



Banbury-Bedrock Bull Terriers

A Puppy's Critical Stages of Development

by Mary Remer

The Neonatal Stage is from birth to 2 weeks. . A puppy brain is only developed enough to control breathing, heartbeat, and maintain a steady state of being. Neonatal puppies are unable to regulate their body temperature but will seek warmth and cry when they are cold or hungry. Consequently, it is up to the breeder to provide an environment that is draft free and of consistent temperature (80-90 degrees) for the first two weeks. The best way to ensure ample nourishment is by daily weight checks which evidence a steady gain. While the eyes and ears are closed, researchers do believe puppies are born with some sense of taste and smell. Research has demonstrated that brief periods of daily handling and specific forms of stimulation, such as the "Super Dog" program, will have positive effects on both the neurological and physical systems. The "Super Dog" program, originally known as the BioSensor Protocol, was developed by the military and found to have the most optimum effects when implemented between days three and sixteen. Five exercises comprise the daily program with each one lasting for 3 to 5 seconds. In his article, "Developing High Achievers" (originally published as "Early Neurological Stimulation"), Dr. Carmen Battaglia sites benefits of the "Super Dog" program which include stronger adrenal glands, stronger heartbeats, and more tolerance to stresses as well as resistance to disease. On a cautionary note, too much stimulation has been shown to have adverse effects. For more information on Dr. Battaglia's work, please refer to <http://www.breedingbetterdogs.com/achiever.html>.

The period of two to three weeks is considered a Transitional Period. Its beginning is marked by the opening of the eyes (sight improves gradually from this point) and concludes at the onset of hearing. Crawling both forwards and backwards and attempts to walk happen during this week. Appropriate non-slip bedding in the whelping box will be helpful, as you will notice increased movement about the box. At this time puppies can tolerate lower temperatures, between 70 and 80 degrees, which will be a relief to Mom.

The next definable period is an Identity Awareness Period that occurs from three weeks through sixteen weeks and contains within it sensitive times where interventions can be critical to a puppy's development. Socialization at this time is critical for proper attachment development to humans and other species as well as confidence in a variety of environments. A broad range of humans (men, women, children, ones with hats, coats, umbrellas, beards, glasses, etc.) must be experienced as well as a variety of environments and other animals. Dogs will only become fluent in "dog" with a broad spectrum of exposures to breeds and ages. Age defines the nature of these experiences which will begin at home. Starting at around three weeks friends can come by and handle the puppies. By the fourth week begin changing the puppies environment by setting up a pen in other areas of the house. By the fifth week they can begin to explore the outside on warm, sunny days. Have visitors over of all ages and sizes. Once they get to seven weeks puppies can go on short outings to puppy friendly places like a friend's house, dog friendly banks and post offices, etc.

It is a good time to start brief play dates with other puppies of similar age and introductions to puppy friendly adult dogs as well. At this time puppies should experience environments that are positively stimulating, such as playing on puppy agility equipment. Well known behaviorist and author, Dr. Ian Dunbar, says that by the time a puppy is four months he should have met four hundred people to meet Dunbar's criterion for a well-socialized puppy. From the socializing perspective, this article suggests an ideal, however, your veterinarian may have concerns about your puppies immunity and vaccination protection. Do consult with your veterinarian or other professional resource. Be vigilant about your puppy's mental and physical safety. Finally, this is a time when puppies need to learn to be alone. Not learning to be relaxed when alone can lead to separation anxiety later on.

In the third to fourth week, the first set of teeth are emerging and consequently it is possible that puppies may experience their first negative response from their mother for suckling too hard when they nurse. She also may be ready to start the weaning process and will let the pups nurse less frequently. So it is here that the first opportunity arises for the pups to learn about inhibiting their bite. This is a critical reason for pups to be reared by their dams, as she will be the first teacher of bite inhibition. Mock play also begins in this week among the littermates. Also during this time, toys of different materials should be put in the environment and there should be different textures for them to walk on as well. Now is the time puppies will leave their sleeping area to relieve themselves so its helpful to have a distinction in surface texture.

It is important for the litter to be kept together and with their mother into the seventh week as it is a critical socialization period. The puppies learn appropriate deference to their mother, which they will then be able to transfer to other relationships. A hierarchy within the litter is established at this time and critical social skills are developed and imprinted through rituals of play and mock fighting behaviors.

Toward the end of the seventh week is an optimum time for bonding and for puppies to be placed into their families. The brain is developed and is ready for the stimulation of learning and socializing as an individual, out of the litter context.

There is a Fear Imprint Stage between eight and ten weeks. Its duration is variable, sometimes lasting for two days or up to two weeks. The owner may notice a sensitivity to loud and/or unusual sounds. Socialization and exposure need to be continued at this time however it is recommended that puppies stay in a familiar environment during this period.

The next critical stage of development occurs between the fourth and seventh months and is called the Flight Instinct Period. Suddenly your compliant, velcro puppy becomes Christopher Columbus and turns a deaf ear while heading in the away direction. It is marked as a critical period as the pup comprehends the following: once he is away from you, you have no magic to make him come when you call and he is able to process this information from short to long-term memory. The behavior of not coming when called can quickly become a learned behavior. Puppies must be kept safe during this time by using a leash unless they are in a fenced in area. Coinciding within this time of independence is the teething process. Some breeds and individuals have a harder time with this than others. Red, swollen, sore gums with erupting teeth can make puppies mouthy and irritable. There may be a regression in house training progress as puppies increase their water intake in an effort to soothe their gums. The puppy may object to necessary protocols such as nail cutting, grooming, ear cleaning, leash walking and taking away toys or food. These objections must be worked through now, as the puppy needs to learn the difference between play and necessities. Puppy Kindergarten classes should be a puppy priority at this time.

Between six and fourteen months there is a Second Fear Imprint Stage, which relates to fears of knowns and unknowns. All of a sudden the fire hydrant on the street that has been there since the puppy's first walk has morphed into a terrifying monster or the couch that was in the puppy's picture since the beginning has suddenly become an ogre. When these fears pop up, build confidence with humor and play rather than soothing the puppy through it. Let the hydrant or couch become a treat dispenser.

Also between six and fourteen months there is the most committed chewing behavior. The adult teeth are in but are not committed in the jawbone. The mandible is the last bone to grow and as it does there is a physiological need to chew. The chewing can become destructive if not managed properly. This chewing is usually at its height between seven and ten months. Hormones and the challenges of puberty and adolescence are also apparent during this period. There can be defiance and challenges with both other dogs and humans. It is a time to focus on your relationship with your dog as well as his relationship with other dogs. Keeping your adolescent dog well exercised and with plenty of appropriate chewing material available is essential. Manners classes can be helpful and supportive.

The period of one to three to four years is referred to as the Maturity Period. Puppies evolve into adult dogs. The larger the breed, the longer it takes to reach maturity. There is physical as well as mental maturity. It is a time when both genetic and environmental potentials are realized. Renowned geneticists and behaviorists, Scott and Fuller, maintain that ultimately a dog's behavioral makeup is 35% genetic and 65% environmental, i.e., training, management, socializing, diet and health care. So your knowledge of puppy development and the resultant actions you take will make a huge difference in your life long relationship with your dog.