



Rearing Newborn Puppies

By – Bob Franklin

The bitch has finished whelping the puppies, she is exhausted and you are exhausted too – now what do you do? First things first - offer some water, broth or milk to the bitch and then take her out side to pee and poop. She just ate many of the puppies' placentas and it may have been hours since she had a drink or was taken outside. It is amazing how many breeders just collapse in bed and forget the basic needs of the bitch.

Many breeders prefer to have the bitch actually birth the puppies out in an open space in the middle of a bathroom or other small room that can be kept warm. This way the breeder and any other helpers can easily get to the bitch if necessary without being hindered by sides on a whelping box. However, you should have already prepared a warm whelping box to transfer the bitch and puppies into once birthing is completed so they are in a warm, dry and non-drafty place and won't need the warmth of the bitch during her occasional absences to eat or do her duties. A heating pad is nice to provide extra warmth but be certain the electrical cord is well protected or out of view of the bitch. The pad itself should be underneath the whelping box so the bitch cannot chew it and possibly electrocute herself.

It is sometimes wise to have a whelping box with a ledge around the edge of the box so pups can be safe underneath this ledge without being squashed or suffocated by the bitch that may unknowingly press her back against a puppy and press it against the side. This is more important for large breeds or litters with lots of puppies. Try to have a fuzzy pad or blanket with edges that can be tucked tightly underneath a board that fills the floor of the whelping box so the bitch cannot rumple the pad all up and perhaps smother a puppy.

Presumably breeders can tell the difference between male and female puppies, but for those who might be unsure, the girls have their plumbing between their rear legs whereas the males have theirs in the middle of their stomach. The umbilical cords hanging down from all of the puppies' stomachs just below their rib cage are just that and should not be confused with a male pup's plumbing.

Good mothers are a joy. An important "mom" duty is keeping the puppies and the whelping box clean. The elimination process for each puppy is stimulated by the mother licking each pup's genital areas. A good mother also eats all puppy poops and pees during the first few weeks of lactation prior to weaning. Calmness on the part of the mother and her willingness to share her pups with the human family are important. Overly protective mothers who won't tolerate handling of the pups by humans usually are overly aggressive in normal life too. This probably should be a crucial consideration as to whether that bitch is ever bred again, and the temperaments of her pups should be observed closely to see if any of them also exhibit the bitch's aggressive temperament characteristics. It is desirable to keep the bitch and puppies isolated from normal household "hub-bub" and certainly keep other animal pets away from the bitch and her puppies. Some bitches are bouncy and will jump up at each noise they hear. Some pups that are attached and nursing when this happens will get a good banging on floor or the side of the whelping box so the objective is to keep this "banging" from happening too frequently.

Some litters of course will have defective puppies. Cleft palates, unclosed stomach with intestines hanging out, edema (water puppies), hairless or underdeveloped puppies or mummified puppies are the most common defects. It is probably best not to waste time with these defective puppies as they will most likely not survive and there are other healthy, strong puppies that need the attention of the bitch and yourself. It is estimated that 28% of all puppies die in the first week after birth, so the first 5 to 7 days are critical. After that, the remaining pups' chances for survival are quite high.

Help the bitch keep the whelping box clean. She will discharge a black/bloody liquid from her vulva for several weeks after whelping as her system cleans out the excessive tissues from her uterus. If a C-Section was necessary, this discharge will usually be more than from mothers with normally whelped litters. Make sure the mother's breast areas are kept clean. If on her trips outside to pee and poop she decides to go down an inviting hole – perhaps looking for a better den for her puppies – then wash off her belly. An exceptionally hairy bitch should probably have hair trimmed from her belly prior to delivery to keep the area cleaner and to help the pups sort out the teats from the hair.

After whelping, feed the mother two small meals a day rather than one large meal but do not initially increase the amount of food she receives beyond perhaps 1½ times what she would have gotten normally. Good quality adult food is probably best since some special foods for lactating bitches or puppy foods can be too rich and contain too much calcium for her initial needs. However, do give her some cottage cheese or yogurt once a day to provide just a little more calcium. As the pups grow and demand more and more milk from the bitch, the quantity of food given the bitch must gradually increase. ALWAYS HAVE PLENTY OF FRESH WATER AVAILABLE FOR THE BITCH.

By the time the pups are 4 weeks old the bitch will be eating about three times as much food as she would normally which has been well supplemented by an egg a day (cooked or raw), a spoon full of cottage cheese or yogurt with each meal and perhaps a little chunk of raw hamburger with each meal. At the third week of lactation, start supplemental calcium powder or pills on a gradually increasing basis to insure that the bitch receives plenty of calcium for all the milk she is producing. Around four weeks of age, most breeders begin weaning the pups.

However, too much calcium TOO EARLY can cause the bitch's digestive system to shut down its ability to absorb calcium so that later on, when the pups are consuming much more milk, the bitch's digestive system cannot assimilate calcium fast enough and she may go into eclampsia (milk fever) or calcium deficiency. She will become very nervous, start shaking, her temperature may get as high as 106 degrees fahrenheit and eventually she may go into convulsions and even die. When these symptoms happens, an immediate emergency trip to the vet is required to give the bitch calcium intravenously. Almost within minutes she will return to normal, but if the pups are at least 3 weeks old, you should begin weaning immediately. More about other potential nursing problems later.

It is important that the pups nurse soon after birth. The first milk contains colostrum which provides passive immunity for the young pups against diseases for several weeks depending on when the mother was last vaccinated. This is why it is especially important for the bitch to be up-to-date on her vaccinations so maximum immunity is passed along to the pups. Try to be sure that every pup gets some early teat time – especially if the litter is large and maybe the bitch's teat count is inadequate for all pups to nurse at once. If one or more of the pups seem weaker or seem to cry a lot, then help those pups get attached to a teat (preferably the ones that seem to contain the most milk – often the two rearmost teats) and keep the other pups from nudging the weaker pup(s) off while nursing. Some bitches don't lie on their side completely and thus tend to keep half of the teats covered and not accessible to the pups. Gently force the bitch completely onto her side occasionally and allow as many pups as possible to nurse all at once.

Indicators that pups may not be doing well are:

1. Limp feeling like a glove without a hand in it.
2. Sounds like it has emphysema or gurgles when it breaths.
3. Nurses only a few minutes and falls off - or does not nurse at all.
4. Cries a lot and acts like it is colicky.
5. Is dehydrated; determined by pinching the skin on the back of its neck and the skin stays creased.

Healthy puppies will:

1. Feel like a glove with a hand in it.
2. Sound like a well tuned motor.
3. Will twitch and jerk in their sleep as if they are having dreams.
4. Nurse with conviction and are strong enough to fight their way to a nipple.
5. Are quiet, either busy nursing or sleeping.
6. The "skin pinch test" pops quickly back into place.

Weight gain is the best way to monitor puppy progress. Lack of weight gain can signal a problem with individual puppies OR, if all puppies are not gaining, it can indicate that the bitch is not producing enough milk or that she has something else wrong. Use the whelping chart described in a previous article "Whelping Puppies" to maintain a weight chart by weighing each puppy in the morning and again in the evening. Some puppies may lose weight the first 24 hours, but by the 2nd day, healthy JRT puppies should gain between ¼ to 1 ounce daily. Sometimes you will catch a puppy just after it poops or pees or before it nurses and they may not show a gain. But make a note to watch that puppy closely and weight it again a few hours later.

Potential problems with the bitch's milk production are several – caked breasts (calactostasis), mastitis, toxic milk, eclampsia "milk fever" or just simple failure to accept the pups. Caked-breasts are usually caused if the bitch is producing too much milk initially and most frequently happens when there are only one or two pups. Check the bitch frequently to see if her breasts are swollen or feel hard. If not corrected, those breasts will probably just dry up on their own, but usually it is wise to hand nurse these breasts to relieve the discomfort for the bitch and hopefully keep them going for when the pups are bigger and demand more volume of milk.

Mastitis is a bacterial infection of the mammary glands. The breasts turn red to purple and the bitch becomes listless. If this occurs, immediate veterinary assistance is necessary. Toxic milk is incompatibility of puppies to the bitch's milk. Usually the first sign of this problem is a whole litter of crying, colicky puppies that aren't gaining any weight. This is a serious problem and immediate veterinarian help is needed or you may lose the entire litter. Eclampsia (milk fever) is a very serious calcium deficiency problem which was discussed in detail earlier regarding proper feeding of the bitch during lactation.

Should a puppy appear weak and not thriving, try giving that pup extra "nipple time" several times a day all alone without any competition from the other puppies. Hopefully it will soon start suckling better and eventually gain enough strength to compete effectively for "nipple time". However, some pups require supplemental feeding either by tubing or bottle-feeding – especially if the mother is not producing appropriate milk and the entire litter must be hand-fed by the breeder. The author has had excellent success "tubing" these weak pups. Tubing involves threading a small tube down the throat of the puppy completely into its stomach and injecting a milk formula directly into the pup's stomach. Your vet's assistance and advice is required to obtain the necessary equipment, proper supplemental milk formula and instructions on how to do the tubing. Some people use a small bottle with a nipple for supplemental feeding but bottle feeding is much slower than tubing and it is more difficult to know exactly how much milk the puppy is getting. Also, the author actually drowned a puppy bottle feeding which is another reason we much prefer the tubing procedure.

Often the pups need to have their toenails trimmed within a few days following birth using a small pair of fingernail clippers. Trim only the points and avoid the quick (that is pink) as the nails can bleed if cut too short. As the pups nurse, they knead the breasts to facilitate milk flow and long, needle sharp nails can be uncomfortable for the bitch or even leave many small bruises. As the pups grow, toenail trimming should be repeated about once a week. The umbilical cord stubs will dry up and fall off in a few days so do not try to pull them off earlier.

Jack Russell Terriers need to have their dewclaws removed and their tails docked by the third to fifth day after whelping depending on the vigor of the pups themselves. Veterinarians can do this removal and docking, but be certain your vet knows how short the tails should be docked. JRTs need longer tails than some other breeds (ie., Boxers, Cocker Spaniels, Doberman Pinschers, etc.). On a JRT, take off only 1/3 to 3/8 of the tail and NEVER MORE THAN HALF. The March/April 2001 issue of "True Grit" has an extensive article on how best to do this tail docking and dew claw removal.

The eyes of your puppies will open sometime between ten and eighteen days. Let this eye opening happen on its own and do not worry if some open their eyes before others. At around three weeks, the puppies will begin to hear loud sounds. By two weeks the pups will begin to stand and by three weeks they will be walking around. By four weeks, the pups will be aware of their surroundings and will begin to play with each other - usually consisting of trying to chew on each other's ears or tails or even male "toidies".

Puppies should be treated for worms at 2, 4, 6 and probably again at 8 weeks of age. Puppies can be infected with worms from the bitch or even from dirt on her nipples brought in from her trips outside. It is really horrible to have a litter of 5 to 6 week old puppies actually pooping sheaths of round worms that look like bundles of angel hair spaghetti. Your veterinarian can provide appropriate wormer and instructions on how best to accomplish this worming. Some vets may even recommend worming the bitch during lactation.

Weaning of puppies can begin anytime from 2½ weeks to 5 weeks depending on each individual situation. There are many, many theories about what to feed the puppies during weaning - probably all will work. One good technique is to use a small amount of a good brand of puppy chow or kibble (the author uses the same adult dog food the mother is getting) and soak the dog food in water until it can be mashed with a fork. At first use very little of the mashed dog food mixed with condensed milk and add scrapings from a piece of inexpensive beef or venison steak. Warm this thin gruel slightly in a microwave and present it to the puppies. As days go by and the puppies are eating eagerly, use proportionally more dog food and add egg yoke (raw or cooked), finely ground hamburger instead of steak scrapings plus cottage cheese or yogurt. Always add enough warmed water or condensed milk to make a gruel - gradually thickening the consistency of this gruel. Use a straight side bowl such as a cake pan - not a sloping sided bowl. With straight sides, less food will be pushed out of the pan.

For the first week or so the pups will waste more food than they eat by wading through the bowl and tracking it out onto the floor. In the beginning, help the pups realize that there is food in the bowls, putting a little on the end of your finger and sort of "rake" it off into the mouths of the puppies. Then push their noses toward the food to get a little on their lips. Once they realize what it is all about, they are usually eager eaters. It is advisable to feed the pups when the bitch is elsewhere otherwise she will quickly eat all of their food. When the puppies have finished, let the bitch clean up what is left. Gradually increase the volume of food and make it a thicker consistency as the pups become more proficient at eating. Weanlings should be fed three to four times a day. Gradually begin keeping the bitch separated from the pups for longer periods of time but after the weanlings have just been fed, allow them to nurse briefly when the bitch returns for so long as she will allow unless health issues with the bitch dictate that she should completely cease nursing the pups. Hopefully, the bitch will also play briefly with the puppies as

this maternal contact and early discipline is good for their personality developments. Always keep fresh water available for both the bitch and the puppies in the whelp box area.

By the time the pups are 4 weeks of age, the breeder should have worked out with their veterinarian the planned vaccination program for their pups. Parental immunity is present so long as the pups are nursing, but this begins to gradually weaken and the pups need to be protected by their own vaccinations. Many vets recommend that vaccines begin at 5 to 6 weeks of age with three subsequent shots on a three week schedule thereafter. However, some vets are beginning to recommend later vaccinations starting at 8 weeks with the shots repeated at 4 week intervals thereafter for a total of three shots.

Rely on your local vet's advice as to what vaccinations the puppies should receive.

An excellent website discussing several vaccination theories for canines is located at http://designerbostons.homestead.com/misc.htm1#anchor_13035 should you or your vet be interested.

Outside visitors should be kept to a minimum until the pups have been given their vaccinations. If outsiders are allowed to pick up the puppies, require that they wash their hands with a disinfectant soap and avoid placing the pups against their faces or clothing. There is nothing worse than having a litter of perfectly healthy puppies get sick from Parvo or some other puppy disease.

A responsible breeder of Jack Russell Terriers should also make an appointment with a Veterinary Neurologist to have the hearing of all puppies in the litter tested. Deafness is prevalent in JRTs, and the only way to really know if your puppies hear properly is to have them BAER tested (Brainstem Auditory Evoked Response), usually at 7 to 8 weeks of age before the pups are placed in their new homes. Also take the entire litter to your local veterinarian for a puppy physical to check for heart murmurs and any other health or genetic problems not readily discernible without medical equipment. It is strongly recommended that the pups receive their first vaccination at least 3 days prior to visits to the vet office for BAER testing or puppy physicals.

There is no way an article like this can include ALL information needed to successfully rear puppies from whelping to weaning. Therefore it is recommended that any breeder just starting out purchase one or more of the many available books on the subject of Canine Breeding. One excellent reference for rearing puppies is entitled: "The Whelping and Rearing of Puppies", by Muriel P. Lee published by T.F.H Publications, Inc.. One of the best books or all is "Canine Reproduction - A Breeders Guide" by Phyllis A. Holst, MS, DVM published by Alpine Publications, Inc.. Several other excellent reference books have already been listed in the three previous articles in this series -- "Breeding Your Bitch", "Canine Pregnancy" and "Whelping Puppies".