



CARE OF THE PREGNANT/LACTATING BITCH

Things to think about BEFORE mating: Your bitch should be at least 18 months of age or have had one heat before mating. Ensure she is in good bodily condition with no illness. When mating dogs consider size of the male involved-mating a small female and large male inevitably leads to problems!! Ensure vaccinations and worming is up to date and inform veterinarian if vaccinating when pregnant.

Signs of heat: Behavioural changes: Swollen genitals - Vulva. "SPOTTING" - red/brown discharge which then becomes straw colour when the bitch is ready to mate, usually between '10 - 14 days into heat. "TAIL FLAGGING" - The bitch will hold her tail off to the side when stroked down the back and rump and indicates that she is now ready to mate.

Mating: The most effective approach to mating is to allow the pair to play and become familiar to each other before the bitch is on heat. Problems occur if a dog is brought to the bitch when she has started her heat. She may reject the dog. It is best to have the bitch familiar with the surroundings. Once she is on heat the dog may stay with her through the whole heat cycle, ie: 2-3 weeks to ensure mating occurs. Once the dogs have "tied" you may safely assume she will be pregnant. However, it may pay to allow them to mate more than once.



Gestation: The normal length of pregnancy in dogs is **65 days** although, this may vary by a couple of days either side. The time period is taken from the last day of mating (if known). Once the bitch has mated you must then determine if she is pregnant.

Signs of Pregnancy-what to look for

1. Increased appetite.
2. Changes in temperament and lack of interest in exercise.
3. Increased body weight which may be generalised as well as in the stomach region.
4. Mammary development can begin as early as 35 days. It is most rapid in the last 1 - 2 weeks. Development may be difficult to assess in older bitches due to flabbiness from previous litters.

False Pregnancies (psuedo or phantom pregnancies)

These are not uncommon in the dog and can be treated although they usually end naturally in about 60 - 70 days-if concerned talk to your veterinarian about other options.

Pregnancy Diagnosis

If unsure if your bitch is pregnant, your vet can usually confirm pregnancy in a variety of different ways at different stages of gestation.

1. After 31 days a blood test (Relaxin assay) can be performed by your veterinarian. This involves a small amount of blood being drawn from your dog and sent to a lab for analysis. It can sometimes be performed between days 22-27 but during this time is not entirely reliable-is much more accurate after day 31.
2. Palpation of pups may be possibly after about 28 days of gestation although this may be quite subjective and not always accurate. It depends on a number of factors including size of the bitch and pups, fat levels, body conformation and temperament.
3. Ultrasound of the bitch can be done. This involves shaving a patch of hair on the belly and an ultrasound machine to look for pups. This is usually possible after about 24 days of gestation
4. Radiography (X-rays) is the final way of determining pregnancy and can be performed after days 45-50 of pregnancy as this is when the foetal skeleton has calcified. This is a good way to estimate numbers of pups but is not always entirely accurate in this.



CARE THROUGH PREGNANCY

During pregnancy, owners should ensure:

1. **Adequate exercise** - Bitches can exercise/work normally for the first 35 days. Taper off as whelping approaches.
2. **Feeding** – Pregnant bitches have very different nutritional requirements than non-pregnant animals. The energy requirements for the pregnant bitch increase as pregnancy progresses and the calcium requirements also change. The last third of pregnancy (last 20-25 days) as well as during lactation are the most important times to consider nutrition. During the last third of pregnancy the bitch requires much more calcium to help with the growing puppies bones. This is best given in the form of a good quality puppy food which ensures neither over supplementation nor under supplementation. This should continue to be fed until the puppies have been weaned. During the last third of pregnancy the bitch may need feeding 3 or more times a day-when lactating ad lib feeding may be required. Pregnant bitches have increased requirements for protein and vitamins as well as energy-these needs can be met with good quality puppy food. Care must be taken to avoid obesity. **DO NOT** feed mince meat during last trimester of pregnancy or during lactation.
3. **Vaccinations** - Ensure her vaccinations are up to date. If your bitch has not been vaccinated or is overdue, it is ideal to vaccinate before whelping. The timing is not essential, however good immune status of your bitch will ensure maternal immunity to the pups. Although this immunity is only temporary. It helps protect the pups at a time when they are most susceptible to disease.
4. **Parasite Control** - Regular worming, for all intestinal worms including roundworm, hookworm, tapeworm and whipworm is important. This will also be important in the pups after they are born and they need to be wormed every 2 weeks initially. Continue heartworm tablets in bitch. Monitor weight increase, as you may need to increase the dog's heartworm tablets as she gets heavier. Continue regular treatment for fleas and ticks, ensure the product is registered for pregnant bitches.
5. **Prepare a suitable whelping area** - This should be warm, dry, and clean. Shredded newspaper is ideal but clean rags will also be O.K. Get the area ready about 5 - 7 days before she is due-don't be surprised however if the bitch finds her own nesting place-its just maternal instinct
6. **Clipping** - Long haired dogs may need to be clipped along the abdomen and around the back-end before whelping.
7. **Drugs** - Check with your vet. If unsure about the effects of administered drugs in your dog.
8. It is important to remember that the birth process in bitches is **NATURAL**. They have very strong instincts that ensure they usually know what to do themselves. Over involvement by anxious owners often lead to nervousness in the bitch-and may lead to problems with dystocia. They must be allowed to relax to allow the natural birthing process to take place.

Signs of Whelping

Normal onset of labour is marked by the following events:

1. 24 hours before - The bitch may go off and hide and make a nest.
2. 12 hours before - Bitch may refuse food. At this stage, it is quite normal to see a white discharge from the vagina as the cervical seal comes away. The bitch may continue to exhibit nesting behaviour. Signs include digging holes, scratching at box, tearing paper, nosing blankets, making beds in odd places, licking at vulva, becoming unsettled and panting.
3. 8 - 12 hours before - A fall in the bitches body temperature by at least 1 degree celcius (to 37 degrees C) The fall in the body temperature is the most definite sign that labour is about to commence. At this stage, the cervix begins to dilate rapidly, being dilate in about 4 - 8 hours time. Contractions begin about one hour before the actual birth process commences.

Watch for:

1. A greenish/black discharge - This is NORMAL and indicates that Placental separation has occurred.
2. The first puppy - Normally the first puppy is delivered within 2 - 3 hours after the onset of labour.
3. The second puppy - Often two puppies are presented in close succession followed by a pause of 1 - 2 hours.

NOTE: Unlike most other species, delivery of the whole litter may normally take 24 - 30 hours. DON'T PANIC AND DON'T INTERFERE TOO MUCH AND UPSET THE BIRTH. It is also normal for puppies to come out tail first as well as head first.

Call your VET for advice or Assistance If:

1. No pup has been delivered 2 - 3 hours after the onset of labour.
2. More than 2 hours have elapsed following the delivery of the last pup.
3. Labour contractions are weak, infrequent and unproductive despite the obvious presence of more pups in the abdomen.
4. The bitch is obviously in distress.
5. The bitch is depressed, weak and shows signs of fever.

Pups should be born into a clean, dry environment. Mother's instinct is usually enough to care for them. However, if she is unable to care for the puppies properly then the owner must act as a surrogate mother-try and avoid this wherever possible as the best mum is their real mum.

THE LACTATING BITCH

1. **Eclampsia:** This is a life threatening condition-signs of which include bitch being unwell, fever, shaking/convulsing, inappetent. Can occur in bitches with big litters and is more common in small breeds. It is caused by a deficiency in calcium and is more likely to be seen in a bitch with a history from previous litters. Discuss the cause, signs, treatment and prevention of milk fever with your vet. If your bitch has these signs call the vet IMMEDIATELY.



2. **Diet** - Pay attention to diet especially calcium and energy supply. After whelping it is important to supplement the bitch with calcium. The best way to do this is to feed good quality puppy food as this has enough calcium in it to prevent any problems. It also ensures the bitch is getting enough and not too much calcium as with calcium supplements it can be easy to under or overdose. There is no need to supplement further calcium if feeding a good quality puppy food and doing so may harm your bitch. Increased food supply is still required until pups begin weaning.
3. **Weaning** - Is normally started at about 4 weeks of age and most pups are weaned by 6 - 8 weeks.
4. **Worming** - The bitch should be wormed twice while pups are sucking.