



Being a Greyhound Breeder - Whelping

Greyhound Welfare & Integrity Commission handbook





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The Greyhound Welfare & Integrity Commission acknowledges the substantial contribution of Greyhound Racing Victoria to the content of this booklet.

1. What greyhound breeders need to know

Greyhound breeders are expected to have a good knowledge of greyhound welfare and behaviour.

Participants wanting to breed greyhounds must register with GWIC as either a Breeder – Owner or a Breeder - Whelper.

A Breeder - Owner can arrange for the service or artificial insemination of a dam, but you must be registered as a Breeder – Whelper if you want to manage the whelping or care for pups before they are old enough to leave the dam (usually at 14 -16 weeks).

Both Breeder – Owners and Breeder – Whelpers are expected to understand the requirements relevant to a breeder's role. These are contained in:

- The NSW Greyhound Welfare Code of Practice www.gwic.nsw.gov.au/codeofpractice
- The NSW Greyhound Racing Rules www.gwic.nsw.gov.au/rules

Breeders should also read and understand the official GWIC policies, as a breach of one of these policies is a breach of the Greyhound Racing Rules. Official policies are available on the GWIC website.

Breeders also have obligations under the *NSW Greyhound Racing Act 2017* and the *Prevention of Cruelty to Animals Act 1979*.

Breeders should also understand the different roles played by the Greyhound Welfare & Integrity Commission (GWIC) and Greyhound Racing NSW (GRNSW) in the administration of greyhound racing:

- The Greyhound Welfare and Integrity Commission administers the Greyhound Racing Rules, registers greyhounds and industry participants (including owners, breeders, trainers and bookmakers), employs race stewards, inspectors and on-track veterinarians, and investigates animal welfare and integrity concerns relating to greyhound racing in NSW. The GWIC website contains more information.
- Greyhound Racing NSW manages greyhound grading, nomination of greyhounds for races and performance trials, the racing calendar, and distribution of prize money. Greyhound racing clubs are also regulated by GRNSW. The GRNSW website (grnsw.com.au) includes tutorials on how to nominate a greyhound for a race, and information about the Greyhounds As Pets (GAP) program for rehoming retired greyhounds.

You should read and understand GWIC's requirements for registration and notification (outlined in Section 7) before deciding to breed a litter. If you do not comply with these requirements, you may not be able to register the pups as racing greyhounds.

The Rehoming Policy requires participants to prepare their greyhounds for life as a pet after racing, and try to rehome any greyhounds that they do not wish to keep.

A breach of an official GWIC policy is a breach of the Greyhound Racing Rules.

All of these documents are available on the GWIC website www.gwic.nsw.gov.au

2. Things to consider before you go into breeding

What you do as a breeder will influence the whole of a greyhound's life – from its racing success and risk of injury, through to its chances of finding a home as a pet.

Many participants in the greyhound racing industry consider breeding a litter at some time. You may have a successful racing female who you have now retired and want to see her talent passed on to her pups, or you may want to continue your involvement in greyhound racing in a new role.

Unfortunately, some people decide to breed with the mistaken idea that they might be able to re-coup some money from a female greyhound that was not a good race dog.

Before you decide to breed, consider that breeding is expensive and there is no guarantee you will breed good runners.

No guarantees

Racing success depends on many factors. Pups inherit genes from both their dam and sire, and while genetics strongly influences racing success, it does not guarantee that all pups of a litter will be good racers. Nutrition, rearing and training also influence a dog's racing success.

While the average greyhound litter size is 6.7 pups, litters may range in size from 1 pup to 13 pups, and there is no guarantee that a particular pregnancy will result in more pups. If you plan to keep some pups and recoup your set-up costs by selling others, this may not be possible if the bitch whelps a small litter.

Costs

The cost of breeding your own litter may seem like a good option when compared to the cost of buying a greyhound from a reputable and experienced breeder or trainer, but that may not be the case.

Before deciding to breed, you must be in a financial position to cover the costs - not just the expected costs of stud service and care of the dam and pups, but the unexpected costs such as emergency veterinary treatment. If the litter is large, vaccination and food costs will also be higher.

Below are some of the things you will need to factor into your budget. Please be aware that all the costs quoted here are estimates and vary somewhat.

Registration

Approval to breed males (stud sires) is granted by Greyhounds Australasia and requires a DNA test. The fee to register a sire is currently \$1350. A bitch must be registered with GWIC as a breeding female – the fee for this is currently \$150. A breeding lease costs \$55 to register.

All services (matings or inseminations) must be registered with GWIC and the current fee is \$55. Litters must be registered with GWIC, and the current fee is \$65.

Stud services

The cost of insemination varies enormously depending on the sire you choose. You may be lucky enough to get a free service from a newly-registered sire, or you may pay \$10,000 for a straw from a top sire, or anywhere in between.

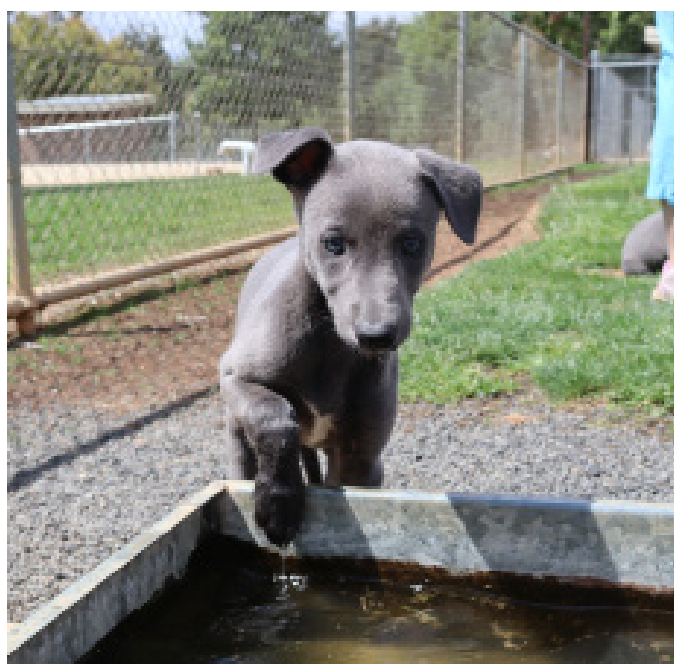
Be aware that if you do not keep the proposed dam yourself, you will have to pay to board her somewhere until she comes on season – and you can't be sure when this will be. You may also need to pay to have the bitch transported to the vet, if you can't do this yourself.

Veterinary fees

It is a good idea to talk to your veterinarian about costs before breeding, as veterinary services will typically include pre-service vaccinations and tests, the surgery to inseminate, X-rays and ultrasounds, and post-whelping checks. You can expect to pay about \$700 for a frozen semen insemination.

Vaccination and worming

A breeding female must have up to date vaccinations before breeding. Any pups require vaccinations at 6-8 weeks, 10-16 weeks, and 12 months. A vaccination typically costs about \$120 per greyhound.



Whelping

If you are not registered as a Breeder – Whelper yourself, you will need to pay someone to whelp the litter for you. Whelping is hard work – many whelpers sleep with the dogs for the first few days because they need to monitor the litter around the clock.

Different whelpers charge differently, but you can expect to pay about \$5,000 for someone to whelp a litter of puppies and care for them until they are old enough to leave home.

Rearing

Care of a greyhound from 3 months to 14 months by an experienced rearer can be expected to cost about \$100 a week, or \$4,000 per greyhound. This should include learning to walk on a lead, chase a drag lure and standing for a physical examination.

Education

Education or breaking in courses vary from 3 to 6 weeks and may cost about \$200 a week for each pup. Greyhounds are trained to exit a starting box, chase a lure and finish a race.

Emergencies

Consider whether you have access to funds for emergencies, such as additional veterinary care in the event of difficulties with the whelping, or an injury or an infection among the pups. Such emergencies can happen at any time and you, as the owner, will have to bear the cost.

Overall cost

Experienced NSW breeders estimate an approximate cost of breeding a litter of 7 pups to the point of being 'race ready' (which includes DNA testing of the dam, the keep of the dam for 12 months, a \$2500 service fee, veterinary procedures, whelping, immunisation, worming, rearing, registration fees and breaking in) can be up to \$40,000.

Time and effort

Growing pups need the best possible food, the right amount of handling and exercise, and close monitoring if they are to develop into canine athletes.

Whelping, rearing and education are critical stages of preparation for a racing career, and for a happy life after racing. Early socialisation and positive reinforcement are essential to develop confidence and the ability to cope in new environments, which will impact both on a greyhound's racing ability and its capacity to adapt to a domestic environment in retirement. This means investing time and energy into each puppy. Cutting corners may ruin any future chances of success.

You must always have the time and willingness to keep your greyhound breeding facility clean and hygienic.

Find a mentor

If you are seriously considering breeding, find yourself a suitable mentor. This will be a breeder who have a good reputation and success in the industry over a long period of time. A successful breeder understands greyhound genetics, anatomy, nutrition, behaviour and temperament.

A good mentor is a source of information that is not going to be found in books or on the internet. Ask lots of questions and listen to their answers. Discuss your breeding plans with them and ask for their opinions. Assisting your mentor with their whelpings and the care of their pups is also a good way to get some experience and to see if breeding a litter of greyhounds is for you.

Work with your veterinarian

If you are seriously considering breeding, establish a good working relationship with a veterinarian well before the breeding takes place. Your veterinarian will be responsible for providing advice about nutrition and care of your pregnant greyhound and her pups from your veterinarian, develop a plan to manage the birth and any problems that may occur in whelping, and providing 24-hour emergency services.

Is breeding really for me?

Before you decide to breed, consider these questions carefully.

- Why do I want to breed greyhounds?
- Do I know enough to get good results from my choice of dams and sires?
- Do I have the space and facilities to provide a healthy environment for a pregnant and whelping greyhound, and her litter of growing pups?
- Does my local government area have requirements or restrictions on dog breeding activities and premises?
- Can I afford the initial set-up costs, ongoing costs and emergency costs?
- Do I know how to properly care for pregnant, lactating and newborn greyhounds?
- Can I put in the money, time and effort to get the best results for a litter of growing pups?
- Do I plan to sell all, most or none of the pups?
- Do I plan to outsource the whelping and rearing of the pups to experienced people?
- Do I have access to reliable and experienced veterinary care?
- How will I rehome any pups that are not suitable for racing?

3. Preparing to breed

Some registration applications can be lodged online and some require paper forms that can be downloaded from the GWIC web site (www.gwic.nsw.gov.au/). If you have any questions, contact the GWIC Registration and Welfare Team on 13 49 42.

There are a number of rules and notification requirements around breeding. The purpose of these requirements is to ensure that greyhounds are well looked after and that people who invest in greyhounds are protected.

Knowing which forms need to be submitted and when means there will be no hold-ups - GWIC may refuse to register any pups from the mating if you do not comply with the requirements. Below are the key forms that you need to complete.

Authority to breed the female

If you do not own the female you intend to breed, you must either transfer her ownership into your name or, if you are just leasing a female, submit a Breeding Lease Sire or Dam form. This way you will be listed as the breeder of the litter.

DNA Fingerprint

If this is the bitch's first litter, she will have to be DNA tested by Greyhounds Australasia (GA) - the relevant form and instructions are available on the GA website (www.galtd.org.au). The test only needs to be performed once in the female's life, before the first mating, and is a simple mouth swab done by a veterinarian.

DNA test results and proof of current vaccination are required before the female can be registered for breeding by GWIC, and before she is mated. DNA test results can take 6-8 weeks to come back, so it is important to get this done early to ensure that breeding is not held up.

Register the female for breeding

All females which you wish to breed from must be registered with GWIC as breeding females. This only needs to be done for the first litter and can be done online from the GWIC website. To be eligible for breeding registration, your bitch must:

- be named;
- be microchipped;
- have completed DNA testing;
- have a C5 vaccination administered within the last 12 months and a copy of her vaccination certificate issued by the veterinarian that clearly identifies the greyhound, the type of vaccine, and the date the vaccination was administered; and

- be no more than 8 years of age and not have had three litters already.

It is possible to apply for an exemption from the rules that restrict litters to 3 in a bitch's lifetime, and the maximum age for a breeding female to 8 years. An application form must be completed and submitted to GWIC, with a health and fitness certificate completed by a registered veterinarian, and a copy of the greyhound's current vaccination certificate.

Ensure the male is registered for breeding

Male dogs intended for breeding must be registered as a stud sire with Greyhounds Australasia. This registration requires a DNA test, a semen evaluation report and a fee. Stud dogs must also have up to date vaccinations, and a copy of the vaccination certificate must be provided to GWIC.

Transfer of ownership of a breeding unit

If you are planning to use frozen semen, you must use one of the approved Artificial Insemination facilities registered with Greyhounds Australasia (<http://galtd.org.au/>)

The straws of frozen semen (called "breeding units") that you intend to use must be transferred into your name. Transfer of breeding units is notified to Greyhounds Australasia (GA) within 14 days of the transfer, with both the seller's and the purchaser's signatures on the form. Transfer of breeding units needs to occur BEFORE the breeding unit is used to inseminate the female. Your veterinarian will not conduct the insemination unless this process is completed.

Some registration applications can be lodged online and some require paper forms that can be downloaded from the GWIC web site (www.gwic.nsw.gov.au). If you have any questions, contact the GWIC Registration and Welfare Team on 13 49 42.

Notification of Service

GWIC must be notified within 14 days that a female has been mated or inseminated ('served') using the Register Services by a Registered Stud Dog Application Form, which is available on the GWIC website.

In the case where frozen semen is used, the veterinarian or approved technician conducting the insemination will submit the details of the service to Greyhounds Australasia.

In the case of a natural mating or artificial insemination (AI) using fresh or chilled semen, the details of the service are completed and registered by the stud master.

Whelping Notice and Litter Registration

When the female has whelped, you must notify GWIC of the number of pups born alive, the number born dead or which die soon after birth, and the sex and colour of each pup – a Whelping Notice and Litter Registration can be completed online, via the GWIC website.

On this form you will tell GWIC the location of the pups if they have not been whelped at your registered address. If the female misses (does not whelp any live pups) then you must notify GWIC of this via the same form. You must provide this form within 14 days of the whelping date.

After the Whelping Notice and Litter Registration has been submitted, GWIC will contact you to arrange a time to come to your property to ear brand and microchip the pups. This should occur before the 10-16 week vaccination.

The GWIC staff member will leave you with a form which records the colour, sex and the microchip number for each pup. The form includes space for your veterinarian to record vaccination details, and you should take this form to the vet when you take the pups for their 10-16 week vaccination.

As soon as 10-16 week vaccinations, ear tattooing and micro-chipping are completed, GWIC will send you individual Registration forms for each pup in the litter.

The Greyhound Racing Rules require that all greyhounds have two forms of identification: a micro-chip and an ear tattoo. All pups are given a single 5-letter ear brand (a punch tattoo) placed in their left ear. The first letter of the brand represents the state in which the pups were born (i.e. 'N' for New South Wales), the second letter indicates the year that the pup was born ('A' = 2011, 'B' = 2012, etc.) and the rest of the ear brand is unique for that pup.

Sale of pups

When you sell a pup, it is a requirement that you notify GWIC within 10 days, so that the pup can be transferred into the new owner's name. Complete the transfer form at the time of sale – transfer notifications can also be completed online.

You should also keep the details of the purchaser – including name, address and contact phone number – recorded with the microchip number of the pup and its litter records. Notification of the sale of the pups is required by GWIC. In NSW, any advertisement for sale of pups must include the microchip number of each pup or, if the pups are not yet micro-chipped, your breeder registration number.

Record keeping

Keeping accurate and detailed records of breeding activities, and for each individual dam, sire and pup resulting from your breeding program, is important. Health and treatment records are required under both the Greyhound Racing Rules and the NSW Greyhound Welfare Code of Practice.

Your records should include information about:

- health, illness, injuries and all veterinary treatment;
- results of any tests;
- feeding regimes for dams and pups;
- the dates of dams coming into season and undergoing insemination;
- litter and whelping information, such as how long the dam was in labour and whether assistance was required; and
- sale of pups, including the name, address and contact phone number of buyers.

When you transfer a greyhound, you must supply the greyhound or pup's health record to the new owner or trainer. It is a good idea to keep photocopies or electronic copies of all forms that you give to others. Use a calendar for calculating and displaying important dates, including when the pups are due for worming or vaccination.

Accurate and detailed record keeping also allows you to learn from and improve your breeding practices, helps your veterinarian identify the source of any problems, and gives buyers confidence that you have a professional approach to breeding.

4. Ensure breeding facilities are up to scratch

Kennels and yards used for adult and racing dogs are usually not suitable for breeding females and a potentially large litter of growing pups. Separate housing is sometimes required for greyhounds that are in season, pregnant, whelping or lactating.

The NSW Greyhound Welfare Code of Practice specifies requirements for housing of whelping greyhounds, and litters of pups, including minimum size requirements for pens and whelping boxes.

Whelping Boxes

A dam is at her most vulnerable during whelping and puppies in the first few weeks of life need constant care and attention. Hence greyhound breeders often put a lot of thought into planning for the birth of a litter.

Whelping boxes need to have sides that are high enough to keep small puppies up to four weeks old in but low enough to allow the dam to get out. This will usually mean the walls need to be 50 - 60cms high. Some boxes have a small gate at the front which will allow puppies in and out, and also makes access for humans easier.

Whelping boxes should also have a rail which runs around the inside of the box, about 15 – 20 cms from the floor. The purpose of this 'crush rail' or 'pig rail' is to stop the dam rolling over on top of a young pup and crushing it against the wall.

Some whelping boxes do not have a base. If the whelping area has a tiled or cement floor a base may not be necessary (and the box will be lighter without one) as the floor is easy to clean. However, if your whelping box does not have a floor it is important to provide extra bedding to insulate the puppies from the cold floor.

Some whelping boxes have two parts – essentially, two boxes side by side with an opening between the two sides. This 'whelping pen' design allows the dam to retreat to one side while the pups explore the other box. This design has the advantage that it can accommodate the dam and her litter for longer, until the pups are a little older but not yet old enough to escape the box.

A whelping box must be large enough to allow the dam to lie comfortably, and accommodate all the puppies for the first four weeks. Greyhounds tend to have large litters of six puppies or more, so require a large whelping box. For a single box, 1500mm (1.5 metres or 5 feet) by 1500mm is a minimum, and 1800mm (1.8 metres, or 6 feet) by 1800mm is preferred. A double box whelping pen might have two boxes of 1500mm by 1500mm.

Different materials have different advantages and disadvantages. Wood – usually pine - is the most commonly used material, and the easiest to work with if you are planning to build your own whelping box. Wood has the disadvantage that it can absorb fluids making it difficult to clean and disinfect and so more likely to harbour disease and pests. It is important to paint or varnish the wood to prevent this, but do any painting well ahead of the whelping to ensure there are no bad smells or fumes during whelping.

Other materials such as plastic, fibreglass or aluminium can also be used. These materials have the advantage that they are easier to clean and sterilise but are often more expensive.

Heating

Heating is particularly important for puppies. Young puppies cannot regulate their own body temperature for the first few weeks after being born, and chilling is a common cause of mortality in young pups. Hence it is critical that you ensure that the whelping box has adequate, reliable heating.

An ambient temperature of about 32 degrees Celsius is recommended for the first 4 days after whelping. This can be gradually reduced to a more normal temperature over the next 2 – 3 weeks as the pups grow.

A comfortable temperature for newborn pups is likely to be too hot for the dam, though. Consequently, it is advisable to heat only part of the whelping box so that the dam does not overheat.

Different breeders use different methods to provide heating. A heated lamp over one corner of the whelping box is a common method. A lamp has the advantage that it allows the dogs to regulate their own temperature by moving closer to or away from the lamp.

With a lamp, it is important to ensure that it is positioned high enough that no leads or wires are within reach and the dam will not bump into it.

Heated pads or mats may also be used, and some whelping boxes have a floor which provides for under-floor heating. The key thing with these methods is to ensure that there are no cords or wires available for dogs to chew on.

Bedding

Different materials can be used for lining the box and providing bedding for the occupants. Many breeders use newspaper or shredded paper with blankets on top for whelping. Paper has the advantage that it is cheap and easy to dispose of if it gets soiled during the whelping process. It can then be replaced with dry bedding such as towels or blankets.

It is important to think carefully about the bedding you provide for the dam and puppies. Lots of deep, thick bedding material can be a risk for small puppies who may get trapped under heavy bedding. Bedding also

needs to be changed and cleaned regularly, so it is advisable to choose materials that are easy to wash and dry.

DIY

Some breeders choose to build their own whelping box - there are lots of good plans and instructions available on the internet. If you are using plans from the internet, it is advisable to check with an experienced breeder or your veterinarian before starting work.

You can also buy a whelping box – either new or second hand – or hire one. As many people breed only one or two litters, it is not hard to buy a whelping box second hand. If you are buying products second hand, it is most important to ensure that they are cleaned thoroughly (diluted bleach is preferred for this), rinsed and aired before use.

Water bowls

Very young puppies do not need water, as their hydration needs are met from lactation. However, the dam will need access to fresh clean water at all times and will drink increased amounts when lactating. Hence a water bowl will be needed within the whelping area. Choose a design that puppies cannot chew, tip over or fall into.

Some breeders fix the water bowl to the wall of the pen. Puppies will also need access to water from the age of about 3 weeks, so you will need to ensure that they also have access to water as they start to wean.

Location

A whelping box needs to be located somewhere that is warm, dry and quiet, but easy for the breeder to supervise. It also needs to be easily accessible with good lighting. Consider somewhere that is warm and private enough for a dam and her puppies.

The whelping area needs to be quiet, warm and away from other dogs. It needs to be easily accessible for you as the breeder, easy to clean and disinfect, secure from vermin, and well lit. You are likely to spend many hours, day and night, monitoring the bitch as she whelps and in the first few weeks of the pups' lives.

The average greyhound litter size is 6-7 pups but litters of 13 are not unknown, so be prepared to house a large litter. New breeders often underestimate the size and activity of young greyhound pups once they reach 12-16 weeks of age and need to apply to move the litter should their neighbours complain about the noise or mess that the pups are making.

When you apply for registration as a Breeder – Whelper, you will be required to provide photos of your facilities, including kennels, yards, whelping and food preparation areas.



5. Genetics and selection for breeding

Basic breeding principles

- All pups get half their genes from their mother and half from their father, so both parents are equally important.
- The genes can be thought of as the 'Instructions' for building a racing greyhound.
- The actual assortment of genes each pup receives from each parent is random. Some pups get more of the 'good genes' than others. No two littermates have the exact same genes (unless they are twins – which is extremely rare), even though they come from the same parents.
- Because all dogs carry some 'good' genes and some 'bad' genes, no matter how good the dog is on the racetrack they will all produce some inferior pups.
- Certain traits are more likely to be passed on – they have what is called 'high heritability'. Other traits may have a low heritability.
- Temperament traits (such as aggression or fearfulness) are highly heritable – this means if you breed a greyhound that is aggressive you are more likely to produce pups that are aggressive. If you breed a very nervous greyhound you are more likely to produce pups that are nervous, though the way pups are raised will also influence their temperament.
- 'Line-bred' animals have a common ancestor behind each parent within the first 3-4 generations. The aim of line-breeding is to try to accentuate desirable traits by increasing the frequency of the desired genes in the pups.
- 'In-breeding' is the mating of closely related animals such as brother-sister, mother-son, father-daughter, and is not permitted under the NSW Greyhound Welfare Code of Practice.

- An 'out-cross' is a mating of two basically unrelated animals. This means that they do not have any common ancestors for at least 6 generations. The two individual dogs may still be line-bred themselves; they are just not related to each other. Out-crossing is generally done to introduce a desirable trait, or to try to increase 'hybrid vigour'.
- A 'pedigree' is a list of ancestors for a particular individual. Although all the dogs in the pedigree have some input into the individual, the first 2-3 generations are the most important and influential. For example, a dog appearing in the 6th generation may only contribute 1% of the genetics for the pup in question. Even if a dog appears a number of times in the 5th or 6th generation it still might only have a small influence on the genetics of the pup.
- 'Progeny records' are a list of the offspring from an individual. They are by far the most important indicator of a dog or bitch's ability to produce successful pups.
- The genes form the dog's 'genetic potential', and this is influenced by other things such as nutrition, exercise and handling. A well-bred dog can be ruined by poor nutrition and care and never actually reach its full potential. Conversely, all the good food and care in the world is not going to turn a poorly bred dog into an athlete.

Selecting a dam

Starting off with the best dam should be a priority. A female that has won in city races is certainly the ideal starting point. If she has been mated previously check the performance of her offspring. If she has not managed to produce any winners within one or two litters, it is very unlikely that she will suddenly produce a good dog no matter which sire you use.

Because temperament is more highly heritable than many other traits, avoid bitches who are non-chasers, 'fighters' or extremely fearful or shy.

Unless there are problems with the male's fertility, it is the bitch which determines litter size based on the number of eggs produced. Look for a bitch which has come from a large litter herself, rather than one which came from a small litter. Smaller litters are more likely to lead to problems such as the need for caesarean section. Ask the previous owner for as much information as possible about the bitch's reproductive cycle – including when she was last on season, how she cycles, and the days she was mated. The more information you have the better.

A dam's litter size is usually fairly constant over time, although older females tend to have fewer pups as fertility declines with age. Select a female that comes from a line of good dams, and avoid those that have been hand reared themselves.

Ensure the female is in excellent physical health so that she has the best chances of getting pregnant. She must be up to date with her vaccinations so that she can pass on her immunity to the pups when they are born and ensure she has been properly wormed and is free from external parasites.

Many females that have recently retired from racing need to increase their body condition prior to breeding, and your vet should give you an ideal weight for your bitch to be at breeding. The prolonged use of oestrus suppressants during racing may affect the bitch's likelihood of coming in season. Consult your veterinarian in this regard.

Once your bitch starts showing signs of a season, it is essential she is locked away from any male greyhounds on your property to avoid the risk of a mis-mating.

Selecting a sire

A suitable sire is one that produces the traits that you desire in their progeny complements the traits of the dam. List the strengths and weaknesses of the dam - this becomes your 'shopping list' as you consider each sire. Prioritise the features you would like to improve and avoid doubling up on faults or weaknesses.

The cost of the stud fee is only a small part of the cost of whelping and raising a litter, and it costs just as much to whelp and raise lesser quality pups as it does good quality pups.

Read carefully the information supplied about each prospective sire. All stud masters will highlight the best things about their stud dog, and not mention the negative. Just because a sire is well advertised, does not mean that he will produce pups that will win races.

Look at the performance of the progeny he has already produced to ensure that he passes these traits on to his offspring. Progeny data is probably the most important information about the sire. There are many good racing dogs who have failed to produce winning pups.

When looking at lists that compare the number of winners for each sire, consider how many pups were produced to reach these totals. If two sires have both produced 15 city winners each and are equally ranked in the 'Top Sires' lists based on winning progeny, the sire who has sired 150 litters is nowhere near as efficient at producing winners as the sire who has sired 30 litters to achieve the same result.

Knowing when a sire started his career is also important. If the sire is in his first or second season, he probably will not have many of his pups racing as they will be too young, and he may appear lower on the ranking list.

If possible, look at the performance of any offspring from prospective sires and females that are related to yours as this will give a good idea of whether the two dogs are likely to produce good pups. When looking at progeny, look at the average over all progeny, not just the feats of one or two exceptional offspring. Pedigree data can be

obtained from www.greyhound-data.com.

It is important that you are clear about what you are getting for your money. As it is a private contract between you and the stud master, the various state greyhound racing authorities will not get involved if there is a dispute.

Insemination

Most greyhound breeding is now done through artificial insemination, using either fresh or frozen semen. Some stud masters will allow their stud dogs to perform natural matings, although the more popular sires are more likely to be mated using artificial means due to the high demand for their services.

Timing the mating of a female is very important. If the timing is wrong, the female is likely to have either a very small litter or does not become pregnant at all ('misses'). Greyhound fertility cycles can be anything from 6 to 12 months but each female tends to have a constant interval between fertile periods - hence the importance of keeping accurate records of when she come into season.

By taking repeated blood tests over several days, the rise in the progesterone level that is associated with ovulation can be detected. This is essential if you are using frozen semen, as it can be much weaker than the fresh variety. Frozen semen does not remain viable for very long after insemination (12-24 hours), meaning the timing has to be accurate. On the other hand, fresh semen can survive a few (3-4) days, which increases the chances of viable semen being present when the eggs are ready to be fertilised.

A stud dog may have frozen 'breeding units' of semen located at a number of Greyhounds Australasia approved facilities. When you apply to the stud master to use the dog, you will need to have one of these units transferred into your name prior to you being able to use it. If the breeding unit is not located near you, it will then need to be shipped to the facility that you plan to use. Forms for registering transfer of ownership of units are available on the Greyhounds Australasia website.

When the bitch is ready to be mated, the frozen semen is carefully thawed, and then used to inseminate the bitch, either trans-cervically (a non-surgical method), or surgically. The inseminating veterinarian or AI technician will examine the semen after it is thawed to check its quality and post-thaw motility. At least 100 million motile sperm are required for each breeding unit.

Surgical insemination involves anaesthetising the bitch and making a small incision in her abdomen so that her uterus can be gently lifted out. The semen is then injected directly into the uterus via a fine catheter with half of the semen being injected into each side (called 'horns') of the uterus. The uterus is then placed back, and the surgery site is closed.

Trans-cervical insemination is preferred by some



artificial insemination facilities as it does not require the bitch to have a general anaesthetic or surgery. With the bitch awake and standing, a fibre-optic scope is used to guide a special catheter through the cervix, and the semen is deposited inside the uterus. Done by an experienced and proficient person, this method can be completed quite quickly, and the results are similar or superior to the surgical method.

Which method is used will depend on the facility and the veterinarian that you use. Talk to the person who will be doing the insemination before the bitch comes into season so that you know exactly what they need from you, and what is involved. You will also want to know what the costs are likely to be, and make sure the semen arrives well in advance so that there is no last-minute rush.

6. Pregnancy and birth

Care of the pregnant greyhound

There are several ways to detect a pregnancy. By the third week after mating, it may be possible for a veterinarian or an experienced person to palpate (feel) her gently and feel the pregnancy. Ultrasound of the abdomen will detect the heartbeat of the pups from about day 22-26 of pregnancy and movement of puppies after day 30. X-rays can be used in the last 7 days of pregnancy and can be useful to count the number of puppies. Teeth are visible on x-ray from 4 days before birth.

It is not uncommon for a female greyhound who is not pregnant to display symptoms of a pseudo- pregnancy or false pregnancy. They may put on weight, produce milk, or display behaviours associated with whelping such as digging a nest – so these features alone are not a reliable indicator of pregnancy.

In the early stages of pregnancy, it is important not to over-feed the mother. She should continue to eat a well-balanced diet at the same rate as before she was pregnant. If her diet is nutritionally balanced and complete, she will have no problems growing puppies. Overfeeding and excess weight can lead to problems giving birth.

Bitches can decline food around three weeks following a mating. In general terms, this is much like 'morning sickness' and it is critical to find food that the bitch is willing to eat at this time. Some bitches will eat roast chicken, cooked sausages, canned fish (tuna or sardines), cooked liver and kidney or tinned cat food. The morning sickness will abate in most cases after 7 to 10 days, but some bitches will be fussy about food for the duration of their pregnancy.

A diet that is not balanced will deprive the mother and growing puppies of vital nutrients. Over-supplementation is just as dangerous as a diet that is lacking in essential nutrients. Over-supplementing with calcium during pregnancy can be particularly damaging and lead to problems when the bitch has whelped. Consult your veterinarian about diet and any use of supplements.

As the bitch moves into the latter stages of the pregnancy, her intake of food will need to increase, but you may have to increase the number of meals, rather than increase the amount in each meal. This is because the puppies will be taking up much of the space in her abdomen and this does not leave a lot of room for the stomach to expand. If you feed a dry kibble, you may choose to gradually change the bitch over to a puppy formula as these are more energy-dense and tend to have slightly higher levels of protein and calcium.

Please take the time to consult your veterinarian about what you should be feeding and what to avoid.

The pregnant mother should continue to exercise regularly. Fit, healthy muscles are necessary to help push the puppies out. Your bitch should have some exercise every day, although the amount may decrease as she gets nearer to her due date. In summer, exercise her only in the cooler parts of the day and avoid extremes of temperature.

Early in pregnancy, it is quite safe to run the female with other dogs, provided they are compatible. In later pregnancy, she may prefer to exercise her on her own.

Many worming and parasite treatments are considered safe to give throughout pregnancy but before using any product or medication, consult your veterinarian.

If your pregnant greyhound does become unwell, consult your veterinarian and ensure they know she is pregnant. Some drugs should never be administered during pregnancy because they may affect unborn puppies or cause the pups to be aborted.

Whelping

Preparing for the birth

Be prepared for the birth well ahead of time so there is no panic if the dam gives birth earlier than expected. If surgically inseminated, your veterinarian/technician will be able to more accurately predict your whelping date. If the date of service is unknown, due to mis-mating or other reasons, it will be important to talk to your veterinarian and to date the pregnancy.

Prepare for the whelping by assembling things that you may need:

- Clean towels and replacement bedding
- Thermometer for monitoring the temperature of the bitch before labour
- Disposable gloves
- Cotton thread, scissors and betadine for tying off umbilical cords if needed
- Hot water bottles
- Garbage bags for soiled bedding
- Scales, pen and paper for recording the weights of pups and the times they are born

Consult your veterinarian about what else you may need for the whelping. Some veterinary clinics may offer a whelping kit that contains Oxytocin and calcium injections along with instructions, but inexperienced breeders should call a veterinarian if things go wrong.



Also, prepare for the needs of the humans who will be overseeing the many hours of whelping with snacks, drinks, pillows and comfortable chairs.

Knowing when the dam is going to whelp

The expected date of whelping is usually 63-65 days (9 weeks) from the time of ovulation. If frozen semen has been used, the date of whelping will be more accurate to predict. Many inseminators say that whelpings from surgical implants are usually at day 61 because of the direct insemination process.

Importantly, the final week of gestation is critical to lung development, bone density, formation of teeth and size (to survive the rigours of birth). Pups born more than 5 days before the due date have a very low survival rate.

During the last week of pregnancy, monitor the bitch's rectal temperature once or twice a day. The normal temperature for dogs is 38-39°C Celsius, and it is common for the rectal temperature of the bitch to drop 1°C or more approximately 24 hours prior to the birth in about 85% of bitches. Bitches carrying small litters (1-2 pups) will not show a decrease in rectal temperature.

Loss of appetite and restlessness are other signs to watch for. Some bitches go off their food a couple of days before whelping, but others will eat right up to the hour before. Mammary development (milk filling) starts to occur in the last 10-14 days. Nesting will also occur in the last 5-7 days, although this will become more intense as the first stages of labour start. Often, the bitch will shiver and start to nest feverishly approximately 24 hours before labour. More obvious shivering will commence in the hours prior to whelping.

The Greyhound Racing Rules require that a dam must be located at the premises of a registered Breeder – Whelping no later than 14 days before her due date. If for some reason this is not possible, please call GWIC to advise of this.

If there is concern that the bitch has gone over time without any signs of whelping, or a caesarean is being contemplated, an ultrasound examination can be performed by a veterinarian to look at the puppies' heart rate. Blood progesterone level can be done to help determine if the bitch 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. Again, this is not useful in small litters.

The first stage of labour (4-24 hours)

During this stage the bitch will usually start nesting and is quite restless. She may shiver or pant heavily, but there are no visible contractions. Some bitches may vomit, some may become clingy, others will hide. Make sure she is in the place where you want her to whelp at this time. Whelping bitches like dark, quiet places, and she may try to hide under the house or behind a shed where it will be difficult to get her and the pups out.

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

The second stage of labour

As she moves into the second stage of labour, she will start having contractions. The contractions may be spaced out to start with, as the first puppy usually takes the longest time to be born. Eventually the bitch will really bear 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 'bubble' of fluid at the bitch's vulva. As she pushes some more, the pup will appear – pups can be born headfirst or tail first – so you will either see a nose, or feet and a tail. It may take a few contractions to fully pass the pup.

Once the pup has been born, it is vital that the sac is removed so that the pup can breathe. This is usually something that the bitch will do. She will chew and lick at the pup until the sac breaks. She will then lick and nose the pup stimulating its respiration. If the bitch 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 bitch. Sometimes you will have to do this if two pups are born close together and the bitch 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, or it may be passed a few minutes later. It is normal for the bitch 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 with the pups (especially for first-time mothers).

If the bitch does not chew through the cord, or if the cord seems to be bleeding, 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 scissors. You can then dab the umbilical stump with a bit of povidone iodine formulation such as Betadine to help prevent infection. After a day or two the umbilical cords will dry out and fall off by themselves.

The bitch will then repeat the second and third stages of labour until all of the pups are born. The time between pups varies, and some bitches will rest even an hour or two between whelping each pup. 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 bitch 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.

If there has been no pup born for about 90 minutes, walking the bitch on a lead to urinate will often assist muscle contractions and push pups along.

Make sure that you make a note of the time that each pup was born, so if there are any problems you will know how long since the last pup was born. You can also note the colour, sex, weight and individual markings of each pup as they are born. These notes will assist in identifying pups in the important first three weeks. 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.

Be prepared to phone your vet if you are not sure if things are going to plan. As a rough guide, these are signs that things may be going wrong:

- More than 30-40 minutes of strong contractions with no puppy
- 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 bitch that is very restless or who is crying or licking frantically at her vulva

Remember, the earlier you get help the higher the likelihood of having live pups, so do not put off seeking help if you think things are not going to plan.

If a pup is visible it may be possible to assist the birth but be careful not to pull hard on a puppy's head or tail as there is a definite risk of dislocation. Any assisting by pulling should be directed in an outward and downwards direction, towards the hocks of the bitch. If the pup seems stuck and some gentle traction does not help, seek immediate assistance. Do not administer oxytocin unless instructed by a 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 bitch (the colostrum) is full of important antibodies that help keep the pups safe from infection. If the pup is having trouble getting a feed, 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 bitch which helps with milk let-down and stimulates contraction of the uterus.

When whelping has finished

When you are happy that the bitch 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 bitches get so messy they need sponging or a wipe down, but make sure that you dry her completely so she does not get cold.

You can also encourage her to have some food and water, although many bitches will be too concerned about getting back to their litter to think about eating. It may be necessary to hand feed bitches that refuse to leave their pups.

Clean up all the soiled or wet bedding and place clean, comfortable bedding in the box. The pups can be placed in a basket or box with a hot water bottle wrapped in a towel (so they do not get burned) while you do this.

When the mother is settled with her pups again, make sure 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 mother will probably spend the next few hours resting and cleaning the pups. It is normal for the mother 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 bitch and pups to their clinic within the 12-24 hours after birth (usually the next morning) for a 'post-whelping check', but other veterinarians and experienced breeders strongly recommend against this because of the stress placed on the mother and the risk of pups coming into contact with diseases in the veterinary clinics. A better alternative is that the veterinarian pays a 'house call' instead, to check that the bitch has truly passed all of the pups and give her an injection of oxytocin to help clear out her uterus. Experienced breeders may be supplied with oxytocin by their veterinarian and administer the injection under instruction from the veterinarian.

Veterinarians will also check that the mother has adequate milk and inspect all of the puppies to see that they are healthy. They will check and weigh the pups and make sure they do not have cleft palates, which can be a serious life-threatening genetic disorder.



7. Raising the litter

The first few days

It is important that you check the bitch and pups regularly in the first few days. First time mothers may not settle straight into being a mother. You may need to supervise constantly to ensure the bitch does not trample or lie on her pups, and make sure that all the pups get a fair chance to suckle.

The easiest way to make sure the pups are doing well is to weigh each pup daily. You will need to have a way of identifying each pup. By weighing you will be able to pick the pups who are struggling and may need extra help to keep up with the rest of the litter.

In the first 24 hours it is normal (but not ideal) for some pups to lose a little weight, but after that there should be a definite gain each day, even if it is only a few grams. Pups that stay the same weight over a 24-hour period should immediately be given priority on the teats, and pups that lose weight should be very closely monitored and supplemented if needed.

As a general guide, happy well-fed pups will sleep for most of the day. When they wake, they will move about and make noise for a short time until mum licks and cleans them (stimulating them to go to the toilet) and will then feed. After about 15-20 minutes of feeding they will fall asleep again. Pups that cry are usually cold, hungry, in pain (such as when a bitch lies on a pup) or have been separated from their mother and littermates – so a happy litter is a quiet one. If your pups seem to be constantly crying something is wrong - check to make sure the bitch has enough milk and that the whelping box is suitably warm.

You should also check the bitch thoroughly each day – inspecting and feeling each of her teats to check for heat, lumps or soreness. All bitches producing milk are at risk of developing ‘mastitis’ which is a bacterial infection in the teat itself. The affected teat becomes inflamed and hard, and often feels hotter than the other teats.

Mastitis can occur suddenly and can be very serious. The milk from the infected teat is discoloured and thick, and the bitch may go off her food, have a fever and appear lethargic. If you are concerned that your bitch might be developing mastitis, have her checked by a veterinarian immediately.

The bitch should be eating as much good quality food as she can and drinking plenty of fluids. If she goes off her feed, that is immediate cause for concern.

The food and water bowls should be placed outside the whelping box, so they are easy for the bitch to access. Never place a water bowl inside the whelping box as puppies have been known to drown in them. If she is a good mother, you may have to take her out to the toilet on the lead as she might not want to leave her pups.

If you want to supplement her calcium, now is the time to do it. The liquid form (calcium syrup) is the best way to do this as the bitch is able to absorb more of the calcium from the syrup than from powder. The powder can also make her food ‘gritty’ and she may not eat as well as she needs to.

Although it is an exciting time, and you may have family and friends who want to visit, keep everything quiet and low-key for a few weeks. It can be very stressful for any mother (but particularly a first-time mother) to have lots of people looking and touching her pups and this can lead to her becoming increasingly unsettled – something you want to avoid. Mothers can also get very protective of their pups and normally mild-mannered bitches may behave aggressively to strangers, especially in the first few weeks.

The first two weeks

During the first two weeks, pups are unable to shiver and rely on their mother and each other for warmth, food and stimulation from their mother to go to the toilet.

At this stage the biggest risks to survival are cold and hunger. Puppies can dehydrate very quickly as they have no body reserves. They are unable to regulate their own temperature, so it is vital that they remain warm and don’t ‘wander off’ from the litter. This is why a whelping box is important as it confines the pups and prevents them from getting away from their littermates.

If a pup becomes chilled, it becomes weak and unable to suckle. If it can’t suckle, it becomes dehydrated and its blood sugar levels fall dangerously low. This becomes a vicious cycle and soon the pup becomes weaker and weaker. Early detection and action can easily reverse this spiral, so it is your job to be alert to changes in each pup’s behaviour.

If you have a weak pup, the first thing to do is to warm it up. Place it on a hot water bottle covered with a towel (to prevent burning). Whilst you are making the hot water bottle, put the puppy under your jumper against your skin to use your body heat to keep it warm.

Once it feels warmer, the next step is to give it some fluids. Using an eye-dropper or a syringe, place a few drops of warm water, (either on its own or mixed with a tiny bit of sugar or honey) in the pup’s mouth. Make sure the pup is held the same way as it would be when it is feeding off the teat – do not hold the pup like a human baby as the fluid will run down the wrong way and could choke it.

If the pup seems to perk up, place the pup on one of the bitch’s back teats and make sure it has a good feed. Sometimes pups look like they are suckling, but they are not really getting much milk. You will have to supervise this puppy, making sure it stays warm and has a feed every few hours until it looks stronger. If the puppy does not respond to the oral fluids, it may need to go to the vet for some fluids to be administered by injection.

When large litters are produced (eight pups or more), supplementary milk may be required. The daily weights of pups will be a perfect guide to the 'haves and have-nots'. Consult your veterinarian if you are concerned that some or all the pups are not getting enough milk and are not putting on weight. The best milk supplements for pups are those specifically formulated for dogs (Di-Vetelact for example) but goat's milk is acceptable in an emergency.

During these first two weeks, check the pups several times a day and night and keep the whelping box and the bedding clean. Get into a routine where each of the pups is gently handled, weighed, and inspected each day. Early handling is part of the pup's normal learning process.

Pups and the mother need worming from about two weeks of age. Roundworm is a particular problem in young pups, as it is passed through the milk to the pups. It is also cycled through the bitch as she cleans the pups and eats their droppings, so do not forget to worm the mother. The worming of pups can be as simple as Drontal Puppy All-wormer suspension (chocolate in colour) while many prefer to mix a regular, crushed all-wormer which is mixed in yoghurt and syringed orally. Talk to your veterinarian about worming products and the appropriate weight-based doses.

The third and fourth weeks

From about the 10th day of life, the pups' eyes and ears will begin to open and they start to explore. Their muscle tone and co-ordination will develop and they make their first attempts at walking. By the fourth week the pups are starting to play with each other and the mother.

The mother's milk production increases as the pup's appetite increases, and she will probably need to eat more food in these two weeks than at any other time. It is also the time to start introducing solid feed for the pups. Most breeders start with a flat dish of cereal such as Weet-Bix mixed with warm water or a milk replacement formula designed for puppies (not cow's milk which can cause upset tummies and diarrhoea) or dry puppy food that has been soaked in warm water until it is soft and mushy.

The food is first introduced, the pups will usually get it all over themselves before realising it is for eating. Over a couple of days they will gradually get the idea, and will soon come running when the feed dish is put down. By supplementing the pups with a number of meals per day, it is possible to take some of the pressure off the bitch, especially if she has lost some condition feeding the pups or she is feeding a large litter.

Pups at this age spend a lot of the day exploring their world. They will start to escape over the walls of the whelping box and will need to be enclosed in a puppy run. They can also be allowed outside for short periods of time if the weather is fine. This is the age when pups learn what constitutes their bed and what is their toilet. It

is important that they are provided with different surfaces so that they instinctively learn to toilet away from their bed.

Puppies also do a lot of exploring with their mouths. They bite and chew each other, the bitch, the bedding and anything else they can get their mouths on. Providing toys of different textures at this age can stimulate this development. It is also possible to encourage chasing behaviour with toys on a rope or string that can be dragged along the ground.

The fifth week onwards

As the pups continue to develop, they will become more and more co-ordinated, and their play will start to mature as their characters develop. This period in life is called the 'Socialisation Period,' and is the time where they learn all about what is 'normal' in their world. After the socialisation period ends, they can be suspicious of new and novel experiences so it is important to expose them to the things they will experience later in life.

Socialisation includes getting them used to other dogs, people, handling, noises, and smells. Encourage them to chasing by playing chasing games. Introduce them to wearing a collar and to walking on a lead. At this age they can have a warm bath using a puppy-safe shampoo, but make sure they are totally dried off as they are still susceptible to the cold. All of their experiences need to be controlled and made as positive as possible.

The pups will now be on regular meals three or four times a day. Do not attempt to wean the pups from the mother because sudden forced weaning is very stressful for both the mother and pups. It is far better to let the bitch gradually wean the pups herself – she will probably start to tell them off when they use their teeth on her teats – but the gradual weaning will allow her milk to dry up naturally, rather than leaving her feeling engorged and uncomfortable, and increasing her risks of developing mastitis.

The pups' food should gradually change from soft and sloppy to harder food. Sudden changes in diet will cause the pups to have loose stools, so introduce new foods slowly over a couple of days. As the pups get older they can be given raw bones to chew on, but make sure the mother is safely locked away if she is likely to become possessive of bones. Chicken necks are very suitable for young pups.

At this age you will be kept busy trying to keep the pups' area clean. You will need to pick up the droppings three or four times a day as pups toilet more often than adults. Their bedding will also need changing more often as they are messier.

The NSW Greyhound Welfare Code of Practice requires that pups not be separated from their mother until they have passed 8 weeks of age, unless a veterinarian advises differently.

Worming and vaccination

Pups are usually wormed at 2, 4, 6 and 8 weeks of age. They need to be weighed and dosed accurately with a product that will kill round worms and hook worms at the absolute minimum. Many breeders choose to use a worming syrup when the pups are 2 weeks of age due to the ease of dosing, but then move to a worm tablet once the pups are bigger. Rotate different brands of worm treatment containing different drugs so that resistance to the treatment does not develop. Ask your veterinarian for advice on the best products to use at each stage.

At 6-8 weeks of age pups are due for their first vaccination, which is usually a C3 – distemper, hepatitis, and parvo-virus – although your veterinarian may advise you to vaccinate against kennel cough or other diseases at the same time. The vaccination, once given, takes 10-14 days to be effective, so it is important not to assume that the puppies are protected from these diseases as soon as they receive the vaccine.

The second compulsory vaccination must be at least C5 and must be given at 10-16 weeks of age. Proof of this vaccination needs to be provided with the Litter Registration Application.

Some veterinarians will also recommend vaccinating against canine coronavirus and leptospirosis (C7), depending on the local prevalence of these diseases.

Ear-tattooing and microchipping

After the Whelping Notice and Litter Registration has been submitted, GWIC will contact you to arrange a time to come to your property to ear brand and microchip the pups. This should occur before the 10-16 week vaccination.

As soon as 10-16 week vaccinations, ear tattooing and micro-chipping are completed, GWIC will send you individual Registration forms for each pup in the litter.

If you are planning on selling all or some of the pups, the pup's individual Registration form should go to the new owner along with its health record.

Pups must not be moved from the property at which they were whelped until they are fully vaccinated and registered. Fully vaccinated means at least two weeks after their 10-16 week vaccination, as it takes up to two weeks for a vaccination to have its full effect.



8. Checklist

For newcomers to breeding

1. Do I have the money to build and equip suitable facilities to whelp and rear a litter?
2. Do I have the money to pay for the care of a mother and large litter, including stud services, veterinary expenses and emergencies such as caesareans?
3. Do I have the space for raising a large litter and will my local council allow it?
4. Do I have the time and energy to rear and educate a large litter of pups?
5. Do I have a mentor to guide and teach me?
6. Do I have a veterinarian I trust and can work with?

Steps towards breeding

7. Do I understand the registration and notification requirements for breeding greyhounds?
8. Have I completed the Breeder Competency questionnaire and am I registered as a breeder?
9. Is my chosen dam up to date with worming, vaccinations and parasite control?
10. Is my chosen dam registered for breeding and has she been DNA tested?
11. Is my chosen sire registered for breeding with Greyhounds Australasia?
12. Has the breeding unit of frozen semen been transferred to my name before being used?
13. Do I know how to tell when my dam is in season?
14. Have I provided GWIC with a notification of service within 14 days of service?
15. Do I understand how to keep good records?

Genetics and selection for breeding

16. Do I understand the basic principles of inheritance and breeding for characteristics?
17. Do I understand how to pick a good dam and compatible sire?

Pregnancy and birth

18. Do I know how to detect a pregnancy?
19. Do I know how to feed and care for a greyhound throughout her pregnancy?
20. Do I have a whelping box and all the equipment I need for whelping?
21. Do I know what signs to look for that my greyhound is close to whelping?
22. Do I know what to look for and do in each stage of labour?
23. Do I know the signs that the labour may be going wrong?
24. Do I know what to do after the labour is finished?

Raising the litter

25. Do I know how to care for pups that are cold, losing weight or smaller?
26. Do I know how to care for a lactating dam and the signs of mastitis?
27. Do I know at what age pups need worming and vaccination?
28. Have I submitted the whelping notice and receive a litter registration form?

9. GWIC applications and notifications

Application or notification	When submission required
Breeder and Trainer Registration Application Form	Submission and approval required before undertaking breeding
Application to register a greyhound as a breeding female (<i>if required</i>)	Submission and approval required before breeding that female
Application to lease a sire or dam (<i>if required</i>)	Submission and approval required before breeding those animals
Application to breed a female over 8 years of age or with 3 litters whelped already (<i>if required</i>)	Submission and approval required before breeding that female
Register Services by a Registered Stud Dog Application Form	Submit within 14 days after service
Whelping notice	Submit within 14 days after whelping
Notification of 6-8 week vaccination	Submit within 7 days after vaccination
Litter registration and 10-16 week vaccination forms	Submit within 14 days after microchipping and ear branding
Kennel notification when pups moved from birth location	Within 14 days after being moved

10 . Further reading

ABC's of Dog Breeding -Orlandi, CW, American Kennel Club, <https://shop.akc.org/products/abcs-of-dog-breeding-what-every-breeder-should-know>

Animal Welfare Code of Practice - Breeding Dogs and Cats (2009), Industry & Investment NSW, https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0004/299803/Breeding-dogs-and-cats-code-of-practice.pdf

Care of the Racing and Retired Greyhound (2007), Blythe, LL, Gannon, JR, Craig AM and Fegan, DP, American Greyhound Council.

Care of the Racing Greyhound: A Guide for Trainers, breeders and veterinarians (1994), Blythe, LL, Gannon, JR, and Craig AM, American Greyhound Council.

Genetics for Dog Breeders 2nd Ed (2001), Robinson, R, Butterworth-Heinemann.

Greyhound Racing Rules – Greyhound Welfare and Integrity Commission, <https://www.gwic.nsw.gov.au/integrity/rulesandpolicies>

NSW Greyhound Welfare Code of Practice – Greyhound Welfare and Integrity Commission, <https://www.gwic.nsw.gov.au/welfare/code-of-practice-for-the-welfare-of-greyhounds>



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