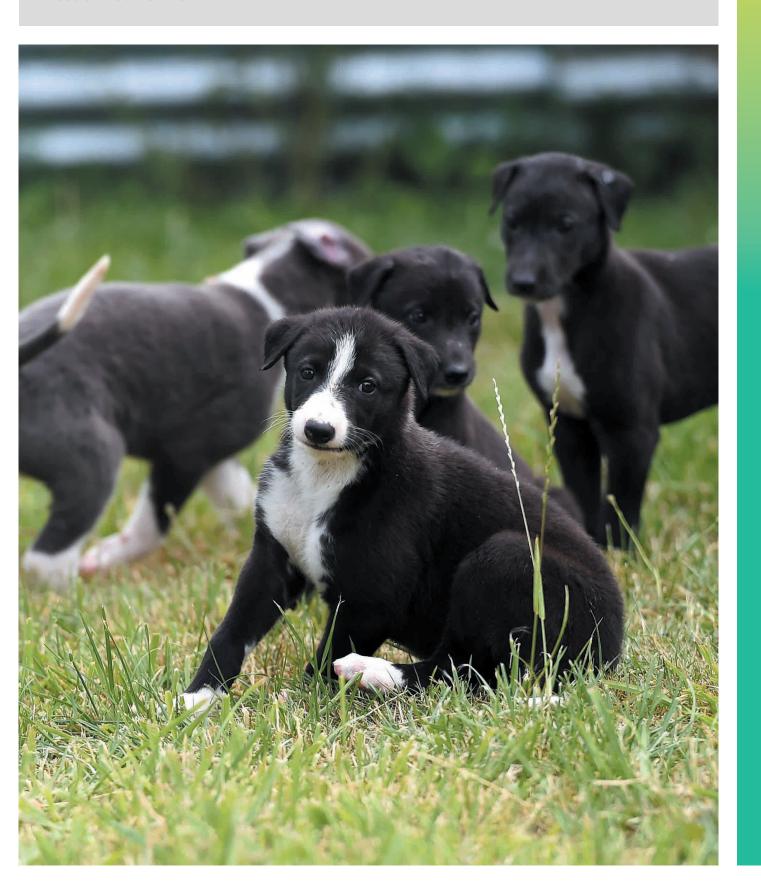


Whelping

Breeder Booklet No. 7



This is the seventh in a series of booklets developed to support the successful breeding of racing greyhounds.

Booklet 1:

Thinking about breeding greyhounds

Booklet 2:

Developing a breeding program – understanding genetics

Booklet 3:

Starting a breeding program

Booklet 4:

Care and husbandry in the breeding environment

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Reproductive anatomy - getting pregnant

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Booklet 7: Whelping

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Care and early development

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Whelping a litter - preparation

As your female greyhound's due date draws nearer it is important that you are well prepared for the impending birth.

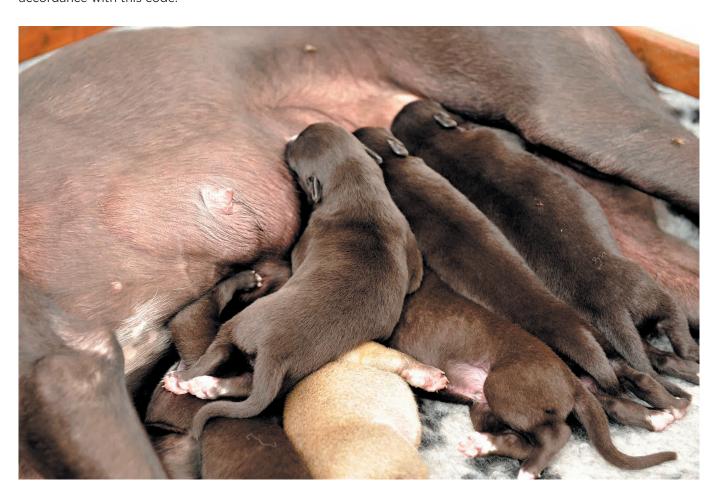
Make sure you are ready well ahead of time, so that you do not have to organise things at the last minute if your female decides to give birth a few days earlier than expected.

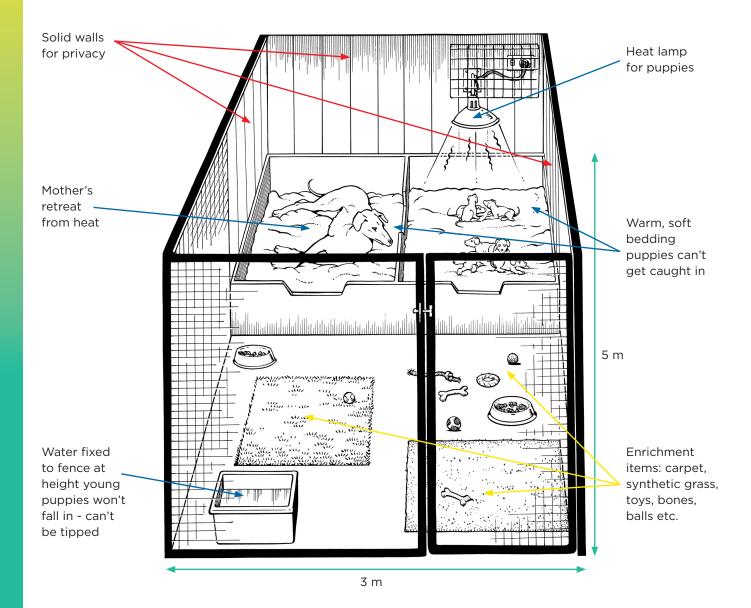
You will need to decide where she is going to whelp the pups. It is advisable to use a 'whelping box' - a wooden or fibreglass box with sides that allow the female to jump in and out, but high enough to keep the pups confined. It must be large enough for the female to lie comfortably while whelping and then accommodate her and her pups for the first four weeks after whelping.

It is important to remember that the *Code of Practice for the Keeping of Racing Greyhounds* (commencing 1 January 2020) sets out minimum requirements for the size, materials and construction of whelping boxes and pens. Any new breeder should ensure any upgrades or new facilities are constructed in accordance with this code.

The whelping box needs to be located somewhere warm, dry and quiet where it is easy to access and there is good lighting. Pups are particularly susceptible to the cold, so making sure that the whelping box is out of drafts is particularly important. The whelping area must be physically separated from other greyhounds, and once the pups are born have an area where the mother can rest separately from the pups. You may want to borrow or hire a whelping box if it is your first litter, or your mentor might be able to loan one to you. Make sure the whelping box has been thoroughly cleaned inside and out with dilute bleach and then rinsed clean so there are no fumes or residue.

Once the whelping box is in place, line it with layers of newspapers and then place some bedding on top. You will want to get your female greyhound used to sleeping in the box a few weeks ahead of time otherwise she might be restless and unsure when you suddenly move her to a new place.





Newspaper or shredded paper is often used inside the whelping box as most females will dig and shred the bedding as they start to go into labour and the newspaper can be easily replaced. Newspaper is also absorbent and can also be replaced as often as necessary if it gets soiled during the birthing process (which can be quite messy). Later the newspaper can be replaced with 'dry bed', towels, or blankets that can be cleaned regularly. Bedding material should be chosen very carefully.

Deep, thick bedding material can result in adverse outcomes for pups, such as suffocation or squashing if the pups get themselves under layers of bedding. You will need to make sure that the whelping box is either in a warm room, or that you have a safe heat source to keep the pups warm as they are unable to regulate their own body temperature during the first few days. A heat lamp over one end of the whelping box can be a good idea as it gives the pups a choice of temperatures, but make sure that it is hung high enough that the female will not hit it or burn herself. New born pups prefer an ambient temperature of 32°C up until about 4 days of age. After 4 days, the temperature can be gradually reduced over a period of 2-3 weeks.

However, during this period of time, the female may not be comfortable in an environment at a constant 32°C. Therefore, you need to consider providing an alternative cooler area for her within the whelping and lactation area. It is important to provide a heat source for the pups, particularly during colder weather, to ensure they can maintain their body temperature as their internal temperature regulation systems are not working at this age.

Finally, you will need to organise a few things to have on hand:

- Pen and paper for writing down the weights of pups, and the times they are born
- Thermometer for monitoring the temperature of the female greyhound prior to whelping
- Gloves
- Scales for weighing the pups (the scales need to be able to weigh in small increments)

- Cotton thread and scissors for tying off umbilical cords if needed
- Antiseptic
- Clean towels
- Hot water bottle(s)
- Plenty of newspaper (no staples)
- Garbage bag(s) for all the soiled bedding

Whether you are a novice breeder or not, you should talk with your veterinarian to discuss any possible issues that might arise and the steps you should take in the event something should happen.

Extra information may also be required to comply with any relevant racing rules and/or Code of Practice.



Make sure that you are well organised and prepared for the whelping - well before the whelping is due to take place.

How will I know when the female is going to whelp?

Once you have bred your female you will have an 'expected date of whelping' from the veterinarian or stud master.

Make sure you write the date down on your calendar. The length of pregnancy is usually 63 days (9 weeks) from the time of ovulation.

During the last week of pregnancy, you can monitor the female's rectal temperature once or twice a day. The normal temperature for dogs is 38-39°C. It is normal for the rectal temperature of the female to drop below 37°C approximately 24 hours prior to the birth, so this is one way to monitor her.

Loss of appetite and restlessness are other signs to watch for. Some females go off their food a couple of days before whelping, but others will eat right up to the hour before. Nesting will also occur in the last few days, although this will become more intense as the first stages of labour start.

If there is concern that the female has gone over time without any signs of whelping, or a caesarean is being contemplated, you will need to have her assessed by your veterinarian. A blood progesterone level can be done to determine if she is ready to whelp. Progesterone levels drop significantly at the time of whelping and can be used to determine if it is the right time to carry out a caesarean.

You need to make sure you know how to tell your female is about to whelp - revisit the signs well before the whelping is due to take place.

The steps of a normal whelping - revisit them well before the whelping takes place. Whilst unlikely, you may need to help her give birth.

Have an action plan in the event that things go wrong.

The first stage of labour

During this stage the female will usually start nesting and is quite restless.

She may shiver and shake or may pant heavily. During this stage the body is preparing for the pups to be born but there are no visible contractions. Some females may vomit during this early stage of labour, while some will become very clingy, and others will hide.

Make sure your female is in the whelping box at this time, otherwise she may end up having her pups somewhere else. They like dark, quiet places, and may hide. Many novice breeders get caught out when their female gets under the house or behind the shed when she is about to whelp, and it can become very difficult to get her (and possibly the pups) out.

This first stage of labour may last a few hours, or even a day. Many females will show signs of impending labour during the day, but it is common for females to whelp at night.

The second stage of labour

As she moves into the second stage of labour the female will actually start having contractions.

The contractions may be spaced out to start with, as the first pup usually takes the longest time to be born. Eventually she will really bear (push) down, and usually 4-5 of these hard contractions will see the first pup born.

In the uterus, each pup is enclosed in a sac of fluid and often the first thing that will be seen as the pup emerges is a sac of fluid at the female's vulva. As she pushes more, the pup will appear - pups can be born head first or tail first - so you will either see a nose, or feet and a tail. It may take a few contractions to fully push the pup out.

Once the pup has been born, it is vital that the sac is removed quickly so that the pup can breathe. This is usually something that the female will do. She will chew and lick at the pup until the sac breaks, and then lick and nose the pup stimulating its breathing. If the female does not break the sac, you may have to step in and clear the membranes and fluid from the pup's mouth so that it can breathe. You can also hold the pup in a towel and rub it to simulate the licking of the female. Sometimes you will have to do this if two pups are born close together and the female cannot deal with them both at the same time.

The third stage of labour

The third stage of labour is the passing of the placenta. Sometimes the placenta will come out with the pup, other times it will be passed a few minutes later. It is normal for the female to eat the placenta and to chew through the umbilical cord. In most cases you will not need to do anything at all except supervise her to make sure she is not too rough (especially first-time mothers).

If the female does not chew through the cord, or if the cord seems to be bleeding, you can tie off the cord with some clean cotton thread about a centimetre from the body of the pup. The excess cord can then be cut off with clean scissors, a couple of centimetres past the knot. You should then dab the stump with antiseptic to help prevent infection. After a day or two the umbilical cords will dry out and fall off all by themselves.

The female will then repeat the second and third stages of labour until all the pups are born. The time between pups varies, and some females will rest even an hour or two between pups. The main thing is to watch her closely. If she seems settled and calm, things are probably fine, if she is restless or contracting, then a pup should appear within a short time or there may be problems.

Sometimes it can be hard to tell if the female is actually finished giving birth or whether she is just resting in between pups. If you can get her to stand you can gently feel her abdomen to see if you can feel more pups. Sometimes there will be a pup tucked right up under the ribs that might be hard to feel.

Make sure that you make a note of the time that each pup was born. This way if there are any problems you will know how long since the last pup was born. You can also note the colour, sex and weight of each pup as they are born. It might be a good idea to have an experienced person sit with you or at least be 'on call' during your first few whelpings. Otherwise, you might need to phone your veterinarian if you are not sure if things are going to plan.

As a rough guide, there are a number of signs that things may not be going to plan:

- More than 30-40 minutes** of strong contractions with no pup
- More than 15 minutes** of contractions with a pup visible
- More than 3 hours** between pups
- A green discharge
- · Lots of bright red blood
- A female that is very restless or who is crying or licking frantically at her vulva
- ** These times are estimates and it is best to confirm with your veterinarian when they feel that you should seek assistance.

The earlier you get help the higher the likelihood of having live pups.



If a pup is visible it may be possible to assist the birth but be careful not to pull hard on a pup's head or tail as there is a definite risk of serious injury. Any assisting by pulling should be directed in an outward and downwards direction, towards the hocks of the female. If the pup seems stuck and some gentle traction does not help, **seek immediate assistance from your veterinarian**.

Once the pup has been born and is starting to move about, it should suckle as soon as possible. The first milk of the female (the colostrum) is full of important antibodies that help keep the pups safe from infection for the first few weeks of life. If the pup is having trouble, it may need to be assisted onto a nipple. The suckling of the pups helps to stimulate the natural release of the hormone oxytocin in the female which helps with milk let-down and stimulates contraction of the uterus (which will help to push any retained placenta out and assist healing of the uterus lining). Do NOT give an oxytocin injection to your female without a specific prescription from your veterinarian for the female that has just delivered.

You need to be able to recognise when things are not going to plan - revisit the signs of complications well before the whelping takes place. Have an action plan in place in the event that things go wrong.

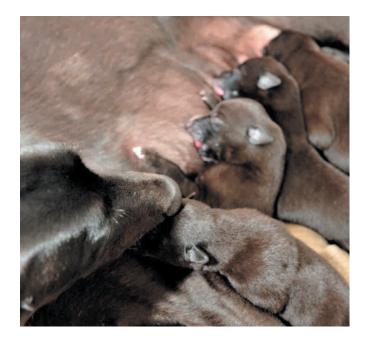
When you are happy that the female has had all of her pups, it is a good idea to take her out for a toilet break and give her a clean-up. Some females get so messy they need a quick bath, but make sure that you dry her completely so that she does not get cold. You can also encourage her to have some food and water, although many females will be too concerned about getting back to their litter to think about eating.

Now is the time to clean up all the soiled or wet newspaper and place clean bedding in the box. The pups can be placed in a basket or box with a hot water bottle (the hot water bottle needs to be wrapped in a towel so that the pups do not get burned) whilst you do this.

Make sure once she is settled again that all of the pups have had a good feed and that any smaller or weaker pups have a chance to access to the best teats (the ones at the back). The female will probably spend the next few hours resting and cleaning the pups. It is normal for the female to have some discharge, and it may continue for 4-6 weeks. The colour of the discharge may be reddish brown through to a blackish green but should never be smelly or creamy in colour. If you are concerned about the amount or the colour of the discharge, ask your veterinarian for advice.

Some veterinarians recommend that you bring the female and pups into the clinic within the 12-24 hours after birth (usually the next morning) for a post-whelping check. You may have also organised your veterinarian to visit you. They will check that the female has truly passed all of the pups and potentially give her an injection of oxytocin to help clear out her uterus if required. They also check that she has adequate milk and inspect all of the pups to see that they are physically normal and healthy.

Sometimes, the mother may become aggressive if you try to move her or assess the pups in the early stages after whelping. You should closely monitor your greyhound and her pups for any signs of something being amiss. At that point you should **definitely seek** veterinary assistance.



Once your female has whelped, you are required to notify GRV of the number of pups of each sex in the litter (alive and dead), along with their colours. Additionally, you will also nominate the veterinary practice that will microchip and vaccinate the litter. If your female fails to whelp any live pups, you must still notify GRV. The result of mating is completed online on FastTrack (MyLitters) and must be completed within 14 days. After these details are lodged, the paperwork for the 6-8-week vaccination will be available.

All females must have a general health check by a veterinarian within 6-8 weeks of whelping. This check can be combined with her pups' first vaccinations.



