

THE ONE AND ONLY?

by Patti Conroy

(This article was inspired by and adapted from the “Integrative Care” column from the GR News by Shereen D. Farber, Ph.D., OTR, FAOTA with her permission.)

We are at the vets and the ultrasound shows one tiny beating heart...a singleton. The dreaded word...ONE!

Raising a singleton cavalier is challenging, but can also be a joy – a very special gift. The first couple of weeks can be frightening for a new breeder and will always be stressful for even the most seasoned breeder. Personally, I feel rearing a singleton can be more challenging than raising an overly large litter. It also can be extremely rewarding – an extraordinary bequest. This article will explore strategies for raising the “one and only” cavalier puppy including safety tips, appropriate early stimulation ideas and later behavioral consequences as well as adaptive methods of socialization and management for both puppy and mom.

Singleton puppies are not uncommon in the smaller breeds groups. When a Cavalier King Charles Spaniel bitch carries only one or two puppies, the puppies can get larger than normal and be difficult to deliver. Take it easy on any supplements offered to a mother with a single puppy...you don’t want to get “either” puppy or mom fat! This larger-puppy-than-normal-condition can produce a possible *dystocia*, an inability of the bitch to deliver the pup without assistance. Having a labor monitoring system available and a vet on call seems prudent. A scheduled Caesarian section may be recommended to prevent complications or death during attempts at delivery if the vet determines that the pup or pups are unusually large. Elective C-Sections require careful monitoring by the vet to detect the best time to schedule the surgery. After the delivery, the vet releases the dam and pup only after they are medically stable. The breeder is then instructed to check the bitch’s incision daily for signs of infection and to try to prevent the pup from nursing near the incision site. Vets rarely give step-by-step instructions regarding care and safety of singleton puppies.

(Note: However breeders in my area are very lucky indeed to have an incredible vet clinic, Harmony, that are not only extremely knowledgeable on singleton deliveries but also very supportive and informative on after care of both mom and baby!).

THE FIRST COUPLE OF WEEKS...KEEP THAT BABY WARM!

Newborn puppies do not have well-established thermostats, making body temperature maintenance a problem for the single child. We have all seen a litter of puppies snuggled together in a pile. (Figure 1 - next page)



The “puppy pile” serves several purposes:

- It helps the puppies stay warm
- They experience the maintained pressure of puppies lying near or on them, which has a calming influence
- Littermates lying on or near a given pup provide a wide range of sensory stimulation including smell, tactile and proprioceptive input.

How do we keep a singleton warm and simulate the experiences it would receive from the puppy pile? If the dam is healthy, attentive and experienced, she will usually gather her single child and bring it near to her.

(Figure 2 - Moms and their “one and only”)

Figure 1 - Puppy Pile:



(Figure 2 Continued - Moms and their “one and only”)



(Figure 3 - Singleton with “littermates” in a simulated puppy pile)

Mom cannot be around every second of a new pup’s life to keep it warm, nor will the singleton receive as much maintained pressure without littermates. Alternatively, I suggest using a Bed Buddy Microwave Heat Pack™. After the Bed Buddy is warmed in the microwave for two minutes on high, the Bed Buddy will stay warm for 45 minutes. Many breeders use socks filled with uncooked rice. While rice-filled items are inexpensive and easy to make, the rice can burn in the microwave and does not stay warm for as long a period of time.

How do you simulate the sensory experience of maintained pressure that littermates provide? The breeder of a singleton should place a number of stuffed animals in the whelping box and pile them around and on top of the puppy; of course making sure the puppy is comfortable and able to breathe easily (Figure 3). I recommend rubbing those stuffed animals on the mother so that each has her odor. The singleton will start to seek out its “littermates” and will continue to cuddle with them even after its temperature has stabilized.

Licking

Dams instinctively lick their babies in order to stimulate digestion and elimination.(2) Some dams become overly attentive and the incessant licking causes skin irritation and damage. **WATCH FOR THIS WITH THE CAVALIER MOTHER!** (Sometimes they have a tendency to overdue the mothering thing!)



Figure 4: Watch for “style” of mothering

The breeder must monitor for this and try to distract the dam. Of course the opposite problem can happen as well. One breeder told me that her bitch refused to pay any attention to her singleton pup, forcing the breeder to use cotton swabs or cotton balls dipped in warm water to simulate the dam’s licking. Another good choice for licking simulation is to use a watercolor sable paintbrush, dipped in warm water. The swab or soft brush needs to be stroked across the genitalia and belly. Bitches also lick their babies in all areas as part of grooming and survival practices. After making the puppy void, stroke the entire body with a warm, clean, cotton ball, swab or soft brush. Make sure you do not use too much moisture and make sure the puppy is totally dry before returning to the box.

Optimum Time Periods

At birth, the sensory systems that are actively reporting back information are primitive touch via the trigeminal nerve, orientation reflexes via the vestibular portion of the 8th cranial nerve and smell via the olfactory nerve (3). Battaglia (4) describes the U.S. Military “Bio Sensor” program for stimulating puppies and enhancing their performance, which later became known as the “Super Dog” Program. The results of their research indicated that there are critical periods or “windows of time” when certain stimuli have maximum effects. There are five exercises used in the first period of life from about day three through day 16.

These exercises include:

- Holding the puppy erect with head up
- Holding the puppy with head pointed down to the floor but its body parallel to the floor
- Holding the puppy supine (on its back)
- Using a Q-tip to stimulate between each of the puppy’s toes
- Placing the puppy on its belly on a cool washrag

Each of these are done for 3-5 seconds. In theory, the exercises stimulate various sensory receptors in the skin, inner ears, muscles and joints that report the information back to the brain for integration. These exercises should only be done once per day to avoid over-stimulation and are not meant to be substitutes for bonding time, socialization and play (4). This research indicates that the exercised dogs have stronger heart rates and beats, more efficient adrenal glands, better stress tolerance and disease resistance upon maturity. (4) It is very similar to toddlers watching early enrichment programs such as Sesame Street. I have used this program for many years and I highly recommend doing these exercises with the singleton as well as with puppies from litters with normal size.

Sensory Input – Tellington-Touch Input

Tellington Touch or “T-Touch™” can be useful for many purposes and can be extremely useful for the singleton puppy. It can facilitate a sensory regulation, especially with autonomic nervous system arousal responses. (5) After the singleton is medically stable and has survived for a week, I recommend using the circular gentle stroking method when holding and socializing with the puppy. Application of T-Touch around the mouth helps desensitize the oral area. This will serve as the first of bite inhibition. When a pup has littermates, it gradually learns the consequences of biting as a result of biting its littermates and hearing them cry or by being bitten by littermates and feeling the pain. A singleton needs to learn to bite softly and T-Touch prevents hypersensitivity around the mouth. It also facilitates the pup allowing its owner to handle its mouth and teeth, which could also be very helpful for a potential show pup. A behavioral management program is useful for teaching the consequences of a bite by making a loud yelp or cry when the puppy bites.

Supervision of Feeding

During the first two weeks, it is critical to monitor the pup’s feeding by weighing it at least daily and monitoring which of the dam’s nipples the pup is using. Also check baby for hydration by lifting up the skin at its withers. If it stays up...it is

Figure 4: “Style” of mothering:



dehydrated and may need professional help. Call your vet! Some breeders carefully rotate the puppy from one nipple to the next during the feeding. A single puppy does not stimulate milk flow as well as several puppies, so careful attention must be paid to mom and baby. It is important to use the “stuffed animal littermates” to knock the puppy off the nipple on which it is sucking. The action occurs regularly among littermates and helps make the puppy stronger as it moves in search of another place to feed. (Figure 6).

There is something to be said for “struggles makes us stronger”. The dam’s mammary glands should be inspected at least twice per day for swollen or warm breast tissue possibly indicating the onset of mastitis.

Socialization

Battaglia (4) states that the critical period of socialization of all canines is between the 4th and 16th weeks of age. Dehasse (3) discusses the concept of “sensitive periods” said to be a shorter time period than a critical period. During sensitive periods, events can leave long lasting results or a learning experience can occur more easily. (3) A few episodes of isolation may have a huge impact on a puppy during a sensitive period. Puppies must be exposed to a wide variety of social circumstances in order to be properly socialized. If one expects a singleton puppy to get along with others of its species, it is critical to introduce it to other like dogs long before week 16. It must learn to interact and play with dogs before that time period if it is to have normal adult interactions. (3)

Figure7 - Right: Singletons playing with Uncles and Aunts

Pat Hastings, (7) AKC judge and author, recommends using “The Rule of Seven” in her seminars. By the time a puppy is seven weeks old, it should be exposed to at least seven different surfaces. The pictures below show a singleton being exposed to a variety of surfaces. Pat Hastings also suggests feeding the puppy out of seven different types of containers. The bottom line for socialization is to provide enough variety to that a puppy is not fearful of new situations, new people, sounds, textures of stimuli in general. (See Figure 8 Next Page)

Weaning

Many owners of a singleton pup delay weaning since the bitch seems willing to nurse for a longer period of time. I myself, had a cavalier bitch with a singleton and mom’s milk did not come in until baby was three weeks old. I hated to begin weaning for several weeks so that baby could enjoy mom’s milk. Generally, this is not a problem unless baby starts to injure the dam’s teats with its teeth. Always continue to monitor feeding and when the bitch is ready to wean her puppy, honor that and begin to offer baby weaning formula and allow mom to begin to have some respite and dry up.

Evaluation of The One And Only

Why do we breed a litter of puppies? Hopefully, one answer is because we are looking to improve our breeding programs. Does that mean we automatically keep “the one and only” because it is the one and only and we have fallen in love? Again, hopefully the breeder works with an objective source to evaluate the pup and ascertain if that singleton improves the breeding program or should be placed in a pet home. I am an advocate of Pat Hastings’ system of evaluating puppies of ALL breeds. (7) Try watching her video, [The Puppy Puzzle](#). Marvelous information – it provides us with useful information

Figure 6: Pups knocking each other around during feeding - comfort after feeding.



Figure7: Singletons playing with Uncles and Aunts



regarding the structure and functional capabilities of a puppy and helps us to determine proper placements, but keep in mind the extra time it takes for the cavalier to mature. Lastly, a singleton puppy is very hard to let go. I am fortunate that I am able to visit with my last singleton puppy and don't miss her as much as I would if she was located farther away. It is quite the experience, and if you can't let your "one and only" go...enjoy them and keep them home



Figure 8: wool, concrete, carpet, grass, wood, gravel and leather – seven surfaces



with you! After raising the singleton puppy, only you can decide whether they stay or whether they go live with another family. It is your decision indeed, since it is a very personal experience raising "the one and only"!

References:

Farber, S.D., PhD, OTR, FAOTA. *"Integrative Care"* (Golden Retriever News 2003; pp.72-74)

Farber, S.D. *Neurorehabilitation, A Multisensory Approach.* (Philadelphia: W.B. Saunders Co., 1982; pp.126-128)

Concannon, P.W. "Canine Pregnancy: Predicting Parturition and Timing Events of Gestation." *Recent Advances in Small Animal Reproduction* (International Veterinary Information Service – www.ivis.org)

Dehasse, J. "Sensory, Emotional and Social Development of the Young Dog." *The Bulletin for Veterinary Clinical Ethology.* (2, 1994; pp. 6-29).

Battaglia, C.L. "Early Neurological Stimulation Super Dog Program". www.retriever-guide.com/superdog.asp, originally reprinted from AKC Gazette. (May, 1995; pp.47-50).

Tellington-Jones, L. *Getting in T-Touch with your Dog: A Gentle Approach to Influencing Behavior; Health and Performance.* (Pomfret, VT, 2002).

Hastings, P., Rouse, E.A. *Tricks of the Trade: From Best Intentions to Best in Show.* (Aloha, Oregon: DogFolk Enterprises, 2000).



