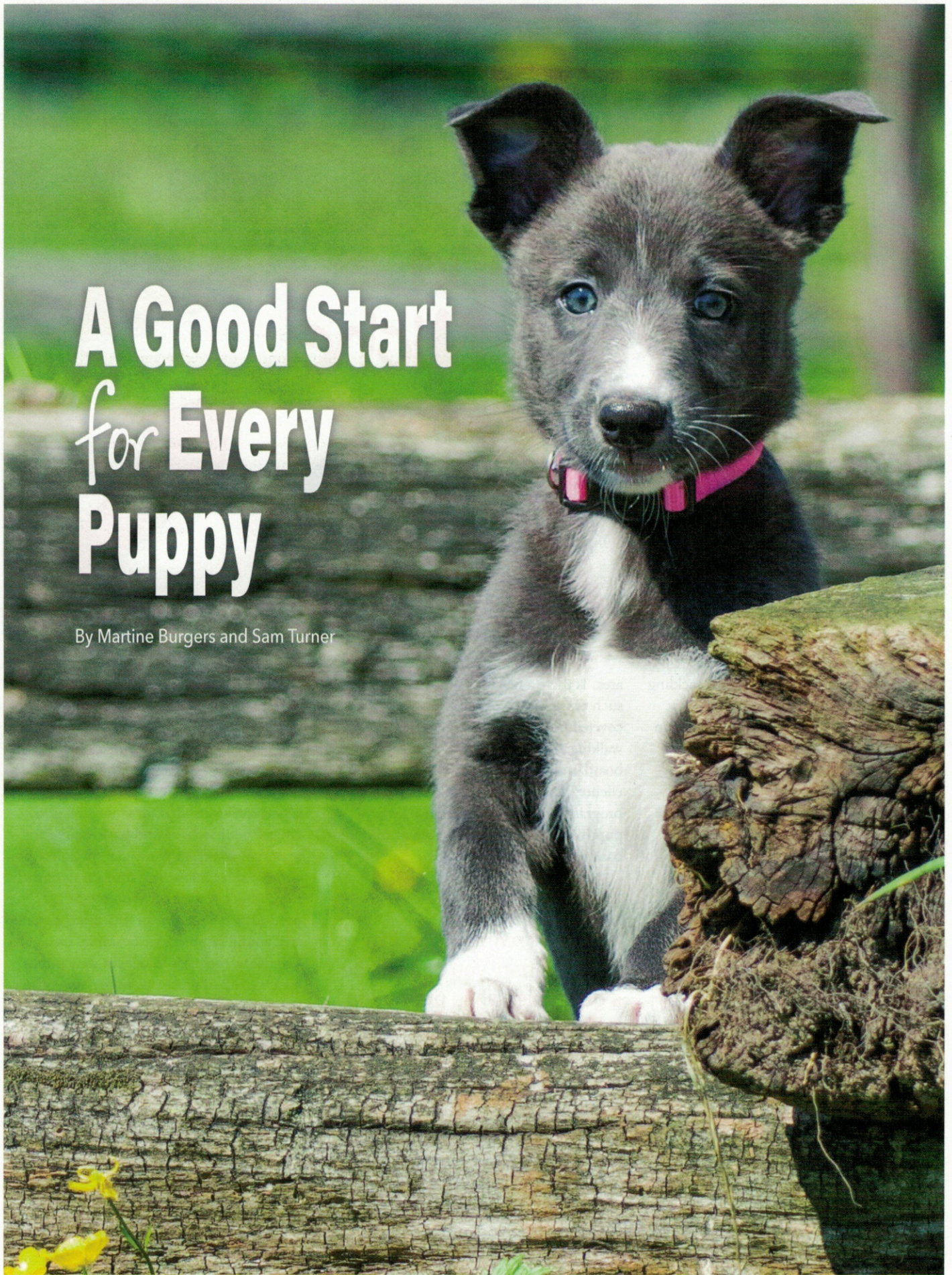


A Good Start for Every Puppy

By Martine Burgers and Sam Turner



▲ Because of proprioception, this pup is aware of where all four of his paws are while climbing on the log.

W

e all want our puppies to grow up to be healthy, fit and balanced dogs. Whatever you want to do with your dog when he's grown, whether he is to become a great family pet, a show dog or a sports dog, your dog must learn a lot of different skills. The era that our puppies just learned "sit" and "stay" at training school is over. Nowadays raising a puppy isn't all about teaching him cues, but all

must pass through a very narrow birth canal, contractions not powerful enough, causing an extended birth process, and a breech delivery. All the afore-mentioned are possible reasons for the newborn to develop blockades. And those blockades can result in all sorts of reactions. A lot of times those reactions are noticed as "that pup is a bit different from the others", e.g., all the pups are active, but one is more passive. One

pup always lies down in the same position to sleep. All the pups like to be lifted and petted, except this one puppy. It's often thought that this one puppy is just different from the rest because of nature, but that probably isn't the case. Most likely, this young dog has suffered from, what we in osteopathy call, a

"Being born is the first obstacle a puppy must take when his life begins. For most pups, this is done without too much trouble, but for others, due to all sorts of reasons, surviving birth can be extremely traumatic."

about developing his proprioception, gaining self-confidence and improving motor skills. With simple, fun and exciting exercises as we will discuss in this article, you will help your dog to become the best version of himself.

Birth trauma

When we start training a dog, we should be sure the dog is physically and mentally able to do what we ask him to do. With mature dogs it's common to visit a therapist or osteopath if you see signs of discomfort. Not a lot of people think about taking their puppy to a therapist, however, because most people can't imagine why that pup might need it.

Being born is the first obstacle a puppy must take when his life begins. For most pups, this is done without too much trouble, but for others, due to all sorts of reasons, surviving birth can be extremely traumatic: a big puppy that

birth trauma. The younger a pup like this gets treated by a certified therapist, the more likely he can overcome his birth trauma completely. Without treatment, the pup will grow up while compensating for this birth trauma. "As the twig is bent, so the tree inclines," is what Dr. W.G. Sutherland, D.O. (founder of cranial osteopathy) used to say. A trauma in a small body will become a bigger problem when the body grows.

The developing skeleton

We can't ask as much of a pup as we do from a mature dog. A lot of the time and energy of a puppy is spent on growing, both physically and mentally. The physical growth a pup has to do isn't just getting larger bones and muscles. The skeleton of a pup has totally transformed by the time the pup is matured. A puppy's skeleton is almost completely made from cartilage. In the lengthening process of the bones, the cartilage is in time replaced by bone. Cartilage is softer

► Different stages of bone development.

▼ Being born can cause blockades in the newborn. If one pup behaves differently than the rest, take this pup to a certified therapist for treatment.

material than bone, hence, it cannot be taxed as much. The last parts of cartilage in the developing skeleton are the epiphyseal plates set at both ends of the bone. Only after these epiphyseal plates have fused will the skeleton reach its maximum strength. For an average size dog this happens at the age of 18-22 months. (See Fig.1)

1. Primary ossification center
2. Blood vessel
3. Secondary ossification center
4. Blood vessel
5. Primary ossification center
6. Articular cartilage
7. Secondary ossification center
8. Epiphyseal plate (growth plate)

MENTAL AND PHYSICAL DEVELOPMENT

Neural pathways

When a pup is born, its brain is not “finished” yet. The cortex is complete and the brain consists of billions of neurons, but that is not all that is needed. Neurons that are connected to each other through dendrites are called a neural network. These connections, or synaptic connections, are not yet established when a pup is born and are made under influence of external and internal stimuli. Studies* with rats show that nerve cells of young rats that grow up in an enriched environment develop more dendrites and more synaptic connections than rats growing up in an environment without enrichment. More dendrites result in more synaptic connections between nerve cells. These connections result in individuals being less susceptible to stress and able to cope with new stimuli better.

Proprioception

Proprioception is the term used for being aware of your body in relation to the environment. In the skin, muscles and articular capsule there are receptors that measure where that particular body part is. The information measured by these receptors is passed on to the cerebellum where the information is interpreted and an image is created. This makes it possible to know which body part is where, even when it is dark or you have your eyes closed.

Proprioception is needed for a body to be balanced. When proprioception is not developed properly, or when it is impaired by the receptors or cerebellum not working properly, dogs can lose their balance. This can make the dogs insecure in their movements and can result in falling over while playing or running.

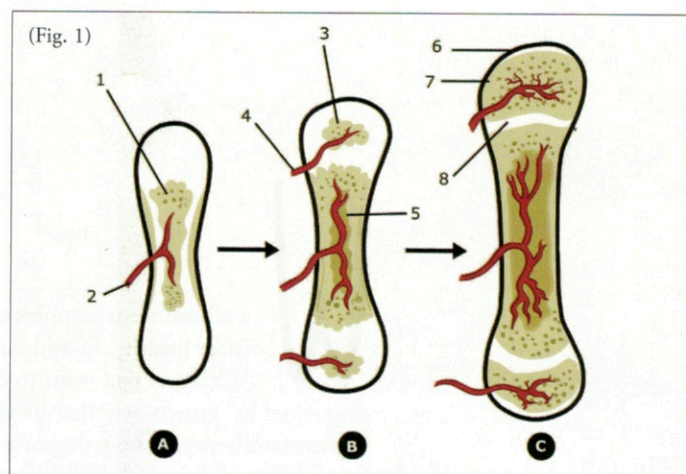


Illustration made by Lili Chin, www.doggedrawings.net



Proprioception training is aimed at exercises that improve motor skills and body awareness. This will lead to improved proprioception. The exercises are aimed at having dogs navigate several challenges by maneuvering over different surfaces, materials and obstacles. All exercises are done at a slow pace so the dogs have the chance to develop their body awareness. Some dogs will try to do challenges as quickly as possible when they are unsure of the surface or of their own balance. By teaching them to think about what they are doing they will become more aware of their bodies and develop better proprioception.

Puppygym

Learning about their bodies starts as soon as pups are born. They learn how to get to the food and how to walk and run. This process of learning continues throughout the developmental stage. When the pups are still in the litter this development is natural, especially when the breeder offers enrichment in the form of toys, boxes and other materials for which the pups may



- ◀ Labrador Sanna learns to navigate over the slope.
- ▼ Dalmatian pup Dex is guided over a selection of different surfaces.

So which challenges can help pups learn to be more aware of their bodies and more confident?

Walking on different types of surfaces is a great exercise to develop confidence. By using surfaces that feel, sound and look different we stimulate different senses. That in turn stimulates neural pathways to be made.

Puppies can learn coordination with four feet using Mikado poles randomly placed on the ground. With this exercise, we ask pups to walk over poles so they need to lift their feet and adjust their stride as they navigate them. Another coordination exercise consists of materials like stools or boxes over which the pups navigate. For this they learn how to use their muscles to lace their feet properly. And if we then change the set up so that the materials are set up as steps they also learn how to change their balance in order to climb or descend. This may sound simple and be taken for granted. Because pups grow so fast and their bodies continue to change shape, they will need to adjust their skills almost weekly to accommodate for these changes.

Another exercise that is easy to do and to repeat every few weeks is learning to go through a small tunnel or under a chair or hurdle. For pups that grow every week this means they need to figure out how to move their body in such a way that they fit underneath. An extra challenge in this exercise is that muscle mass does not increase as fast as the length of their legs. Going under something is much easier for a 12-week-old pup than a 20-week-old pup with longer spindly legs.

Short sessions with a high rate of success and/or reinforcement are key. The completion of a challenge is not the main focus. What we are looking for are puppies willing to participate and try the challenges set for them. Even when all a pup does is place one foot on any material it is progress and learning. By reinforcing these choices, the puppies learn to try new things, they learn to learn. If puppies choose to avoid something or choose to get off a surface or certain material or obstacle, they are always allowed to make that choice. Perhaps the next run-through the puppies will choose differently. By implementing Puppygym we stimulate pups to develop better coordination/motor skills, balance, proprioception, confidence and trust. This will set your pup up to be the best version of himself.



interact. Pups develop their motor skills as they explore their environment, play, learn to navigate small obstacles to get to each other and food and interact with the world.

Once the pups leave the litter, their days change: the amount of play is usually less but also different from playing with siblings. The challenges for the body are therefore different and often less than they should be for this phase of development. During this phase owners can offer challenges that will teach pups more about their bodies and develop their balance, coordination and proprioception as a whole.

Challenges that are offered in Puppygym classes can vary greatly. The one thing that binds them, however, is they are low in intensity and short of duration. The focus of the challenges can be coordination, balance, proprioception, confidence and initiative and choice. Most challenges will be a combination of these.

Animals and Airplanes: The Veterinarian's Role

How do new airline regulations regarding the types of animals allowed to fly in cabins affect veterinary practitioners?

By Debra Vey Voda Hamilton, Esq.

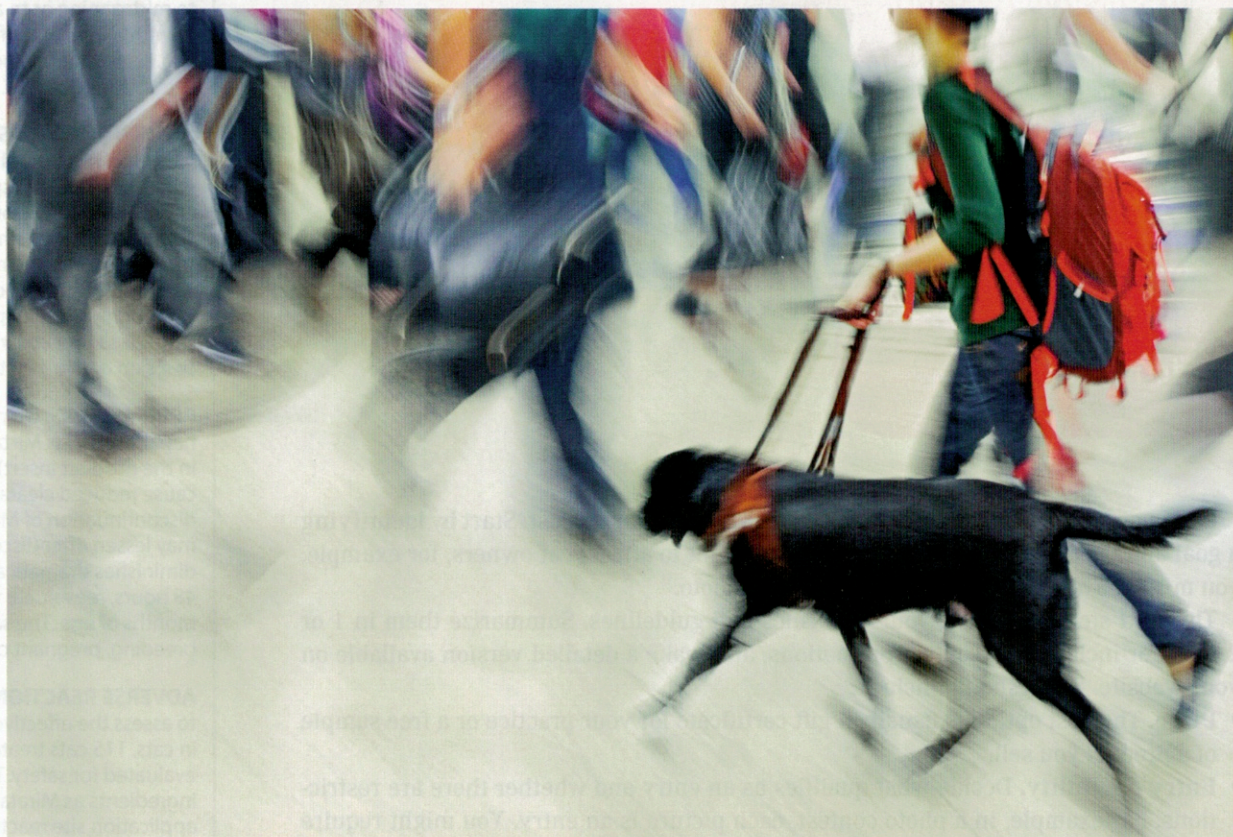
In recent months, many major airlines have tightened their regulations regarding service and emotional support animals traveling on board flights—actions that have raised a number of questions for veterinarians:

- How can veterinarians protect themselves while assisting pet owners in caring for these animals?
- How do you provide health care to the pet yet not give an evaluation of its behavior or training?
- What is the veterinarian's role in this 2-sided pet care question?

At the recent Animals on the Mind 3.0 conference, hosted in May by the Institute for Human-Animal Connection, nonveterinarian experts in the field of human-animal interaction spent 2 days exploring these questions. Psychologists, animal trainers, and service/support animal handlers shared their perspectives on identifying these pets while caring for both the person and the animal.

No one disputes the benefits available to people who use service or support animals. Because these animals come in all shapes and sizes with varying training levels and abilities, however, the temptation to abuse the privilege is always present.

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At the conference, presenting researchers and service, emotional support, and therapy dog users were careful to point out how the handler/animal team works. They clearly had a deep awareness of the needs of the animal in these interdependent relationships. To them, the pets' needs were as important as any human therapeutic benefits that resulted from these relationships.

Given these studies, completed on a much more evaluative level of observation of the training and behavior of the animal and the handler, how can veterinarians adequately observe and evaluate a pet being asked to do tasks? Is it even their role as health care providers to make such an evaluation during a pet's pretravel health check? Questions involving the legitimacy of a service, emotional support, or therapy pet or its ability to behave on a plane creates a conundrum for the veterinarian.

In early March, the American Veterinary Medical Association (AVMA) announced that it had reached an agreement with United Airlines to revise the carrier's Veterinary Health Form, which is now required prior to flying with a service or emotional support animal.¹ The AVMA contended that the information being requested in the original version of the form might not position United Airlines to make good decisions that would support the health and welfare of both human and animal passengers. The AVMA also expressed

concern that the statements on the form created potential liability risks for veterinarians attesting to them. In reality, veterinarians cannot and should not vouch for the training or behavior of any animal in their practice. It is beyond the scope of their examination, training, and expertise. What a veterinarian observes about a dog in the confines of a veterinary hospital might be quite different from how the dog reacts in a pressurized, noisy airline cabin.

Now the question remains: How can veterinarians serve their clients and themselves when it comes to providing a health check of a service or emotional support dog?

First, it's important to understand the differences between a service animal and an emotional support animal. Service animals, which are acquired after months of individualized and partnership training, have federally protected rights under the Americans With Disabilities Act. They must be granted reasonable access anywhere.

An emotional support animal has protected access under the Fair Housing Act and Air Carrier Access Act, passed in 1988 and 1986, respectively. Reasonable accommodations must be made upon proof that the pet provides a necessary service. Emotional support animals provide a service by their mere presence; no real training is required. For emotional support

animals to fly in the cabin of a plane, a doctor's note identifying the support the animal provides and the symptom(s) it ameliorates is mandatory.

Many veterinarians feel compelled to verify a service animal's training and behavior, but this is not within the scope of their training. Instead, they should explain to their clients that they can only sign the health voucher. It is all they can uniquely do with their training and expertise.

Now that the AVMA has helped United Airlines reshape its form, it also hopes to work with other airlines to create more appropriate veterinary health forms, ensuring the safe travel of service and emotional support animals while keeping passengers and crew members protected. ■

Reference available at AmericanVeterinarian.com.



Ms. Vey Voda-Hamilton is an attorney/mediator and principal at Hamilton Law and Mediation, the first mediation practice to focus specifically on conflicts between people over animals. She is a best-selling author of *Nipped in the Bud, Not in the Butt – How to Use Mediation to Resolve Conflicts Over Animals*, which outlines the methods she uses to address conflict, keep clients, and appreciate another's point of view in a disagreement.