

The Whole Dog Journal™



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A monthly guide to natural dog care and training

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It Really Works

How bits of chicken can accomplish so much more than force.

BY NANCY KERNS

I've been using my friend Christine as a model for our training articles lately. She has lots of dog-handling experience, looks *great* in photos, has two very large dogs that we can use (and have) for the photo shoots, and isn't fazed by *anything* I ask her to do for the photos.

That is, she hasn't been fazed *yet*. But she definitely hesitated when we were taking the pictures of my middle-aged Chihuahua, Tito, for Pat Miller's article on dogs who hate handling (see page 18). Christine takes care of my dogs when I have to leave town, so she knows Tito and his quirks.

When Tito came to live with us a few years ago, he belonged to my husband's niece, who bought him as a puppy while still in college. Then she graduated and started looking for a job, and like a lot of young adults, sent her dog to stay with other people while she moved about; Tito had at least five different temporary homes before I was asked whether I could take him "for a few months."

I said yes, even though I suspected he'd end up with us forever, because he can be a fun little guy. For all of his travails, he still likes people, especially those he's met before; if you were friendly to him once, he will go *crazy* when you meet again. He has the most perfect manners on leash of any dog I've ever known, never *ever* allowing the leash to tighten for a moment. He's a tennis ball addict, and he hikes and swims like a miniature Labrador!

But Tito does *not* like being picked up or carried. If someone tries to lift him off the ground ("Oh, what a cute little dog!"), they get a rude surprise – a dramatic snarl/bark and air-snap (he's never actually bitten anyone).

I was educated by Pat Miller years ago to use counter-conditioning and desensitization (CC&D) to change how a dog feels about things – and Tito has had a lot of these sessions over the past few years. For some time, I've been able to pick him up without a problem, and even trim his nails and brush his teeth. Other people can, too – as soon as

Tito feels confident that they aren't going to hurt him or force him to do something.

If he perceives a threat, Tito gets ready for battle. If you yell at him, he'll immediately growl back. If you escalate, so will he. I'm certain that if someone tried to physically punish and force him to comply with something he hadn't agreed to, he'd fight to his literal death.

But because he's *also* experienced force-free training, with no negative consequences for failing to perform a certain behavior, and rich rewards for the tiniest increments of improvement, Tito now generally chooses to try to figure out and do what we want him to do.

When Tito and Christine first met – and she immediately tried to pick him up – she experienced his snarly "I don't do dat!" response. So when I told her I wanted her to pick him up and clip his nails for some photos, she hesitated – not because she was afraid, but because she knows him well and didn't want to push him into a corner.

We started by doing just that, in a mild way, because I knew we could elicit a snarl (or worse), by waving some clippers in his direction (see photo on page 18). Then we started a CC&D session, with Christine giving him bits of chicken for his cooperation. Because we had started rudely, and pushed forward at an unrecommended fast pace (for the sake of the photos), Tito was wary at first. But when, halfway through the session that was supposed to lead up to clipping a single nail, Tito spontaneously hopped into Christine's lap as if to say, *C'mon, let's get this over with!*, she was surprised and touched. She didn't hesitate at *that* point, though. Instead, she praised him, gave him some chicken, and clipped his nails!

NK

Car Trouble

Some possible explanations, and a lot of remedies, for dogs who get motion sickness.

BY STEPHANIE COLMAN

Five magic words: “Wanna go for a ride?” These six simple syllables are enough to launch some dogs into a dizzying display of tail-wagging leaps and spins in eager anticipation of the fun to be found in a car buzzing along the open road. In contrast, though, are the dogs who find car rides as much fun as most humans do root canals. For some dogs, the dislike is physical; they experience motion sickness and battle with nausea, drooling, and vomiting. For others, it’s emotional, and the dog suffers from anxiety associated with riding in the car. Unfortunately, the two causes can overlap, where a dog initially experiences physical motion sickness and comes to associate the unpleasant feelings with the car, which leads to anxiety related to riding in the car.

There are a number of factors that can contribute to motion sickness in dogs.

It’s not uncommon for young puppies to experience physical motion sickness related to issues with the vestibular apparatus – the part of a mammal’s body that deals with balance and spatial orientation, explains Jennifer Jones Shults, DVM, CCRT, of Veterinary Rehabilitation and Pain Management Hospital in Cary, North Carolina. The vestibular apparatus is found in the inner ear, and consists of three fluid-filled semicircular canals. When the head moves, fluid within the canals shifts, stimulating the tiny hairs that line the canal to transmit information to the brain.

A young puppy’s body takes time to mature. For some dogs, motion sickness is the result of a vestibular system that is not yet fully developed – which is why many puppies seem to outgrow motion sickness caused by car rides as they get older.

“Young dogs with vestibular issues usually outgrow it by 5-6 months of age,” Dr. Shults says. “But bigger dogs can take longer. For example, a Great Dane isn’t considered fully mature until 2 years old, so his ear canals might take longer to reach full development than those of a Toy Poodle, who is usually fully grown somewhere between 9 to 12 months old.”

Although it takes time for the ear canals and processing centers of the brain to fully develop, not all puppies

experience motion sickness. Why Puppy A handles early car rides like a champ when Puppy B is consistently car sick is not yet fully understood.

“It could be as simple as a puppy’s ear canals or semicircular canals still being too small to handle the rapid shifts in direction or the acceleration of the car, or it could have to do with what the puppy was exposed to in his first eight weeks – like rolling play with littermates or being handled upside down, which cultivates the still-developing vestibular centers in the brain. Or it could be a combination of the two,” Dr. Shults says.

PREVENTIVE EXERCISES

Some people believe that early exposure to specific movements that challenge the vestibular apparatus can prove beneficial in protecting a puppy from experiencing motion sickness once he leaves the litter.

Heidi Mobley of Sanger, Texas, has bred Australian Shepherds for more than 25 years. She uses the Early Neurological Stimulation (ENS) or “Bio Sensor” protocol, first designed by the United States military as a way to help its working dogs grow up to reach their maximum potential. Mobley says very few of her puppies have gone on to develop motion sickness.

“I think it helps create heartier puppies by helping to get them used to different movements at a very early age,” she says.

The program consists of a series of

Most young dogs who suffer from motion sickness in cars outgrow it with time. It’s harder – but possible – to help an adult dog who gets motion sickness to get past her discomfort in cars.



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five exercises that are done once daily between days 3 and 16. The mild stress, both as a result of being individually removed from the litter for a short time, and from the exercises themselves, stimulates the adrenal gland. It is thought that this strategic exposure to brief amounts of stress helps puppies respond better to stress later in life.

Of the five exercises, three involve specific movements that challenge the vestibular apparatus: holding the puppy so her head is up and tail is down; the reverse, where her tail is up and head is down; and holding the puppy on her back with her feet up.

“There’s a lot of research with babies that shows how early rolling movements can help the vestibular apparatus develop appropriately,” Dr. Shults says. “There aren’t any published studies showing that Early Neurological Stimulation will decrease vestibular disease in dogs, but the conduct is similar to what they recommend with children, and that has been studied in great detail. Anytime you’re upside down or on your back, the fluid in the semicircular canal has to shift, so it’s essentially like practice, and I think that makes sense.”

NATURE VS. NURTURE

The question of nature versus nature often comes into play when looking at animal behavior, and issues surrounding dog-related car trouble are no different. While some dogs experience motion sickness stemming from a physical issue – the vestibular apparatus – for other dogs, the problem is emotional; it’s literally all in their heads.

With that in mind, it’s extremely important that a puppy’s early exposure to the car be a positive experience. As a breeder, Mobley makes sure she’s the first person to introduce her puppies to riding in the car. She schedules the first trip for sometime between 6 and 7 weeks old, and has the puppies travel together with their mother to help keep them relaxed and comfortable. Then she specifically avoids car rides until the puppies are 10 weeks old – which means her puppies don’t typically leave for their new homes until that age.

“That’s the clincher,” she says. “The puppies I see going home between 8 and 9 weeks old are leaving during the imprint stage; if they get sick during that time, that’s when we end up with dogs who get car sick for the next two years or

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so. I’ve seen it happen again and again,” she adds, noting the especially strong potential for the lasting impact of negative experiences during that critical age.

SOCIALIZATION BENEFITS

Early, effective socialization plays a key role in helping puppies and young dogs develop a positive association with riding in the car. If the only time a dog rides in the car is when he’s driven to the vet, the groomer, or the boarding kennel, there’s a good chance he’ll decide that car rides are something to be concerned about. When people get a new dog, one of the first car rides is usually to the vet for the initial wellness exam, which is often stressful.

It’s important that puppies and dogs have ample opportunities to experience the car as a portal to fun. As a trainer, I challenge my students to schedule “cookie visits” at their vet’s office, where they visit the office during a slow period simply to hang out in the waiting room, eat cookies, play with a toy if willing, schmooze with any available staff, and then go home.

Similarly, planning several short rides to fun places can help teach a dog that riding in the car is a good thing. Drive to the park for a fun walk. Drive to a friend’s house for a play date. Or even drive to your favorite fast-food restaurant where your dog gets a small bite of food from the drive-through.

TREATING MOTION SICKNESS & CAR-ANXIETY

To help reduce the chance that your dog will experience motion sickness, or to

A puppy being taken through a “Bio Sensor” exercise, meant to help the vestibular apparatus develop properly. This is thought to help prevent vestibular disease and motion sickness later in the puppy’s life.

help minimize its effects, both Dr. Shults and Mobley recommend positioning the puppy or dog in the car so that he’s facing the direction of travel.

“The ocular center in a puppy’s brain hasn’t really developed enough for him to understand going backward; they understand going forward,” Shults says. Whether it’s riding restrained via a seatbelt or inside a carrier, facing forward helps the brain make sense of what is going on, which can lessen the chance of motion sickness. “Basically, we’re providing input though the eyes that helps the dog know which way is up,” Dr. Shults says.

Many dogs who suffer from motion sickness do better when the windows are open about three inches, to help equalize the air pressure in the car. Traveling on an empty stomach can help minimize the effects of motion sickness, and dogs who battle with motion sickness often do better if they’ve been well exercised a few hours before travel, to aid with their overall relaxation.

When riding with a dog who is getting car sick, it’s important for the owner to remain calm. A negative or hysterical response to a dog throwing up in the car can easily add to a dog’s anxiety.

There are also several natural and pharmaceutical approaches to treating motion sickness and its associated anxiety:

■ **HOMEOPATHIC COCCULUS 30C** – Donna Kelleher, DVM, author of *The Last Chance Dog: True Stories of Holistic Animal Healing* and *The Proof is in the Poodle*, runs a holistic veterinary practice in Seattle, Washington, and offers a membership-based website designed to help teach people about natural treatments for a variety of chronic problems plaguing pets.

She recommends a homeopathic treatment: one pellet of Cocculus, given shortly before travel. When dosing homeopathic remedies, technique matters. The pellets should not be touched, nor should they be given by hiding them in food. Either transfer the pellets from the bottle cap directly

into the dog's mouth, or crush with the back of a metal spoon, add a bit of water, and spoon the mixture into the mouth. It's important not to touch the pellets because that can interfere with the remedy's vibrational force.

Homeopathic remedies such as *Cocculus* and flower essences (discussed below) are two of several therapies classified as "vibrational medicine." Living organisms are multidimensional energy systems. When imbalance occurs, the energy is at a less harmonious frequency, which leads to physical and emotional symptoms. Natural-minded practitioners select certain remedies for their specific energies, with the goal of restoring balance.

■ **GINGER** – Ginger is widely regarded as an anti-nausea remedy. Dr. Kelleher recommends making a ginger tea by steeping two tablespoons of fresh grated ginger in one cup of water, and once cooled, spooning one tablespoon per 20 pounds of the dog's body weight into the dog the night before travel, and again an hour prior to departure.

Ginger can also be found in capsule form, and some people have reported success by sprinkling a small amount into the dog's food. Dr. Kelleher's preference is for fresh ginger, and if not using the tea, she would rather hide a tiny piece of fresh ginger in the dog's food than use capsule form.

Many people who have heard about the anti-nausea properties of ginger will reach for the ginger cookie; Mobley reports success with helping many client dogs overcome motion sickness through a combination of ginger cookies and behavior modification.

If trying cookies, be sure to look for a high-quality ginger snap. The "ginger cookie" in the cookie aisle of the typical mainstream grocery store is likely to be lower quality as compared to the ginger snap found in a higher-end market. For example, ginger is the seventh ingredient in a Nabisco Ginger Snap, versus the fourth ingredient in a Trader Joe's Triple Ginger Snap. However, both versions contain sugar and flour, which many holistic practitioners, including Dr. Kelleher, recommend avoiding.

■ **SCULLCAP** – *Scutellaria Lateriflora* is an herb that has been used for hundreds of years as a mild relaxant and as a therapy for anxiety and nervousness. Dr.

SUCCESS STORY

While the concept of energy-based healing might be tough for some people to accept, professional animal trainer and flower essence practitioner Jennifer White of Woodinville, Washington, has a large database of client success stories to draw upon. It includes a 3-year-old service dog who was on the verge of being retired due to extreme car sickness. The dog had exhibited symptoms of nausea – drooling and panting – since early puppyhood, and he never outgrew the problem.

"The client needed to drive to work everyday, and the car sickness was so significant that the dog was becoming generally anxious and was losing his willingness to work," White says. "Eventually, the dog started to balk at having his special bracing harness put on, because he knew it meant leaving the house and riding in the car." The client tried several suggestions to no avail, and turned to flower essences as a last hope for helping a dog that was her otherwise-perfect partner.

White created a custom blend designed to address car-related stress, and recommended a systematic desensitization and counter-conditioning protocol. Within a week, the dog's car sickness symptoms lessened, and after two weeks, he was offering a positive response to the bracing harness with a renewed enthusiasm for his work.

"She ordered refills for about three months, at which time I encouraged her to taper the doses. She finally released her reliance on the regular doses and saw that the dog was no longer stuck in the anxiety cycle of car sickness that seemed impossible to break," White recalls.



Kelleher says it is safe to use with other drugs, and can be dosed at ½ of a capsule per 15 pounds of body weight, given one hour before travel. This won't address nausea, but can help relieve the anxiety (panting, shaking, etc.) often experienced by dogs who have motion sickness.

■ **FLOWER ESSENCES** – Flower essences are said to be catalysts for emotional change. They are thought to trigger a balancing response in the body and are most effective when given in 3 to 6 doses throughout the day. In acute cases, a dose can be given every five minutes. Flower essences are usually found in liquid form and can be given orally, rubbed into paw pads, ear flaps, and on the belly, sprayed in the environment or on the dog's bedding, added to water, or even added to food and treats.

The following flower-essence blends are commercially available and considered helpful as part of a desensitization

and counter-conditioning protocol to address motion sickness and car-related anxiety:

- **Soul Support** – Contains Cattail Pollen, Chalice Well, Cotton Grass, Fireweed, Labrador Tea, Malachite, River Beauty, Ruby, and White Fireweed.
- **Rescue Remedy** – Contains Impatiens, Star of Bethlehem, Cherry Plum, Rock Rose, and Clematis.
- **Drama Trauma** – Similar to Rescue Remedy, but with double the amount of Star of Bethlehem and the addition of Star Tulip to aid in emotional grounding.

■ **CHIROPRACTIC ADJUSTMENT** – Misalignment of vertebrae can create a variety of health and wellness issues in both people and pets, ranging from low

energy and slow healing to headaches, irritability, balance issues and all levels of pain. Danielle Shelbourne of Urban Dog Training in Brisbane, Australia, has helped numerous animal clients find relief from motion sickness by working with a qualified animal chiropractor.

“We’ve found that subluxations of the atlas (C1, the topmost vertebrae, which connects to the occipital bone at the top of the head) can cause pressure around the inner ear and cause motion sickness,” says Shelbourne. “In a dog, the atlas is a large butterfly-shaped bone that can misalign easily during normal activity. Some dogs are born with vertebral subluxations, or they can develop from such activities as pulling on the leash.”

Shelbourne says that dogs with a C1 subluxation often experience not only motion sickness, but also display thunderstorm phobia, are sensitive to handling, especially around the head and neck, and can be reactive and aggressive in a variety of settings.

“In our experience, if a dog has three of these issues, we would definitely recommend chiropractic treatment, and we’d be fairly confident that the dog’s outcome would be positive,” Shelbourne says, noting that, while an adjustment might resolve the physical issue, behavior modification might still be necessary to counter a learned negative association with car travel.

William Strickland, DC, of Rose City Veterinary Hospital in Pasadena, California, has been working with animals for nearly 17 years. Cervical subluxations and soft tissue abnormalities, he says, likely contribute to motion sickness indirectly by creating imbalance. While he’s not had a client visit him with the sole complaint of motion sickness, he has seen dogs with handling sensitivities and aggression issues who also suffer from motion sickness.

Subluxations are subtle but powerful. It’s not uncommon for animals (human or canine) to experience subluxations that don’t cause symptoms that are obvious to the untrained eye, yet still create imbalance in the body. Not only does the imbalance create its own issues, but it leads to compensatory problems as the dog navigates through life in a poorly aligned state.

“One of the biggest benefits of chiropractic is as a modality for restoring balance to the entire body – the soft tissue, bones, and joints,” says Dr. Strickland. In

the case of a dog with motion sickness, he says the improvement is likely the result of the animal being in overall better balance. A body out of physiologic balance can also have a harder time *literally* balancing while in the car, which can contribute to motion sickness.

While some people mistakenly view animal chiropractic as a heavy-handed, bone-crunching technique, Dr. Strickland notes that qualified, experienced animal chiropractors follow a “less is more” mentality, and frequently use an activator adjusting instrument, a small, hand-held tool, to painlessly deliver a gentle impulse force to the spine.

“It’s effective on babies and the elderly,” he says. “If we can safely use it on a baby or a 97-year-old grandpa, it’s certainly safe for animals of all sizes.”

Dr. Strickland notes, however, that it is important to look for a practitioner who has advanced training and experience in animal chiropractic as a specialty and to always consult with your veterinarian first to rule out a more serious cause of dysfunction or disease.

■ **TACTILE TECHNIQUES** – Some dogs are also comforted by tactile techniques, such as **Tellington TTouch Training**, or by wearing a compression garment such as a **ThunderShirt**.

MEDICATION

Conventional veterinarians have a number of prescription medications available to prescribe for dogs with serious motion sickness.

■ **MECLIZINE** – The drug is sold over the counter under the brand names Antivert, Bonine, and Dramamine Less Drowsy. Dr. Shults says the generally accepted dose is one tablet for big dogs and half of a tablet for small dogs. However, it’s always wise to consult with your veterinarian before administering medications designed for human use.

■ **MAROPITANT CITRATE** – Sold as Cerenia®, this is the first, and currently only, FDA-approved veterinary medication designed to prevent vomiting in dogs due to motion sickness, and based on how it works, can often be more effective than meclizine.

“Meclizine works on the chemoreceptor trigger zone and on the histamine receptors in the brain,” Dr. Shults explains. “Research is showing

those parts of the brain aren’t as involved in motion sickness as the substance-P receptors and the NK1 receptors, which is what Cerenia works on. That’s why the meclizine products might work on some dogs, but might not be strong enough for all dogs.”

■ **ANXITANE® (L-THEANINE)** – Manufactured by Virbac Animal Health, this prescription product made with L-Theanine, an amino acid found in green tea leaves, can help reduce environmental stress in both dogs and cats, and is said to help dogs with mild-moderate anxiety related to fireworks, thunderstorms, car rides, social settings and geriatric issues. Like scullcap, Anxitane doesn’t address the physical symptoms of motion sickness, but, when paired with a behavior modification plan, can help lessen the dog’s resulting anxiety.

It’s important to note that all of the approaches discussed thus far should complement, but not replace, a thoughtful behavior modification program. Helping your dog to consciously and unconsciously feel happier and more confident near and in the car will increase the odds that any other approach will be successful in improving or eliminating his motion sickness.

THE ANXIOUS DOG AND BEHAVIOR MODIFICATION

As the saying goes, “An ounce of prevention is worth a pound of cure,” but sometimes, despite our best efforts, a dog still struggles with motion sickness or develops car-related anxiety, and we’re left trying to solve a problem rather than prevent one.

When a dog is drooling and throwing up, he’s experiencing motion sickness. Dogs experiencing car-related anxiety frequently resist jumping into the car and will often yawn (when not tired), lick their lips, pant, shake, refuse food, avoid eye contact with owners who try to reassure them, or appear to “hunker down” in one spot, generally looking unhappy. And remember: a dog who has experienced motion sickness can easily become worried about riding in the car, and that apprehension can continue even after the motion sickness symptoms have been resolved, either through physical maturation or with the help of natural or pharmaceutical intervention.

The author's own dog recently began exhibiting mild, unexplained anxiety when riding in the car. He would initially begin to shake when asked to "load up," but now appears more relaxed, following a counter-conditioning program and the use of a flower essence blend.

There are myriad reasons why a dog might be, or become, anxious about the car. It makes sense to most people that if the only time a dog rides in the car is when he's going somewhere likely to be at least somewhat unpleasant – such as the veterinarian, groomer, or kennel – that he might learn to dislike the car. But what about dogs who ride to a variety of places, and who have been fine in the car, but suddenly develop anxiety?

Sometimes we can make good educated guesses if we can pinpoint a specific event that aligns with the onset of the anxiety. For example, the dog was content in the car until he was with the owner during a fender-bender. However, some negative associations are harder to detect. Maybe the dog's anxiety started after he was with you when you gave your too-tipsy-to-drive friend a ride home from the party; or the passenger who smelled of tobacco when your dog is used to a smoke-free environment. Were you stuck in traffic, and your dog had to endure the sound of an emergency response vehicle slowly making its way through the stopped cars? Did someone cut you off, causing you to shout angrily inside your car? In any of these cases, the dog can associate the unpleasant stimulus with the car, and come to worry about riding in the car as a result.

In most cases, it's not important to know *exactly* what triggered the anxiety. It's always wise to rule out any medical reasons for sudden behavioral changes. A chiropractic evaluation and adjustment can help rule out the likelihood that it's at all painful for the dog to enter or exit the car, and a trip to the vet can rule out an undetected ear infection or other malady that might make travel uncomfortable.

STRESS IN DOGS

Stress is a series of events that begins with a stimulus (the stressor) detected by the brain, which activates the body's fight or flight response. Stress can be good (called "eustress"), like the opportunity to dash through the grass to chase a ball, or bad (called "distress"), such as being put into a new and uncomfortable situation. With



both eustress and distress, the autonomic nervous system, the part of the brain that controls unconscious body functions, is kicked into action.

The autonomic nervous system is comprised of two parts: the sympathetic nervous system and the parasympathetic nervous system. During times of stress, the sympathetic nervous system is activated, and the parasympathetic nervous system, which regulates bodily functions associated with a more relaxed state, such as digestion, is suppressed.

When the sympathetic nervous system is activated in response to a stressor (either good or bad), adrenaline is released into the bloodstream to ready the body for action. In an instant, the brain has prepared the body's organs to support the increased heart rate, blood pressure, and respiration necessary to support the body in its fight-or-flight activity.

For the dog chasing the ball, this response is what helps power him after his toy at top speeds. For the dog facing the uncertainty of a car ride, the brain readies the body in much the same way. Essentially, the dog's body has prepped itself for the physical challenge of self-defense (fight) or for the need to flee (flight).

In extreme cases, the fight-or-flight response presents itself as the dog who actively fights getting into the car, maybe even snapping at the owner in the process. However, the same physiological response is in play with the dog who is anxious about the car to a lesser degree. He may not fight the handler or attempt to escape, but he's still under the influence of adrenaline, which leads to the panting,

shaking, whining, and pacing behaviors most commonly exhibited by dogs who experience anxiety when in the car. This adrenal response also inhibits the parasympathetic nervous system (the part of the brain that regulates digestion), which partly explains why extremely anxious dogs often refuse food treats.

DESENSITIZATION AND COUNTER-CONDITIONING

The goal of a solid anxiety-reduction training plan is to alter a dog's behavior patterns by changing the way he feels about a specific situation. This is more than just getting used to riding in the car – it's about creating a situation where the dog can associate car travel with something good.

In developing a training plan, we must first evaluate where the desired behavior has broken down. Dogs who fear riding in the car might have already learned that when the owner holds the leash and stands by the door leading to the garage, that a car ride is imminent, and, as a result, the dog resists coming to the owner in that setting.

Think of the finished behavior (calmly riding in the car) as a series of behavioral puzzle pieces that must each be tackled individually. The owner's job, often with the help of a qualified trainer, is to help the dog become comfortable with one puzzle piece before progressing to the next. Trying to skip steps can easily backfire, as it's not only likely that some of the previous progress will be destroyed, but the dog can be left feeling distrustful of the owner.

Remember, the goal is not just for the dog to "appear fine," but to take the time to build a positive association with each puzzle piece. If the dog is only ever just barely "fine" with a situation under normal circumstances (for any behavior) it's far more likely that he will actively resist the same situation under times of stress. Taking the time to build positive associations is like creating emotional padding. He might not be as relaxed and happy about the situation in times of stress (for example, in the car along a windy road or in stop-and-go traffic) as he was during training. But with some "padding," if his behavior degrades, it's more likely that he'll tolerate the situation and still be fine, rather than experience an emotional meltdown. Reducing an animal's stress makes life more pleasant for him and you. And, it's healthier! Repeated

exposure to high amounts of stress has been proven to be unhealthy for both people and pets.

DESENSITIZING

Think about your dog; when does he start to show signs of anxiety? Identifying the activities or locations that trigger his anxiety is critical for mapping out his behavior modification plan. Your desensitization and counter-conditioning plan should start in a place where the dog is “under threshold” – that is, has no apprehension and shows no sign of stress.

Let’s say your dog’s apprehension about being in a car starts with him balking at the sight of you holding his leash by the door. Start by picking up his leash somewhere else in the house, not anywhere near the “door of danger,” and then giving the dog some treats. When he willingly approaches (which he should do as long as you are far enough away from the place where he might otherwise feel concerned), ask him to sit, attach his leash, offer a treat or two, praise lavishly, and remove the leash.

Repeat 3 to 5 more times, then release your dog to return to his day. Repeat this simple training session randomly throughout the day, but never follow the training session with a scary car ride.

When your dog happily approaches at the sight of you holding the leash away from the “door of danger,” repeat the process a little closer to the door. The goal is to work at a level where the dog remains confident. If he looks at all

concerned, you’ve progressed too quickly. Only begin the next piece of your puzzle once your dog can confidently handle the previous piece.

Throughout this process, **do not try to trick the dog!** The point is not to stand farther from the door in order to more easily “catch” the dog before you need to take him somewhere. In extreme cases, it’s best to avoid car rides altogether until some significant progress in these small steps has been made. This can be frustrating for the owner, especially when the dog is our best hiking buddy or ribbon-winning agility partner, but it’s important to weigh the long-term benefits (years of lower-or no-stress travel) against a few weeks or months of leaving the dog at home while you work on this process.

The goal is to very gradually get closer to taking the dog for normal car rides. But the steps taken toward that goal should be very small; you’ll have the best chance of success if you refrain from moving to the next step until the dog is consistently confident at the preceding steps.

For the dog who became apprehensive when the owner picked up his leash by the door, but was confident and happy when the owner picked up the leash elsewhere in the house, the next steps might be:

- Seeing the owner with the leash or harness near the exit point of the house leading to the car.
- Seeing the car in the garage or driveway from a distance.

- Standing next to the car.
- Being asked to enter the car (or asked to enter the carrier in his car, which might be an extra puzzle piece).
- Being in the car when it’s not running.
- Being in the car when it’s idling, but not moving.
- Being in the car when it’s moving.
- Going for a very short ride up the street.
- Going for a ride around the block.
- Going for a slightly longer ride to a *really* fun destination.

How quickly you progress through the steps will depend on the dog.

Remember, throughout this process, it’s critical that you remain calm. Avoid getting frustrated or angry at a dog who isn’t progressing as quickly as you’d like. This holds true for a dog who is getting physically sick, too; even the owner’s panicked exclamation of “Oh no! Gross!” can compound the dog’s emotional reaction.

While it can be frustrating to deal with a dog who has “car trouble,” understanding what’s behind the issue is an important first step in seeking relief. Developing a thoughtful plan of action – coupled with time and patience – will help put your dog on the road to recovery. 🐾

Stephanie Colman is a writer and dog trainer in Los Angeles. She shares her life with a career-change search-and-rescue dog whom she is teaching to play in agility.

RESOURCES

EXPERTS MENTIONED IN THIS ARTICLE

- **Jennifer Jones Shults, DVM, CCRT**, Veterinary Rehabilitation and Pain Management Hospital, Cary, NC. (919) 335-6675; vetrehabnc.com
- **Donna Kelleher, DVM**, Seattle, WA. Membership-based website: wholepetvet.com; (360) 739-7343
- **Danielle Shelbourne**, Urban Dog Training, Brisbane, Australia. 07-3342-0568; urbandogtraining.com.au
- **William Strickland, DC**, Rose City Veterinary Hospital, Pasadena, CA. (626) 796-8387; rosecityvets.com

FLOWER ESSENCES

- **Drama Trauma**, available from Blackwing Farms, (760) 728-9900; blackwingfarms.com

- **Rescue Remedy**, widely available online or at natural pharmacies and health food stores.
- **Soul Support**, available from the Alaskan Flower Essence Project, (505) 934-2861; essencesonline.com
- For a more personalized flower-essence blend, consider searching the International Flower Essence Society database (www.flowersociety.org) of more than 50,000 active practitioners for a practitioner near you.

TACTILE TECHNIQUES

- **Tellington TTouch Training**, Santa Fe, NM. To find a TTouch practitioner near you: (866) 488-6824; ttouch.com
- **ThunderShirt**, Durham, NC. The original compression garment used to treat dogs with anxiety. (866) 892.2078; thundershirt.com

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- 6/14 Won't Come When Called • "Drowning" on Land • Product Review: iCalm Dog • Self-Control Exercises • Vaccine Titer Tests • Adoption Success Stories • Accepting Training Errors With Grace
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High-Tech Treats

Apps, websites, GPS trackers, and podcasts that can help you protect and enjoy your dog.

BY BARBARA DOBBINS

It's incredible how many aspects of our lives have been enhanced and transformed by technology in just the past few years. Anyone who uses a computer or mobile phone is at least aware of his or her ability to obtain recommendations for businesses or directions to a location. If you're a dog owner and need a reputable emergency veterinary clinic in a strange town, having the tools to find such a clinic and get there in record time may literally save a dog's life. But web- and mobile-device-based technology can also be used by dog owners in countless other important ways – and we're sharing some of the most fun and useful ones with you.

Note: This article deals with high-technology, web- or mobile-device-based products and services that dog owners can use to help manage their dogs' health and to improve their enjoyment and experiences with their dogs. The companies that provide these products are technology-based themselves – and as such, tend to follow the modern trend of being available to

consumers and clients only through email or "contact us" forms accessed through their websites.

THERE'S AN APP FOR IT

Mobile-device applications – better known as "apps" – are a convenient way to keep information and tools at your fingertips.

Many of the apps discussed below are available in free and paid versions; the paid versions offer more bells and whistles. Some apps are designed for either Apple or Android phones only, while others are available in both platforms. To download or purchase these apps, check iTunes (for Apple products) or Google Play (for Android phones and e-readers).

■ Looking for a dog to adopt? Try the **BarkBuddy** app (the Tinder for finding dogs to adopt), which sources photos from Petfinder.com and allows users to swipe through profiles of dogs in their area and use sliders to filter by gender, age, activity level, and size.

■ Social networking apps abound to help you meet people who love their dogs as much as you love yours, find a play-mate for your

dog, or locate dog-friendly businesses. **Meet My Dog** is a private social network that allows dog owners to discover, connect, and share with other dog owners in their community.

■ It's impossible to be familiar with *all* the different breeds of dogs, especially when it seems that new ones show up every day, so having a breed-guide app at your fingertips can be handy. **Perfect Dog Pro** is only one of the many breed identification apps available. This app lists hundreds of breeds, complete with photos and descriptions. While it has an "identify" function that works through your selection of the dog's physical characteristics, I'm waiting for the ability to upload a photo and have the app search for a match. What a boon that would be for shelter workers!

■ If you need help taking a great photo of your dog, the **Dog Boogie** app has built-in sound effects to assist you in getting the dog's attention. It also enables you to create a profile for your dog and share it with a community of dog people as well as with Facebook and Twitter, or send via email. **BarkCam** is a similar app, offering sounds of interest to your dog and sharing capabilities, but it also includes features to add filters, quotes, or meme text directly to the image.

■ My favorite sound-effect app is **iSqueek**; if you love to squeak dog toys as much as most dogs do, you will love this app, too. It allows you to choose from among 18 virtual squeaky dog toys that react realistically when touched. Each toy has a unique action and sound, utilizing the touch screens and speaker of your mobile device. This app was developed as a tribute to the developer's dog, Hemmy; it allows the developer to have the sound of the deceased dog's favorite toy with him at all times.

■ Want to start clicker training? Or do you just want more information about what it is? **iClicker** is a dog-training app that features tutorials and a digital clicker. Available for iPhones and iPads only.



HEALTH-RELATED APPS

Dog-related apps are not all frivolous fun; some developers have a sincere interest in helping you keep your dog healthy.

■ The **ASPCA's** mobile app provides a wealth of features, including access to a personalized pet-recovery kit for when your pet goes missing; critical advice to ensure your pet's safety before, during, and after a disaster (even when there is no data connectivity); the ability to store and manage pet records; and relevant news alerts regarding animal welfare.

■ There are numerous apps for pet first aid. The top-rated ones include **Pet First Aid by the American Red Cross** and **Pet First Aid for Your Dog, Cat, Puppy, or Kitten**. These apps are easy to use and include life-saving information such as emergency tools and contacts as well as first aid tips. There's also information about disaster preparedness, emergency dog-management tools (including muzzles and restraints), and medication administration, as well as a pet profile feature where you can maintain your dog's health records.

■ Similarly, other pet-health apps such as **Pet Phone** and **Pet Master Pro** provide a way for you to keep all your pet's details – medical conditions, special needs, insurance info, appointment management, identification details, photos, veterinary contacts – on your digital device.

■ **PupTox** is a handy guide to more than 250 items that are toxic to dogs and cats, categorized by beverages and liquids, foods and solids, chemicals, non-food plants, and other common hazards. It's not created for emergency situations (it does not include first aid), but it can help you be more informed about pet hazards. It's worth installing on your phone for its chocolate-toxicity calculator alone.

■ The **petMD Symptom Checker** allows the user to search more than 2,500 articles on dog and cat health based on the symptoms selected. Each article includes a detailed description of a condition and its symptoms, causes, diagnosis, treatment options, and prevention. It's easy to use: simply choose dog or cat, select the area on a diagram of a dog that is presenting with an issue, then check off the related symptoms. A list of articles will be offered that may offer insight to

your pet's condition. It's not possible for the app to be comprehensive, but it can guide the user to understanding a number of general pet-health issues.

■ Here's an awesome app that can be used to test your dog's urine for signs of diabetes, urinary tract infection, crystals, liver disease, a dangerous level of dehydration, ketonuria, proteinuria, and anemia: the **Petnostics Mobile App** and **Petnostics Urine Cup**. Using the cup, you collect a small sample of your dog's urine; the lid of the cup is made with reagent test strips, and the test begins when you put the lid on the cup and turn it over. After just a minute, using your iPhone's camera, the app will give you the test results and indicate whether you should seek veterinary attention for your dog or all is well. At \$10 per cup, this is a relatively inexpensive test that can help you determine when a vet visit is in order.



Petnostics urine test

■ **Dosecast** is a very useful medication-reminder app. While not designed specifically for pets, it works well for those of us whose dogs have to be given medications on a schedule. This flexible app allows you to program a custom administration schedule based on daily, weekly, monthly, or variable day/hour requirements and sends notifications at the specified intervals. Dose amounts and instructions can also be customized, with the ability to set maximum dosages to help avoid overdosing.

The pro edition logs history and compliance, including late and missed doses, tracks quantity and provides refill alerts, and supports multiple pets on the same app. The app can also track contacts, pharmacy, and prescribing veterinarians. In the United States, the app connects to a drug database that allows you to easily find the medication to add to your dog's profile.



Presence, a home-monitoring app, allows owners to observe their dogs remotely. The app has a setting that enables digital video recording to begin when movement is detected.

MONITOR YOUR DOG

As I was putting the finishing touches on this article, my dog's veterinarian and I became concerned that my senior dog, Duncan, might have a seizure while I was away (I had arrived home to find a possible residual symptom). It was time to put monitoring technology into action.

My colleague Lisa Lyle Waggoner of Cold Nose College often uses monitoring technology with her separation anxiety clients, so I asked her for a recommendation. She replied quickly with her favorite, the **Presence** home-monitoring app.

Within an hour, I had located two older iPhones that did not have provider service, and, using wi-fi, downloaded the free **Presence** app onto each of them. With the app also downloaded onto my in-use iPhone, I linked the three devices, and placed the older ones in spots with strategic viewing angles of the areas where I suspect Duncan spends most of his time while I'm away. Not only does **Presence** allow live viewing, it has a motion detector option that can be adjusted to be sensitive to varying degrees of movement (I've set it to be activated by tiny movements) – and to record when triggered. The app sends push notifications to my phone whenever motion is detected. I'm hoping that my remote viewing turns out to be super dull. Or at least finally provide proof that Duncan reads books when I'm not there!

■ I'm looking forward to having the capability to monitor specific aspects of Duncan's health with a biometric monitor. Whistle Labs, Inc. (which merged with former competitor Tagg), says it will release the **Tagg GPS Plus**

device this summer, featuring an air-temperature sensor that will send alerts to your phone when your pet's environment becomes too hot or too cold. Tagg also allows you to monitor and follow your pet's activity and track your pet's location with advanced GPS and cellular technology.

The **Whistle Activity Monitor** is a similar product, attaching to your dog's collar and recording his activities throughout the day, producing a record of your dog's day-to-day behavior as well as long-term trends. See whistle.com for more information about both of these products.

■ **FitBark** is another device that attaches to your dog's collar and records how much time she spends at different activity levels. You can view how your dog is doing at any point in the day through real-time updates via the FitBark base station or another authorized device. You can share your dog's quantified data with your veterinarian or compare your dog's activity level to guidelines of similar breed dogs. The device also provides a family messenger function, a to-do list, a journal, and an option to share your dog's activity via social media. See fitbark.com.

■ **i4C Innovations** is taking the application of technology for monitoring canine health and fitness a step further. The soon-to-be-released **Voyce** smart collar, developed by a team of biomedical engineers, dog experts, and Cornell University, features a sensor-enhanced collar (non-invasive, radio-frequency-based) that will be able to monitor and record key vital signs, including heart and respiratory rates as well as activity, rest, and calories burned. The collected data will be archived, providing an overview of your dog's health history and trends, and will be conveniently accessible through all major browsers on desktops, tablets, and smartphones, as well as easily shared with your dog's caregivers.

Additionally, Voyce will offer exclusive content to members including tools such as medication reminders, medical-records storage, and a symptom checker. This types of wearable activity monitor can provide data that will help you understand your dog's health and behavior, and make appropriate changes to his diet and exercise programs. See mydogsvoyce.com.

■ Technology has taken even a greater leap toward protecting working dogs (such as those in law enforcement), especially with biometrics. These dogs often face unavoidable life-threatening situations every day, ranging from mission-specific dangers to environmental challenges. And unfortunately, many of these valuable dogs suffer or die from heat-related injuries.

To provide an extra layer of occupational health and safety for these canines, **Virtual Armor** has developed a small telemetry sensor that is surgically implanted in the dog's neck to monitor body temperature with a GPS component to aid in location finding. When the dog's temperature approaches critical condition, the handler is notified by email or text message. See virtual-armor.com for more information.

DOG GONE?

Technology is increasingly finding useful ways to help us know where our pets are at all times.

■ Like a visual microchip, the digital pet-identification tags by PetHub embed a Quick Response (QR) code (a machine-readable optical label) on the back of a metal engraved ID tag that others can scan should they find your pet. When a person scans your pet's tag with their smart device, it will display your contact data and pet's information. The premium service option delivers an even better tool: it immediately notifies you via text message if your pet's tag has been scanned. The basic service is free; for a minimal charge, you can upgrade the account to include instant found pet alerts, scanned location information, real-time GPS, shelter alerts, and partner discounts. See pethub.com.

■ Want to keep track of where your dog is at all time? **Marco Polo**, **PeTronix RoamEO**, **Loc8tor GPS Tracker**, **Gibi**, **Trax**, **Tagg**, and **PocketFinder** are just a few of the pet-location-monitoring products on the market. These devices come in the form of a dedicated collar or a small apparatus that attaches to your dog's existing collar. Most of these products utilize GPS tracking transmitted via signal to a dedicated receiver, such as computer or mobile device. Some rely on a dedicated provider network and all require some sort of subscription fee.

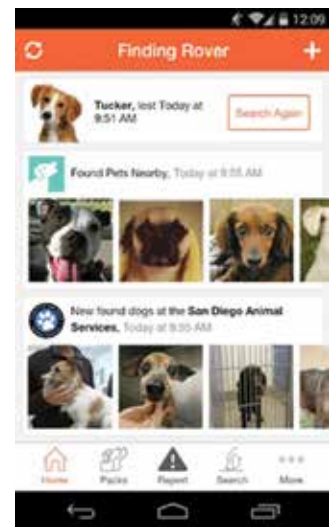
Most of these products allow you to set

up virtual boundaries and send you alerts if your dog leaves the designated area. The devices offer a range of options such as water resistance, waterproofing, use with multiple dogs, rechargeable batteries, real-time update capabilities, ability to function in other countries, various sizes and weights, ability to track speed, ability to share capabilities with others, and ability to store tracking history. For more information, see eurekaproducts.com (Marco Polo); pettonix.com (PetTronix RoamEO); loc8tor.com (Loc8tor GPS Tracker); getgibi.com (Gibi); traxfamily.com (Trax); pettracker.com (Tagg); and pocketfinder.com (Pocket Finder).

■ The **Finding Rover** app and website is fairly new to the market. It utilizes facial-recognition software to reconnect owners and their lost dogs. A front-facing photo with a clear image of the dog's nose and eyes (the most important features the technology uses to identify the pet) is uploaded to the site and Finding Rover.com keeps the file in their system.

Finders of dogs can upload images of found dogs and Finding Rover scans its database for a match.

Finding Rover's network is growing, and includes shelters, vets, rescue groups, other dog-related organizations, and social media. The free service is available on smart devices and the Internet. See findingrover.com.



■ **Pet Position** is similar in that its goal is to help find missing pets fast. This app allows you to send and receive notification alerts of pets that are missing in your area. There's even an integrated local missing-pets database. The app is free, but sending alerts requires an in-app purchase (a function that limits false alerts). Additional features include a walk tracker and locator for pet-related businesses. See petposition.com.

OUT AND ABOUT

There are lots of apps that can gather information about how much exercise you and your dog get on a walk or run.

■ **MapMyWalk** is meant for mapping human's walks, but is an ideal crossover product for dog walking. This fitness-tracking application uses the built-in GPS of a mobile device to track not only the route of your walk (or run) on an interactive map, but records the duration, distance, pace, speed, elevation, and calories burned and saves it as historical data. See mapmywalk.com.

■ Specifically designed for use with dogs, **Paw Tracks** is a walking tracker that can be shared with friends and groups. Similarly, it has a GPS function that keeps track of the route, notes the time, and calculates the distance, and duration of the outing. It also offers options to note the time your dog eliminates ("Log a Poo," "Log a Pee"), or is given a meal, making it a convenient app for caregivers to use in order to share up-to-date information about your dog and his schedule. See pawtracksapp.com.

■ Why *just* walk when you can raise funds for your favorite animal organization at the same time? **WoofTrax's "Walk for a Dog"** app supports an animal organization of your choice every time you take a dog for a walk, be it your own dog, a shelter dog, or as part of your business.

It's easy to use; when you begin a walk, you simply press the "Start Walking for [Organization]" button. The app tracks your walk for the fundraising benefit, *and* maps your route and keeps a history log, with route, duration, distance, and speed. When you're done, simply hit stop and the walk is credited to your selected shelter.

There are currently more than 4,000 organizations registered for benefits from the app, and more are added every day. If your favorite 501(c)(3) non-profit shelter isn't there, you can request that it be added as a beneficiary. Donations are funded by sponsorship, advertising, and investors; WoofTrax distributes funds twice a year with notification to participants via email, Facebook, and Twitter. The more walks, the more WoofTrax can donate; it's really that simple.

A savvy professional dog-walking colleague, Elisabeth Rosen, checked with her favorite rescue to verify that WoofTrax was a legitimate operation and following through on donations before she starting using the app. Rosen's favorite feature is the option to upload

photos of and information about the dogs she walks. See wooftrax.com.

■ Need to find someone to walk your dog? The **Trottr** app allows the user to search for a local professional dog walker, including those available for same-day and on-demand service. According to the app, these dog walkers have been "vetted, trained, certified, bonded, and insured." (For more information on choosing a dog walker, see WDJ March 2014.) The app shows any given walker's availability and provides information about him or her. Walks are private, timed, and tracked with GPS; payment is made with an in-app function. See trottr.us.

■ You can search for places to go on outings with your dog with the **Dog Park Finder Plus** by DogGoes.com. This app lists more than 6,600 dog-friendly parks, beaches, and hikes with details such fees, size, descriptions, and photos of each location. Dog-friendly restaurants and interstate rest stops are also listed. With search and browse functions and reviews and ratings, this is an ideal app to use when traveling or for exploring your local area with your dog.

■ Another great app for traveling with your dog is **BringFido**; it allows you to browse pet-friendly destinations worldwide and provides information on accommodations, attractions, travel guides, restaurants, events, and pet-specific services that welcome you and your dog. You can even book reservations directly through the app. Additional features include dog-related forums, reviews, and interfaces with Facebook and Twitter. See bringfido.com.

■ **Dogalize** provides a similar service but is specifically dog-oriented. Search and locate dog-friendly places such as parks, restaurants, hotels, veterinarians, pet shops, kennels, and more. Users can share experiences and multimedia content such as posts, photos, and videos with other dog owners. See dogalize.com.

■ I don't know of anyone who has used the **DogVacay** app or website, but apparently it's trending. It's been referred to as the Airbnb for dogs – designed to help you find boarding for your dog with a pet sitter, in your home or theirs. You can search for sitters in your area, read reviews, schedule, book, and pay online.

DogVacay also provides insurance for veterinary care for every booking while your pet is under the care, control, and custody of the host. While all pet sitters listed through this app are reported to be reviewed and approved, remember to check the sitter out personally; the service does include a "Meet-n-Greet" option. See dogvacay.com.

LISTEN AND WATCH

Podcasts allow me to feel like I'm a programmer of my own radio station. My all-time favorite dog-related podcast is "**The Dog Trainer**" (quickanddirtytips.com/dog-trainer). Host Jolanta Benal, CPDT-KA, CBCC-KA, gives dog behavior, training, and care an intelligent and witty voice.

Another enjoyable podcast comes from pet expert Steve Dale, who hosts a one-hour weekly show, "**Pet World.**" Don't have an hour? Check out his Pet Minute, a daily dose of short, important topics related to pets. These podcasts are available from iTunes or directly through Dale's website: petworldradio.net.

Veterinarian Andy Roark hosts a smart weekly YouTube show entitled "**Cone of Shame.**" I never fail to laugh at or learn something from these smart and humorous videos about veterinary topics. Check them out at drandyroark.com/cone-of-shame.

HERE TODAY ...

Things move fast in the high-tech world. I can only imagine how many technology-based items for dogs have been created just in the time it's taken me to write this article. The Pet Tutor recently announced that it is making its system "open development," allowing customers to create custom solutions with access to apps and hardware from other developers. Every time I heard about a new app and would look at it, I would find at least a dozen more new ones.

Conversely, the makers of some of the products I wanted to include in this article went out of business by the time the article was edited and fact-checked. I hope, however, that you find some of these products to be as useful or fun as I have. 🐾

Barbara Dobbins, a former dog trainer, writes about dogs and studies canine ethology. She lives in the San Francisco Bay area with her Border Collie, Duncan.



Going Under

What you should know about anesthesia before you schedule your dog's veterinary procedure.

BY DENISE FLAIM

Even the biggest worrywart owner usually relaxes a bit when her dog goes to sleep – but of course, her anxiety will ratchet up to stratospheric levels if that “sleep” is the span of temporary unconsciousness known as anesthesia. The more you know about it, however, the better you should feel about this often-necessary veterinary procedure.

While it's been compared to a state of chemically induced sleep, anesthesia is more like a reversible coma, in which your dog feels no pain, has no memory, and his muscles relax. Perhaps the most fascinating aspect of anesthesia is that scientists still don't understand *exactly* how it works – other than that it somehow causes the central nervous system to be depressed, slowing down automatic functions like breathing, heart rate, circulation, and the swallow reflex.

In addition to surgeries both simple and complex, anesthesia is often used with dental procedures, as well as during certain diagnostics and treatments in which it's important that a dog lie still.

Like any medical procedure, anesthesia poses certain risks to your dog. Be sure it is employed wisely – and not just because it's the path of least resistance. Owners who request that their dog be anesthetized for regular nail trimming, for example, might consider

When a dog is under full anesthesia, as when he's getting a through dental cleaning as seen here, he will be intubated, his blood pressure and blood oxygen levels should be continuously monitored, and he should be kept warm. An IV is in place and ready to deliver additional medications and fluids if needed.

that behavioral modification and gradual desensitization would be a safer, and arguably more humane, approach.

TYPES OF ANESTHESIA

What types of anesthesia your veterinarian elects to use depends very much on his preferences, and your dog's individual situation.

■ **PREANESTHETIC.** Many vets will administer a mild sedative to calm a dog so he can be more easily handled and prepped for surgery. Acepromazine is commonly used, but there are many drugs, and combinations of them, that are also highly effective. Barbiturates were once widely used for this purpose, but their use has been discontinued in the United States.

■ **INDUCTION ANESTHETIC.** As its name suggests, this anesthesia agent kicks off the anesthesia process. Propofol is the name that most owners will be familiar with, but, again, there are a variety of choices, depending on the veterinarian and the situation at hand. Induction

anesthesia is administered intravenously (that is, with a needle); the idea is to administer a fast-acting anesthetic to pave the way for the more powerful inhalant anesthesia. The catheter that dispenses the induction agent also gives the veterinarian a conduit to provide supportive fluids – and immediate access to the bloodstream should other drugs need to be administered in response to the patient's condition.

Because propofol works so smoothly and quickly – and can be reversed just as speedily – it is typically used to anesthetize a dog as a preparation for general anesthesia. Your vet is unlikely to use it alone during any major procedure.

“Because propofol can cause significant hypoventilation (low breathing rate) or apnea (absence of breathing), it is recommended that a patient be intubated, or have a breathing tube placed, and a supplemental oxygen source available,” explains Stuart Clark-Price, DVM, MS, DACVIM-LA, DACVAA, CVA, an assistant professor of anesthesia and pain management at the College of Veterinary Medicine at the University of Illinois at Urbana-Champaign.

There are exceptions to this rule, such as very short procedures or sedations that take less than 10 to 15 minutes, or when inhalant anesthetic isn't possible because an endotracheal, or breathing, tube can't be placed – for example, if the surgery is being done on the upper airway. “Propofol-only anesthesia may also be appropriate for animals with suspected brain tumors,” he adds, “as propofol may maintain proper blood flow to the brain more than inhalant anesthetics in this population of patients.”

■ **INHALANT ANESTHETIC.** This is what most of us think of when we hear the word “anesthesia” – a gas anesthetic. Inhalant anesthesia requires a breathing tube, which is placed in the trachea to ensure that the dog gets the proper levels of anesthetic, as well as oxygen, during the surgery.

For a procedure that will last more than a couple of minutes, once your dog has been given a mild sedative (pre-anesthetic) and the induction anesthetic that renders him unconscious, he will usually be intubated, so the person managing his anesthesia can carefully titrate his oxygen and gas anesthetic mixture.

Today, most veterinary practices use isoflurane and sevoflurane (colloquially referred to as “iso” and “sevo” for short).

“Isoflurane is the most commonly used gas anesthesia for canines in the United States. Sevoflurane is a newer agent that is also commonly used,” explains Dr. Clark-Price. “There is very little difference between the two agents as far as safety. Both cause clinically significant vasodilation and decreased blood pressure. So owners should ask if their veterinarian monitors blood pressure during anesthesia.”

“Masking down” is a procedure where the veterinarian skips the induction agent, and simply anesthetized the dog with the inhalant anesthesia, placing the mask over the face until the anesthesia kicks in. One downside to this approach is that there is typically a period of excitement or struggle before the dog succumbs to the anesthesia, which can be stressful for the vet staff, to say nothing of the dog.

“‘Masking down’ is just one way to induce general anesthesia, and it can be used safely unless rapid control of the airway is desirable – for example, in a patient at risk for regurgitation or vomiting – since mask induction takes several minutes,” explains Bruno Pypendop, DrMedVet, DrVetSci, DACVAA, professor and service chief of anesthesiology at the School of Veterinary Medicine at the University of California, Davis.

“However,” he adds, “many veterinary anesthesiologists, including myself, prefer not to use this technique unless there is no alternative. The reasons for this include the stress imposed on the patient, the poor control of the patient for several minutes, time it takes before you can place a tube in the trachea and gain control of the airway, and the exposure of personnel to anesthetic vapors.”

POST-OPERATIVE PAIN MANAGEMENT

Only a few decades ago, canine surgery patients were released with only a pat on the head; today, veterinarians are very aware of post-surgical pain, and it is standard practice to prescribe medication to help relieve it. Dr. Clark-Price suggests asking your vet what protocol he or she uses for pain. “Multimodal approaches to pain management” – that is, using several medications, which reduces the amount of each individual drug used, and can prove safer – “can help alleviate pain associated with surgical procedures as well as shorten recovery time so that an animal can be returned to his owner sooner and get back to his usual routine.”

In fact, owners should ask what drugs will be used throughout the anesthesia process. In anesthesia as well as pain management, a multi-modal approach is often advisable, Dr. Clark-Price continues. “Are they ‘preoxygenating’ the



patients – providing supplemental oxygen prior to inducing anesthesia? Do they intubate their patients and use gas anesthesia or do they use a strictly injectable protocol? Do they have established protocols for emergencies?”

RISKS OF ANESTHESIA

The risk of death for dogs undergoing anesthesia is approximately 0.1 percent. That doesn't sound like very much until you translate it into whole numbers: One in 1,000 dogs undergoing surgery will die from an anesthetic-related problem. That's 10 times higher than the mortality risk in humans, which is 0.01 percent, or one in 10,000.

A study conducted about 10 years ago from the United Kingdom estimated the overall risk of anesthesia-related deaths in dogs to be even higher – 0.17 percent, or about one in 600 cases – though advances in veterinary medicine over the decade may have lowered that number.

Before you panic, Dr. Clark-Price reminds that those are just averages.

“The actual rate at a specific hospital depends on many factors, including equipment, experience, anesthetic drugs used, if a person is dedicated specifically to monitoring a patient during anesthesia, and the health status of the patient,” he says. “Hospitals with anesthesiologists probably tend to have lower mortality rates than those that don't.”

Your dog's general state of health affects the chance that complications may develop, which is just common sense: A sick dog is at higher risk than a healthy one. Specific procedures also carry specific risks. For example, Dr. Clark-Price says, “a dog that is having a spay will have less risk than a dog having its spleen removed because of cancer.”

Dr. Clark-Price lists five common risks for patients undergoing anesthesia: hypotension (low blood pressure),



A sterile ointment is put in the dog's eyes to prevent them from getting dried out from being open while the dog is unconscious. Often, a vet tech will take the opportunity to clip the dog's nails and express his anal glands while he's out, too.

hypoventilation (reduced depth and frequency of breathing, hypothermia (low body temperature), bradycardia (slow heart beat) and pain (the degree changes, depending on the procedure).

While different types of anesthesia are associated with certain risks, there are more important factors involved in assuring that your dog comes out of surgery successfully.

Dr. Pypendop offers this quote from Dr. Robert Moors Smith, a pioneer of modern anesthesia practice in people: “There are no safe anesthetic agents, there are no safe anesthetic procedures, there are only safe anesthetists.”

In other words, how anesthesia is used, and how the patient is supported and monitored throughout the process, is what matters most.

“The veterinarian and their technicians' knowledge and training are more important than which specific drug they use,” Dr. Pypendop says. “That is why there are specialist training programs in anesthesia for both veterinarians and veterinary technicians.”

MONITORING

Both Drs. Clark-Price and Pypendop stress that monitoring is the best way to prevent problems associated with anesthesia. Keeping a close tab on certain bodily functions, such as respiration and

heart rate, allows veterinarians to detect problems early, and prevents them from progressing to the point where they become critical or life threatening.

For an idea of just how important monitoring is in avoiding complications, Dr. Clark-Price

points to the four main monitors used during human surgeries: electrocardiogram (which measures the electrical activity of the heart), pulse oximetry (how much oxygen is in the blood), blood pressure, and end tidal gas monitoring (how well a patient is breathing during anesthesia). When those four monitors are used in human medicine, “it reduces the chances of avoidable anesthetic complications by 96 percent!” he says. “Many veterinary practices have one or more of these monitoring devices, and clients should ask their veterinarians if they are using any of them.”

But Dr. Pypendop notes that sometimes, an experienced eye can be even more critical than a high-tech approach.

“When mentioning monitoring, people often think of ‘machines that beep,’ but in my opinion, while these devices are helpful, having a trained individual dedicated to monitor each patient is the best way to avoid complications,” he says.

Most veterinary practices do not have a board-certified anesthesiologist on staff; instead, anesthesia monitoring typically falls to a veterinary technician, who is supervised by the veterinarian. Vet techs can be certified in anesthesia management. Make sure to ask your veterinarian about who will be assisting with surgery, and if that person is board certified (in cases where the anesthetist is a veterinarian) or has received any specialized training in anesthesia administration (in cases where the anesthetist is a veterinary technician).

If your dog is at risk for anesthesia-related complications, consider asking your veterinarian to consult with a veterinary-anesthesia specialist who has been certified by the American College of Veterinary Anesthesia and Analgesia.

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In the end, you and your vet might decide that the best course is to have the procedure done with a board-certified anesthesiologist in attendance, most likely at a specialty practice or university hospital.

BREED-SPECIFIC CONCERNS

Dr. Pypendop notes that there are “many unsubstantiated, likely baseless” reports of breed sensitivities to a particular drug or series of drugs floating around on the blogosphere. But some are legitimate. Even if your dog a good old “all American” canine, considering what breeds might be in his background might be useful when it comes to calculating anesthesia risks.

“The only well-documented, breed-specific anesthetic drug concern is with the use of thiobarbiturates in Greyhounds,” Dr. Pypendop says. But that sensitivity – which is believed to affect all lithe-bodied breeds created for chasing prey at high speeds, such as Whippets and Borzoi – is a moot point since that class of sedatives is not available in the United States anymore. Anecdotally, sighthounds have been found to have prolonged recoveries from other drugs, too, and their low stores of body fat leave them susceptible to hypothermia, or lowered body temperature, while anesthetized.

Dr. Clark-Price notes that Arctic breeds such as Siberian Huskies and Alaskan Malamutes typically experience a great deal of disorientation – formally called dysphoria – during recovery from anesthesia. “They may require additional sedation until they have fully cleared the anesthetic drugs from their systems,” he says. Ideally, your veterinarian will have a “recovery room” that is dimly lit and quiet, away from noises and activity that could agitate

recovering patients even further.

Dr. Pypendop ticks off a laundry list of other breed tendencies to keep in mind with anesthesia: Certain herding breeds, such as Australian Shepherds, Collies, and Border Collies, carry a genetic mutation that makes them more sensitive to some drugs, including those used for sedation and anesthesia. Some breeds are predisposed to diseases that can increase anesthesia risks; miniature Schnauzers, for example, have a relatively high incidence of sick sinus syndrome, which creates heart-rhythm problems, or arrhythmias. And some Boxers appear to be sensitive to acepromazine.

“Size plays an important role, as smaller and toy breeds are at a higher risk for hypothermia during and after anesthesia,” Dr. Clark-Price says. Regardless of breed, your veterinarian should provide warming blankets or other heat support during surgery, to keep your dog’s body temperature from plummeting.

“And brachycephalic breeds – Pugs, Bulldogs, anything with a ‘smashed’ face – may have difficulty with airway management during and after anesthesia,” he continues. “These animals may require very close monitoring after anesthesia to make sure they do not obstruct their airways.”

WHAT YOU CAN DO

Most dog owners know that withholding food and water before anesthesia is standard procedure; typically, your veterinarian will ask you to start fasting your dog at midnight on the day of surgery.

“Adequate fasting is important to limit the incidence of vomiting, regurgitation, or gastroesophageal reflux during anesthesia,” Dr. Pypendop explains.

Let your vet know about any medications you are giving your dog – including herbal supplements and nutraceuticals – and ask for guidance on what you should and should not give on the day of surgery.

Many vets will require or strongly suggest that pre-operative bloodwork be done to ensure that there are no imbalances or underlying conditions that could complicate surgery. (See our article about blood tests, “It’s in the Blood,” WDJ March 2015.)

Dr. Clark-Price notes that obesity is a risk factor for complications during anesthesia, and for some elective procedures, it might be advisable for your dog to take off a few pounds before going under. The best way to decide if postponement is the best option is in consultation with your veterinarian, who should also be involved in any weight-loss program you implement.

Though owners are understandably anxious to get their dogs back home after surgery, Dr. Pypendop warns against “rushing the procedure.” Instead, give your veterinarian time to adequately monitor your dog’s post-anesthesia recovery. That said, “some individuals may be extremely anxious in a hospital environment,” he says, “so optimal care should be decided on a case-by-case basis.”

With plenty of communication and a little research, you can let your dog undergo anesthesia with the confidence that he’ll emerge from his big fat nap none the worse for wear. 🐾

Denise Flaim of Revodana Ridgebacks in Long Island, New York, shares her home with three Ridgebacks, 11-year-old triplets, and a very patient husband.



“Dude, wow . . . I guess I’m not quite ready to go home!” Your dog will be groggy and disoriented for a variable amount of time after general anesthesia. Allow the veterinary staff to observe him and keep him warm and safe for as long as they feel necessary.

Must Touch Dogs

What to do if your dog hates certain husbandry chores (grooming, harnessing, trimming, etc.).

BY PAT MILLER, CBCC-KA, CPDT-KA

I put my hands on my dogs at least a few dozen times a day. It might be to attach or untangle a leash, look into ears, check teeth, brush or trim fur in various places, put on a Thundershirt, apply flea and tick preventative, or just to feel the soft silky warmth of dog under my hand. We humans are a tactile species, and with our handy opposable thumbs, we're always doing something to manipulate our canine companions and their body parts.

Many dogs love being touched by us as much as we love touching them. When I sit on the sofa in the evenings typing on my laptop, I have dogs snuggled close to me on each side! But dogs aren't born with a natural love of being touched by humans. They have to *learn* that human touch is good.

A well-socialized puppy learns early in life that human hands make good things happen. This is classical conditioning – giving your pup a good association with touch (and with all the other things he's likely to encounter in his lifetime). A well-socialized pup is an optimist, believing that the world is a good place, and new things are safe unless and until proven otherwise. Getting your dog to accept new things throughout his life like Thundershirts, Calming Caps, nail clippers, stethoscopes, and otoscopes is much easier if he is well socialized. (We will publish an article about proper socializing in an upcoming issue.)

If your dog has no problem whatsoever with any kind of husbandry procedure you inflict on him – from trimming nails to getting dressed in a rainsuit,

well, count your lucky stars, and show him your appreciation for his continued cooperation!

TOUCHY?

But what if, for whatever reason, your dog *hates* being touched? Or maybe he likes being petted, but won't let you pick him up, or won't allow you to look for and carefully pull off a tick? Or maybe it's just that he hates a certain procedure, whether it's getting his ears cleaned or his teeth brushed.

“Counter-conditioning” is the most powerful tool to use to literally counter those negative responses. Counter-conditioning is the process of *changing* your dog's existing association with something from one state to another – usually from negative to positive.

As an example, say someone once made the mistake of muzzling your dog and forcibly holding him down

while clipping his nails; your dog probably now thinks nail trimming is a terrifying ordeal. You can use counter-conditioning to convince him, instead, that nail trimming is a wonderful thing, by pairing bits and pieces of the nail trimming process with high-value treats, and gradually putting the whole process together. You are working to convince your dog that nail trimming *actually* makes really good stuff happen. (See “Positive Pedi-Pedi,” WDJ August 2012.)

But that's not all you can do! You can use counter-conditioning to invite your dog to willingly and happily participate in the process of *any* husbandry procedure that is currently problematic for her. I'll discuss the “how” of the process for several different procedures in just a moment.

CHOICES

We humans tend to be happier with our lives when we can make our own choices. Our dogs do, too! The better we are at giving them opportunities to make choices for themselves *and* setting them up to want to make the *right* choices, the happier we all are. If you can convince your dog to willingly and happily choose to participate in a husbandry procedure, everyone is better off.

An alternative to the above-described counter-conditioning for nail trimming is to provide your dog with a canine-sized emery board, teach him to use it, and let him choose to file his own nails. (Note: Some owners report that their dogs love to file their own nails so much that they have to put the board away or their dogs file their nails down to the bloody quick.)

Whatever procedures you use, you can set your dog up for success by “priming” before you begin.

Priming is a behavioral effect in which exposure to a stimulus influences a response to a later stimulus. While well documented in human behavior, the concept of priming is less-known in the world of dog training and behavior. Simply put, if you “prime” your dog with tasty treats or a fun activity prior to engaging in the handling activity, your dog is in a happier frame of mind to begin the procedure, and thus better able to make choices and respond from a less stressful place.

Here are some handling challenges and how you can use choice *and* counter-conditioning protocols to make life less stressful for you and your dog.



Does your dog respond with a definite, “NO WAY!” when you pull out the nail clippers?

WIPING MUDDY FEET

CLASSICAL CONDITIONING APPROACH

For *all* classical conditioning procedures, **do multiple repetitions of each step**, feeding your dog a high-value treat (I like to use bits of fresh roasted or canned chicken) after each repetition. **Only move to the next step when your dog becomes clearly happy at the previous step**; this lets you know he's made the association between the procedure and the high-value treat.

If he seems uncomfortable at any step, back up to the previous step until he's happy again, and then figure out a smaller, intermediate step. In this exercise (wiping muddy paws), an intermediate step between Step 1 and Step 2 below might be to put pressure on the foot but not pick it up. Note that for proper classical conditioning, you present the stimulus first (for example, touching his foot), and *then* present the food. You want him to think that the touch makes the treat appear.

1. Touch your dog's foot; then feed him a treat.
2. Hold his foot for a brief moment; treat.
3. Hold a towel in your hand (in front of him); treat.
4. Touch the towel to his foot; treat.
5. Holding the towel in one hand, lift and hold his foot for a moment; treat.
6. Holding the towel, lift his foot with your other hand, and touch his foot with the towel; treat.
7. Rub his foot gently with the towel; treat.
7. Rub his foot more vigorously with towel; treat.

"DOG'S CHOICE" APPROACH

When you train your dog to do any alternative method (in this case, for getting his paws clean), make the training process rewarding enough that your dog will happily choose to offer the behavior when you ask for it.

1. Start by training your dog to walk through a plastic tub with water in it. (Start with an empty tub and add water gradually if your dog is worried about the water). Use shaping, luring, or a combination of both.
2. Shape your dog to stand on an absorbent mat or towel to wick off the water. Alternatively, shape your dog to actually wipe his feet on the absorbent mat or towel to hasten the drying process.
3. Put the behavior (walk through tub and then stand or wipe paws on mat) on cue, so you can invite your dog to choose to perform it. If you have trained him well, he will happily choose to offer the behavior when you ask.



PUTTING ON A HARNESS (JACKET, THUNDERSHIRT, ETC.)

Some behaviors don't lend themselves well to a total choice approach, but you may be able to use a Choice/Conditioning-hybrid procedure, still giving your dog some sense of control over his own world. Here's one such procedure:

CLASSICAL CONDITIONING APPROACH

1. Hold up the harness in front of your dog with one hand; feed him a treat.
2. Let your dog sniff or nose-touch the harness; treat.
3. Let your dog sniff the harness and feed him treats through the opening that will go over his head.
4. Let him sniff the harness, and hold treats farther away so he has reach farther into the harness to eat them.
5. With his head through the harness, allow the harness to rest on his neck; treat.
6. Touch the straps that buckle; treat.
7. Move the straps that buckle; treat.
8. Touch the two sides of the buckle together; treat.
10. Snap the buckle closed; treat. (If your dog is sensitive to sounds, you might choose to counter-condition the sound of the buckle snapping closed first (or the Velcro

sound of a Thundershirt), prior to and separate from the procedure of putting the harness or shirt on the dog).

CHOICE AND CLASSICAL CONDITIONING

1. Shape your dog to walk into the harness suspended to give him access. (Click and treat as he offers to move incrementally farther into the suspended harness.)
2. When he is voluntarily moving into the harness, use classical conditioning Steps 6 through 10 above to complete the process.



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LIFTING YOUR DOG

CLASSICAL CONDITIONING

1. Place both hands briefly, gently, on either side of your dog's spine, and then feed him a treat.
2. Gradually move your hand down and under your dog's ribcage on the far side, touching and feeding him a treat several times at each step.
3. Gradually move your other hand around the front of your dog's chest to his opposite shoulder, touching and feeding him several times at each step.
4. Put light pressure on your dog with both hands, gradually hugging him toward you, and then feed him a treat.
5. Gradually increase pressure, feeding him treats several times at each step.
6. Hug your dog against your chest, lifting upward slightly; release and treat.
7. Gradually increase the amount of lift pressure until you are picking him up, giving him a treat several times at each step.

DOG'S CHOICE APPROACH, SMALL DOG

1. Shape or lure-shape your dog to go into a carrier on cue.
2. Lift the carrier to transport your dog to the desired location.
3. Treat while carrier is being carried, to offset any negative association with the movement of the carrier.
4. Treat when you place the carrier at the destination, again to maintain a positive association with the moving process.

ANOTHER DOG'S CHOICE, SMALL TO MEDIUM-SIZED DOG

1. Shape or lure-shape your dog to jump into your lap when you are seated on the floor. Put the behavior on cue.
2. Make a circle of your arms in your lap so when he jumps into your lap he is jumping into your arms. Practice until the behavior is fluent (happens quickly and easily) and on cue.
3. Kneel, and cue him to jump into your arms. Practice until fluent.
4. Sit in a chair and cue him to jump into your arms. Practice until fluent.
5. Stand and cue him to jump into your arms. Be sure you catch him!



PHOTO, RIGHT: Christine has lure-shaped Tito to put his front paws on her leg, and is gradually adding the presence and pressure of her hands under his chest (a step in the direction of lifting him). He wears an ideal, happy, "Where's my chicken?" expression in anticipation of his reward for his cooperation.

A THIRD DOG'S CHOICE, ANY SIZED-DOG

1. Using a portable ramp or steps made for dogs, shape or lure-shape your dog to walk up the ramp or the steps. Put it on cue.
2. Practice until the behavior is fluent.
3. Use the ramp or steps in place of picking him up when you need him on an elevated surface such as getting into the back of your SUV, or onto the exam table at your veterinarian's office.

TRIMMING TOENAILS

Even behaviors that don't lend themselves well to choice, such as trimming hair and medicating ears, can incorporate an element of choice *and* priming, by teaching your dog to "station." To "go to station" means to go to a specific spot where nine times out of 10 (or better yet, 99 times out of 100), *really* good, fun stuff happens. If, every once in a great while, a slightly less fun (but not hugely aversive) procedure happens, it shouldn't be enough to change his happy association with his station, especially if you do much of the classical conditioning away from the station, and invite him to station only when he has a positive association with all the parts of the procedure. Remember, **do multiple repetitions at every step** until the dog is happy!

CLASSICAL CONDITIONING APPROACH

1. Show your dog the nail clippers; feed him a treat.
2. Move clippers toward dog; treat.
3. Let him sniff the clippers; treat.
4. Move clippers as if you were snipping nails, several inches from dog; treat.
5. Move clippers toward the dog's feet; treat.
6. Touch clippers to his chest or shoulder; treat.
7. With clippers close to his feet, move them as if snipping nails; treat.
8. Touch his foot with one hand while holding clippers near his body; treat.
9. Pick up and hold his foot for a brief moment while holding clippers near his foot; treat.
10. Pick up and hold his foot for a brief moment while snipping clippers near his foot; treat.
11. Pick up and hold his foot, spreading his toes apart, as if you were trying to get a toenail into position to be cut, while holding clippers near his foot; treat.
12. Pick up and hold his foot, spreading his toes apart, and touch the side of the clippers to a toenail or two; treat.
13. Pick up and hold his foot, spreading his toes apart. Clip a tiny slice of one nail; treat.
14. Once your dog is happily on board for all of these steps, invite your dog to his station for the procedure. This introduces a *small* element of choice, but choice nevertheless.



TOP: Christine is on Step 6 as described at left; Tito is doing great.

ABOVE: We moved through the steps too quickly; Tito is not ready to have his foot touched. He moaned (a Chihuahua prelude to a growl), his expression is guarded, and he pulled his foot away.

LEFT: As we approached Step 12, Tito suddenly hopped onto Christine's lap! She gave him some treats and clipped a couple nails. Huge success!

This may seem tedious, but it's important to understand that breaking each activity down into many small steps accomplishes two things. First, it helps your dog understand what it is that you want. Second, it makes the learning process much more engaging and enjoyable for him.

There are countless procedures that involve touching and handling our dogs, and each could be spelled out in a protocol that uses choice, classical conditioning, or a combination of the two, to make life easier for both you and

your dog. But I bet by now you've got the idea.

Your dog's challenge might be the application of topical flea and tick preventative, cleaning and/or putting medication in ears, electric clippers, flea combing, brushing teeth, pulling ticks, or something else. No matter which challenge it is, it's always better to figure out how to help your dog become a willing partner in the activity than to restrain and force him into accepting the procedure. Unless it's a medical emergency, there's no need to use force! 🐾

Pat Miller, CBCC-KA, CPDT-KA, is *WDJ's* Training Editor. She lives in Fairplay, Maryland, site of her Peaceable Paws training center, where she offers dog-training classes and courses for trainers. Pat is also the author of many books on positive training. Her two most recent books are *Do Over Dogs: Give Your Dog a Second Chance at a First-Class Life*, and *How to Foster Dogs; From Homeless to Homeward Bound*. See "Resources," page 24, for more information about her dog-training classes, books, and courses for trainers.

In the May issue, we published an article, "Outfoxing Foxtails," that included an endorsement of the Outfox Field Guard, a protective hood for dogs that is made out of a fine mesh, allowing the dog to run and breathe freely while protecting him from getting foxtails in his eyes, ears, nose, and mouth. We failed to include a phone number for the company that makes and sells the Outfox Field Guard, however. That number is (800) 261-7737. Orders may also be made online at outfoxfordogs.com. We regret the omission.

I want to thank you for your article, "How to Prevent a Bad Adoption" (WDJ May 2015). Having recently driven two and a half hours to see a rescued Border Collie who was nothing like his description, I found it very pertinent.

I've had multiple experiences during my search for a new dog that have led me to give up for the time being. I've decided, when I'm ready, I'll buy a puppy from a reputable breeder. That way, I'll have more of an idea what/whom I will be getting.

I am finding, from both my own and friends' experiences, that it is more and more difficult to find a relatively sane dog to adopt. I have a theory about this. I think the rescue groups are focusing more and more on the dogs they perceive as "victims" and less on finding good pets who will fit decently in the home of the average owner. So, in order to place these damaged dogs, they have to cover up the truth about the extent of their behavioral and emotional problems.

I am very concerned that since so much room is being taken by the more damaged dogs, more adoptable dogs will end up being euthanized because there won't be space for them. A case in point: the Korean dogs saved from being eaten a few months ago and shipped to several rescues in the U.S. Until recently, I was a volunteer at a shelter that took some of these dogs. The adults were adopted fairly quickly – and many were returned because of their extreme behaviors. The puppies were feral and dangerous and underwent intensive socialization. I don't know the outcome because, frankly, I couldn't stand to volunteer there anymore. But those dogs took up pens, and many hours of the staff trainers' time. Both were limited resources that could have been devoted to more happily adoptable dogs.

Name withheld by request
Via email

I just read "Snake Aversion Without Shock" (WDJ May 2015). We live in Nova Scotia, where there are no poisonous snakes, but we do have porcupines. Our young Husky recently had to make an emergency trip to the vet for a face full of quills; thankfully we were just a car ride away. If the quilling happened on a camping trip it would have been very serious. The same training for snake avoidance would work for porcupine avoidance I should think! We will be giving it a try.

Peggy Hopper
Via email

Thanks for your comments, and sorry about your dog! The article mentioned that the exercises taught by both shock-free trainers mentioned in the article are also useful for dealing with dogs who chase toxic toads, skunks, or porcupines. While the dangers pre-

sented by the abovementioned are dramatic, it's no less important to teach your dog to resist chasing cats or cars, or demonstrating a reliable "leave it" behavior when you drop one of your prescription medications or a chunk of dark chocolate.

I think my take on "Snake Aversion without Shock" will be unpopular. Although the idea sounds interesting, I want my dogs to be afraid of rattlesnakes, and stay away if they see, smell, or hear one. I live in the outskirts of Tucson, Arizona, and avoiding rattlesnakes is a matter of life and death in the Sonoran desert.

I don't have a problem using a shock collar for rattlesnake aversion training; it is quick and will save their lives, maybe the dog owner's life too. Force-free positive/clicker training is my choice for agility, tricks, obedience, etc. Force-free rattlesnake avoidance training would take too long, especially when you needed that training last week.

Colleen DeGrado
(Comment on WDJ website)

Thanks for the opportunity to respond to your concerns. Lots of owners regard force-free training as great for tricks and games, but not "serious training."

However, force-free methods are used with great success to train dogs for very serious tasks that are also a matter of life and death. The best example is probably explosive detection training. In this type of training, the last thing they want to train the dogs to be is afraid. A dog that ran away when he detected the odor of certain chemicals would be of no use to anyone. Rather, in this training, they want the dogs to halt immediately and alert their handlers to the odor; then the handlers can give them a cue for the most appropriate next thing they should do, whether that's continuing to hold still, back up, return to the handler, or continue forward.

That's exactly the type of training that we described in the article. The goal of shock-free snake avoidance training is to train the dog to recognize the sight, sound, and smell of snakes, and to regard any sign of snakes as a cue to go to his owner immediately.

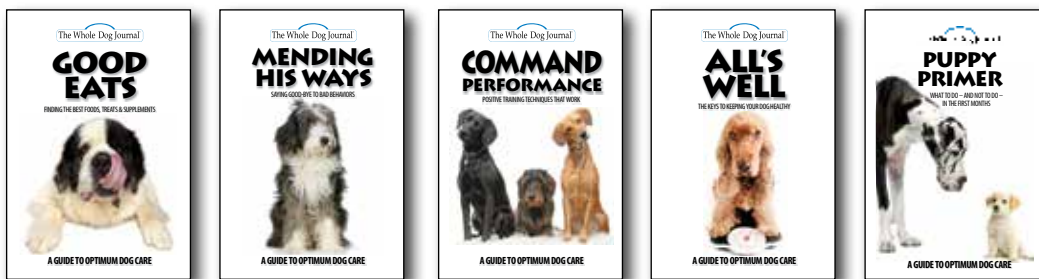
But as you said, and as noted by one of the trainers we quoted in the article, Jamie Robinson (who is based in Tucson, by the way), this training is not a quick fix; it requires commitment. If I lived in the Sonoran desert, I think this training would be my top priority!

Finally, there is no guarantee that a dog who is subjected to one of those shock-based snake avoidance training sessions will associate being shocked and made afraid with the sight, sound, and/or smell of the snake. He may, instead, associate the shock with a group of people standing around a parking lot, or the smell of the snake handler's cologne (bummer if it's the same one your husband wears), or the snake handler's cowboy hat.

There just isn't any way to instill fear in your dog in a precise or reliable way – and if it goes awry, and he develops "irrational" fears or phobias as a result of a crash course in shock-collar-based snake avoidance, you may never be able to help him completely shed those fears or phobic behaviors. 🐾

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