Critical periods in a Dog Life - Developmental Stages

Critical stages of canine development have been well covered in both scientific and popular literature and are based primarily on the work of John Scott and J. L. Fuller in the forties, fifties, and sixties. Clarence Pfaffenberger’s book "New Knowledge of Dog Behaviour" introduced these stages of development to breeders, trainers and pet owners over 20 years ago. Jack and Wendy Vollhard and Richard Wolters further popularized this field by introducing puppy aptitude testing based, in part, on Scott and fuller’s findings. Drs. Michael Fox and Ian Dunbar, initially studying canine development and behavior in clinical settings, have written copiously for the lay press regarding puppy socialization.

Unfortunately, many writers have led new puppy owners into believing that a puppy purchased at any age older than exactly 7 weeks will bond less well and be less trainable than a puppy purchased at exactly 49 days of life. The 49th day of life may be the earliest time a puppy may leave its littermates, but it may not be the best time.

THE EARLY CRITICAL PERIOD: BIRTH - 21 DAYS

Neonatal Period: Birth - 12 Days

During this period the puppy development is limited to two functions; nursing to obtain nutrition and staying warm. A puppy is totally dependant upon his mother to meet all of his physical needs. He needs to be stimulated to urinate and defecate. His sense of taste, touch, smell and his ability to hear is limited. The environment affects him only as much as it touches him.

**Breeder Do's**

- Keep bitch happy, healthy, and well-fed. Her physical and emotional well-being will supply everything the puppies need during this stage.

- Handle puppies very gently, with very slow, massaging movements. Very light stimulation of the nervous system (called "pre-stressing") may be beneficial when applied during the second week of life. This could involve rotating pups gently in your hands, applying light pressure to the ear leather, and holding each pup gently on its back for a few seconds each day. Pups should, of course, be weighed daily to monitor growth and this would be a good time to handle each pup. **THIS IS NOT SOCIALIZATION OR TRAINING.** Pre-stressing does, however, assist in developing brain cells.

**Breeder Don'ts**

- Don't allow visitors (human or canine) during this period. Avoid anything that will stress the bitch (house guests, parties, home repairs, etc.) Also try not to move puppies or remove mother from the litter at this time. If the pups or dam need to see a veterinarian try to arrange for a home visit. Despite the common practice, this is not a good age to take a litter to a dog show in your RV.

Transition period: 13-21 days

Eyes and ears open and pups slowly begin responding to light, movement, and sound. Puppies become mobile as they gain awareness of their surroundings, their mother, litter mates, and objects. Pups may also begin to alert to human presence during this period. This is still a reaction to stimuli rather than a social bond or emotional attachment.

Pups will attempt to get up on their feet, but continue crawling backward and forward. They may begin trying to get out of whelping box toward end of this period.

**Breeder Do’s**

- Introduce toys as obstacles to climb over or bump into. This helps pups develop spatial awareness. Some pups may begin briefly interacting with toys near the end of the third week. Continue handling pups daily using slow, massaging movements. Pups are growing fast and need frequent nail trimming. Introduce brushing with soft brush. Again, this is not training but stimulation.
Breeder Don'ts

Avoid startling pup with loud noises or sudden movements while hearing and eyesight are developing. If you must move or change puppies' environment, this is the time to do so. Do not remove from dam.

Awareness Period: 21 - 28 days

Most important period with rapid sensory development. Puppies are fully alert to their environment and will startle easily at sudden sounds and movements. During this time they are able to recognize their breeder and other significant humans by smell, sight and sound. However, they have lost the natural insulation of the neonatal period and negative events can easily imprint in basic behavior during this period.

Social bonding begins to occur during this week.

Neonatal behaviors such as head swinging, mewing and crawling back and forth stop. Pups are more active and moving well on their feet. This is a time of rapid physical change. There are also significant changes in brain waves during this period and pups are now able to learn from experiences and to retain what they have learned.

Breeder Do's

Introduce new tactile sensations in puppies' box. Pups enjoy burrowing in shredded newspaper, for example, or crawling over a rolled towel or blanket. Continue daily handling, adding new sounds and sights to the environment radio, TV, telephone, computer printer. Introduce toys that make sounds. Pups can be removed from the box and placed on new surfaces. Do this with two pups at a time rather than separating from litter.

Breeder Don'ts

AVOID LOUD NOISES OR SUDDEN CHANGES DURING THIS PERIOD. Negative events can permanently imprint on pups during this week. Do not run vacuum cleaner around pups, blow hair dryers, run clippers, etc. Postpone having work done on your home and ask prospective purchasers or curious friends to wait until the end of the 4th week to visit puppies.

Do not move puppies or separate from dam during this week.

Canine Socialization Period: 21 - 49 days

Puppy is with mother and littermates. During this period, puppy learns about social interaction, play, and inhibiting aggression* from mother and littermates. Puppies must stay with their mother and littermates during this critical period. Puppies learn the most important lesson in their lives--they learn to accept discipline.

Social awareness, learning to become dogs (note: first week of this critical stage of development overlaps with second period of development). Play fighting behavior becomes increasingly intense. Pups are developing problem solving abilities, physical coordination, bite inhibition. Mother begins weaning pups during this period, those beginning to initiate discipline. During this time puppies will begin to move to the far corners of their bed, box, or pen to urinate and defecate. House breaking can begin!

* Some lines of dogs don't begin to get incisors until about 7 weeks, so this time period may last two additional weeks in those dogs--one can't learn to inhibit his bite if he has no teeth.

Breeder Do's

During entire period leave pups together as litter and allow dam free access to pups.

During 4th week (21-28 days) introduce food to pups without removing dam. You can feed her in the litter box at the same time. Begin escalating sensory experiences (see notes on second critical period). Continue daily handling by breeder and family members.

During 5th week (28-35 days) introduce pups to the outdoors. Take them outside to urinate and defecate after waking or eating. When this is not possible provide pups with a designated bathroom spot to begin their housebreaking.

Begin handling pups individually away from litter mates and dam for at least 10 minutes each day. Enlist the help of family members, friends, neighbor and prospective puppy owners in this process. If you cannot handle 10 minutes each do, do 5 minutes. Daily experiences away from litter mates are crucial.
During 6th and 7th weeks (35-49 days) increase sensory experiences with brief car rides. Introduce pups to vacuum cleaner. Puppies can begin simple training routines using food lures and social attraction at this time. Start teaching pups to stand on grooming table to be examined or to be brushed.

This is the prime socialization period. Introduce new people, especially children. Pups enjoy interaction with a gentle adult dog, a kindly aunt or uncle who will baby-sit with patience. Introduce situations that will stimulate problem solving behavior – tunnels, cardboard boxes, gates, steps, fences, logs, etc. Allow pups to have successes and reinforce these successes with food.

**Breeder Don’ts**
DO NOT REMOVE PUPPIES FROM LITTER DURING THIS PERIOD! Do not completely remove mother. Do not correct for play fighting, housebreaking errors, or mouthing.

**Fear Impact Period: 8 - 12 Weeks**

Enlarging social awareness and bonding outside of litter. Mental abilities are fully formed but pups lack experience. This is the optimum time to teach new things and is, in fact, the period of fastest learning. Research has shown that behaviors can be shaped and modified most easily during times when learning is occurring most quickly. Training during this time will actually increase the capacity to learn by increasing brain cells in the appropriate regions of the brain.

Bladder and bowel control develop and pups are capable of sleeping through the night without an accident.

**Breeder Do’s** Greatly enlarge the puppies’ world between 49 and 56 days. Begin puppy rotation, playing and sleeping in smaller groups. Pups that remain with breeder can be crated with one or two other pups. Be sure to switch puppies around.

Continue individual grooming, play and training sessions with each pup. Gentle but firm discipline from humans may be begun. Begin teaching response to simple commands such as sit, down, stand, come, walk on lead at this time. Pups during this period can learn complex behavior chain and can make associations.

**Breeder Don’ts** Do not isolate from humans or unnecessarily restrain during this period (only restraints should be crate or necessary fencing). Avoid inadvertently reinforcing fearful responses.

**Note:** First fear imprint period occurs between 8-10 weeks. Avoid placing pups during this time. Avoid shipping pups, ear cropping, traumatic experiences.

Pups that have been properly socialized and bonded with breeder can be successfully placed at 10-12 weeks after they have passed the first fear imprint period and while they are still young enough to be "babies."

**Dominance Period: 3-4 Months**

Dominance period where pup solidifies social position. Pups will begin testing their place in the world during this time. They tend to become emboldened. This is a period of very fast physical growth.

**Breeder/Owner Do’s** Pups must be treated as individual dogs. If they are still with breeder, they should no longer be treated as part of a litter and should sleep alone in individual crates at night and all training and grooming sessions should be individual.

Introduce behavioral dominance exercises. "Alphabetize" yourself and your family - feed pup after you eat, move crate to different locations so pup doesn't become site protective, take food and toys away from pup while eating or playing.

Continue socialization and obedience training providing slight distractions. TEACH THE RECALL AND PRACTICE IT SEVERAL TIMES EVERY SINGLE DAY!!!! Do this before pup enters the "flight period" at about 16 weeks.

**Breeder/Owner Don’ts** No tug of war games. Do not allow pup to sleep in bed with humans. Absolutely forbid all chasing games with children.
VERY, VERY IMPORTANT NOTE; DO NOT RAISE LITTER MATES OR TWO UNRELATED PUPPIES TOGETHER DURING THIS PERIOD!!!

**Flight Instinct Period: 4-6 Months**

The flight period, corresponding to teething. Pups begin testing limits. May attempt to assert dominance over human pack members (especially children). May "forget" housebreaking.

This period is characterized by independence and willfulness. Owner or breeder is no longer Mommy substitute.

**Breeder/Owner Do's**: Keep pup on lead when outside fenced enclosures. Continue recall training and response to commands. Continue passive dominance and touch sensitivity exercises and handling all parts of pups body.

**Breeder/Owner Don'ts** Do not let pup off lead if at all possible. Do not chase pup or play chasing games.

**Second Fear Imprint Period: 7 - 14 Months**

Sexual maturity, hormonal changes. Fearfulness of new situations, objects, people, other dogs. Male dogs begin lifting legs. Some individuals will pass through this period faster than others, often with no noticeable problems. Others may display marked changes in behavior in strange situations. Reinforce the behaviors you want; do not reinforce fearfulness by coddling or protective behavior. But also try to avoid punishing fearfulness. Try to adopt a firm but patient and kindly attitude to the pup's fearful behavior. Continue socialization to humans and other dogs. Avoid or postpone extremely stressful or traumatic experiences for animals that appear to be in this fear imprint period.

**Rule of Sevens: Seven Weeks to Seven Months**

From the age of 7 weeks until 7 months, a puppy should meet 7 new people every 7 days. Everyone she meets should give the puppy treats, and as much variety as possible in terms of size, age, color, and personality type should be represented. The puppy should also go 7 new places every 7 weeks (or at least one new place a week), and the places should be as different from each other as possible, such as a lake, a park, a shopping mall parking lot, the vet's office, a pet store, etc. And don't stop there! These recommendations are minimums the more people and places your puppy experiences, the more well-adjusted he'll be as an adult. Keeping track of the people your puppy meets and the places he goes can be fun for young children and will ensure that you meet your goals. Be sure the puppy is put on his own four feet for these introductions and visits; holding him in your arms can send him the wrong signals and prevent him from experiencing the world on his own.

~ Author Unknown

**References and Related Reading:**


~ Source: [http://www.dogwoodshelties.net/dog_info/Behavior/Development.htm](http://www.dogwoodshelties.net/dog_info/Behavior/Development.htm)