · Fresh blood discharges from the vulva
- Green discharge escapes the vulva without a pup delivered
- The bitch is shaking continuously
- The bitch does not settle to feed her pups

ARE STILLBORN PUPS COMMON?

It is not uncommon for one or two puppies in a litter to be stillborn. Sometimes, a stillborn puppy will disrupt labour resulting in dystocia (inability to deliver pups). At other times, the dead puppy with be born normally. Although there is always a cause for this occurrence, it is often not easily determined.

CARING FOR NEWBORN PUPPIES:

The mother will spend most of her time with the puppies during the first few days. The pups need to be kept warm and to nurse frequently. They should be checked every few hours to make certain that they are warm and content, crying indicates they are not comfortable or are hungry. The mother should also be checked to see that she is producing milk and not discharging from the vulva any excessive fluids. Remember, she will most likely be very hungry and thirsty herself so ensure she has access to fresh water and food.

If the mother feels the pups are in danger, she may become anxious. Placing a sheet over most of the whelping box giving privacy and blocking excess light often helps. Some dogs, especially first time mothers, are more anxious than others and may attempt to hide their young, even from the owner. If the bitch continues to move her pups, you may need to intervene and confine them. Make sure the pups are not placed in a cold or draughty

place as initially they will like to be in an environment at about 30 degrees.

In extreme cases if the bitch becomes too distressed she may kill pups as a means of protecting them from danger. Adaptil collars, sprays or plug ins may be helpful in calming a stressed or nervous mum.

SIGNS THE PUPS ARE NOT DOING WELL, WHAT SHOULD I DO?

Pups should feed and sleep 90% of the time during the first two weeks of life. If the pups are not settled or are making more noise than what they should it may indicate that they are lacking in nourishment, are too cold or too hot, or may have an infection. Also if puppies are not gaining weight it may mean that the puppies are not getting enough milk. Pups can easily be weighed on kitchen scales. You should also check the bitches mammary glands regularly for mastitis, this causes heat and swelling in the gland and the milk production will decrease or even stop. It is very painful to the mother and needs veterinary attention.

When there is inadequate milk, supplement feeding one to three times a day is advised. Artificial dog milk can be purchased from vet clinics and these have clear instructions for you to follow. **Cows milk is not appropriate!** Puppies less than two weeks of age should be few every 3-4 hours. After two weeks, every 6-8 hours is sufficient. Pups can be started on solids from 3 weeks of age. Large breed dogs may start as early as 17 days of age. Farex, weetbix or puppy porridge are all good to start with as you can change the consistency to suit the pups liking but we recommend a professional diet rehydratable puppy food.

THE FIRST FEW WEEKS

In the first month of the puppies life, very little care from the owner is required as the mother will feed and care for them. They are born with their eyes and ears closed, but these will open in 7 to 14 days. If any swelling or bulging is noted under the eyelids, they should be opened gently. Cotton wool dampened with warm water may be used to assist in opening the lids. If the swelling is caused by infection, pus will come from the open eyelids and should be treated by your vet. If the eyes are not open by 14-16 days of age or if there is pus of discharge, please see your vet promptly.

Pups should double their birth weight in about one week. By two weeks of age they should be alert and trying to stand. At three weeks, they are likely to try and climb out of their box. At four weeks, they should be able to walk, run and start playing. Most people start offering the pups solids at this age. Place a small amount of the puppies food, mixed to a thin porridge consistency, in a flat saucer and place the saucer on sheets of newspaper as the pups will make a very big mess! Warming it to body temperature may make it more appetising. You can encourage the pups to feed by gently applying some food to the sides of their mouths with your finger.

DO PUPPIES NEED A SPECIAL DIET?

YES! There are many commercial foods especially formulated for puppies, some are better than others and a high quality one is recommended. Your veterinary clinic can advise you on the best for your puppies. Puppies should be fed puppy food until they are around 9 months of age if small to medium breeds. Large breeds should be transitioned onto a large breed growth formula from 4-5 months of age which they would then stay on

until 18-24 months. These formulations have been specifically designed to meet all the requirements of rapid growth. Adult food is not suitable for pups nor is fresh meat which is low in calcium and high in phosphorus and can lead to severe development problems.

WHAT IS MILK FEVER?

Milk fever (eclampsia) is due to a lack of calcium in the bitches blood and occurs because the bitch puts her calcium into her milk. It most often occurs when the pups are 3-5 weeks old, especially with large litters. The signs of milk fever include depression, vomiting and muscle spasms or tremors. If not treated quickly, it can be fatal and is hence classed as a medical emergency and you should ring your veterinary clinic if you notice any of these signs. To help prevent eclampsia, feeding the bitch a good quality food during pregnancy and puppy food during lactation is recommended. Calcium supplements are also recommended for large litters and bitches with large milk production.

VACCINATIONS AND WORMING:

Pups are provided some immunity from their mum before and shortly after birth, if mums vaccinations are current. Some of the mothers antibodies cross the placenta and enter the pups circulation but most antibodies are provided in the milk, especially the first milk, the colostrum. These will provide protection for the pups for a few weeks. Puppies should receive their first vaccination at 6-8 weeks of age. These will provide protection within 10 days and then the pups can go to their new homes. They should receive their boosters at 10-12 weeks of age.

Intestinal worms are common in puppies. Sometimes the signs are not apparent but often you may notice:

- poor body condition
- chronic soft or bloody faeces
- loss of appetite
- a pot bellied appearance
- · loss of shine of coat
- weight loss

Some worms are transmitted through the uterus to the unborn pups and through mothers milk so often pups are born with worms. It is therefore essential to worm puppies every 2 weeks until 12 weeks of age then monthly until 6 months of age.

We hope that this information has helped you decide whether breeding is for you and your bitch. We hope that all necessary information is here for you in easy to understand terms but if not we welcome any questions, even if you think they are silly, to ensure a safe pregnancy and delivery, and strong healthy bitch and puppies.

If you decide not to breed or have finished breeding, we strongly recommend desexing of both bitch and dog as this prevents many medical problems and helps keep your pet safe. We can be contacted on **53811996** if you have any queries at all.