

The Whole Dog Journal™



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A monthly guide to natural dog care and training

AUGUST 2011

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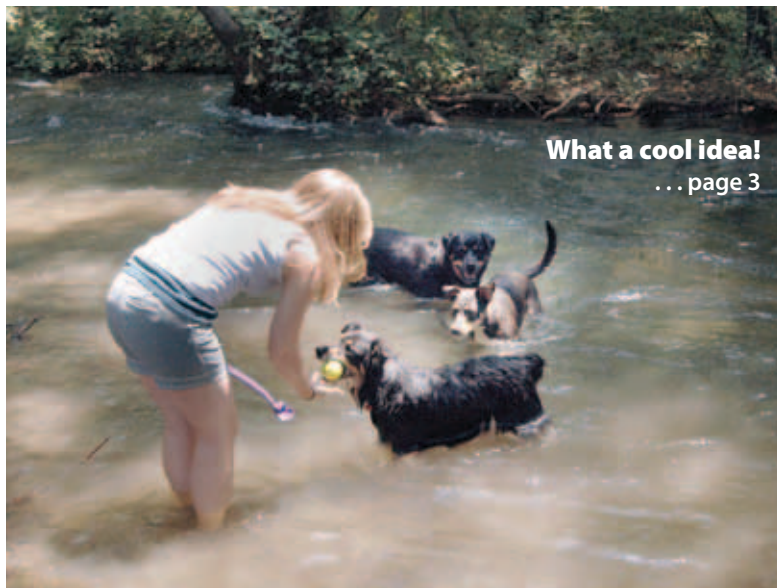
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The Whole Dog



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PAW EDITOR'S NOTE

Deja Vu

Consumer Reports does it again – claims all pet foods are the same.

BY NANCY KERNS

Why, oh why, does *Consumer Reports* even “go there”? I have the utmost respect for the magazine’s reviews of vacuums and DVRs and such, but pet food is beyond their ken. Yet they persist. In “Tame Your Pet Costs” in the August issue, its authors advise readers not to “pay a premium for ‘premium’ dog food.” They put the quotes on *premium* dog food, to indicate their apparent opinion that there is no such thing. Sigh.

A quote: “Premium or otherwise, any food you see on supermarket and pet-store shelves that’s labeled ‘complete & balanced,’ ‘total nutrition,’ or ‘100 percent nutritious’ should meet the minimum standards for nutrition set by the Association of American Feed Control Officials. That indicates that it’s adequate for the vast majority of healthy pets.” The short article goes on to indicate that the best buy the authors found was Ol’ Roy at Walmart, “for just 34 cents per pound.”

Can you think of anything nutritious you can buy for 34 cents per pound? No; just sawdust comes to mind. Sprinkle on some fat from a vat of road kill and a vitamin/mineral mix of dubious origin and call it a day!

I just don’t know how anyone could regard a dog (carnivore) food whose ingredients list starts with (as one example) turkey, chicken, and chicken meal as “just as good” as one that starts with corn, “meat and bone meal,” and soybean meal – even if the protein, fat, and vitamin levels in the two foods were equivalent.

“Bargain” prices are *always* an indication of cheap, low-quality ingredients. I will agree with *Consumer Reports*, however, that high prices may not necessarily correlate with high-quality ingredients; there certainly are plenty of high-priced foods competing in the “premium” niche whose ingredients don’t

necessarily explain the price of the product. So many factors go into pricing that you have to look past the price to the ingredients to determine the quality of a food.



Allow me to rave *positively* about something else. Recently, two of our favorite behaviorists/authors, Patricia McConnell, PhD, and Karen London, PhD, published a *great* little book, *Love Has No Age Limit: Welcoming an Adopted Dog into Your Home*. They wanted to address a little-known problem having to do with dog adoptions: the fact that up to a third of dogs who get adopted in some areas end up being returned to the shelter. The goal of the book is to help guide folks with newly adopted dogs through the first few days, weeks, and months post-adoption – to avoid the most common mistakes that people make, and set up the dog and family for success.

Best of all, to make sure the book is affordable to cash-strapped animal welfare organizations, everyone involved with the book’s production agreed to discount the compensation for their work, so the book could be sold far below a typical retail price. Order it today from Dogwise for just \$9.95; dogwise.com or (800) 776-2665.

NK

MISSION STATEMENT: WDJ’s mission is to provide dog guardians with in-depth information on effective holistic healthcare methods and successful nonviolent training. The methods we discuss will endeavor to do no harm to dogs; we do not advocate perpetrating even minor transgressions in the name of “greater good.” We intend our articles to enable readers to immediately apply training and healthcare techniques to their own dogs with visible and enjoyable success. All topics should contribute to improving the dog’s health and vitality, and deepening the canine/human bond. Above all, we wish to contribute information that will enable consumers to make kind, healthy, and informed decisions about caring for their own dogs.

Cool It!

Five ways to prevent your dog from suffering heatstroke, even when it's really hot.

BY NANCY KERNS

Dogs can suffer from heat stress in just a few short minutes, even when the temperature doesn't seem that hot to us. How will you know if a dog is at risk for overheating? There is not an exact answer to this question; it depends on the dog and the situation.

All dogs are at risk in extreme temperatures. But a dog who is accustomed to 90° weather may have less risk on a very hot day than a Seattle pup vacationing in the Arizona desert. Also, the air temperature is only one consideration; humidity, sun exposure (or lack of shade), amount of time in the heat, level of exertion, and availability of water can all affect how well a dog tolerates heat. Be alert for signs of heat distress, such as excessive panting or drooling, reddened gums, listlessness, or rapid heartbeat.

Fortunately, there are plenty of ways to help prevent your dog from getting so overheated that he suffers heat stress or heatstroke.

1 Avoid exposing your dog unduly to extraordinary heat. Again, this is a relative recommendation; a dog who is acclimated to a fairly hot environment can tolerate more than a dog who is not. But when temperatures rise beyond what are average, give your dog greater respite from the heat. Leave him home! And if left at home, make sure he's got ample methods for staying cool: shade; lots of fresh, cool water to drink; and perhaps the cooling breeze of a fan. If you must take him out, try to keep him out of the sun – and make sure he has constant access to cool drinking water.

2 Modify your dog's exercise routine in hot weather. Walk him after dark or before dawn. Find a pond, creek, or beach where dogs are safe and welcome,

and incorporate swimming or water play into his usual game of fetch. During severe heat waves, he can forego any sort of rigorous exercise for a few days.

3 Get him wet. Hose him down, put him in the tub, mist him with a spray bottle, or wipe his coat with a sopping wet towel. In a dry climate, the evaporation will help lower his body temperature; in a humid environment, you'll need to get some extra air flowing over him for a wet coat to help him cool down. Ceiling fans are terrific; battery-powered fans that attach to your dog's crate or x-pen work well, too.

4 Provide ample water. Make sure your dog has lots of fresh, cool water – preferably from more than one source. Dogs always seem to drink more when they have options.

If you're out with the dog, offer water frequently. Stop in a shady spot, and really encourage him to relax and drink. Some dogs get distracted by their environment and pass up the chance to drink in favor of gawking. Make it clear that you're not going on until they take at least one quick drink.

5 Use an evaporative cooling vest, coat, bandanna, or mat. There is a wealth of products for keeping dogs cool on the market, available from many pet specialty store or online pet supply catalogs. Look for garments that are wetted and gradually release water through evaporation, such as the HyperKewl Evaporative Cooling Dog Coat by Tech-Niche International, winner of the “best new dog product” at SuperZoo 2010, a pet products trade show. But in a pinch, even a plain cotton T-shirt or bandanna, wetted and worn by the dog, can help provide some evaporative cooling. 🐾

If you're lucky enough to have access to a safe, dog-friendly body of water, move your daily dog walk to that spot during heat waves.



STUDY REVEALS MOST COMMON DISEASES IN DOGS

Banfield report compares selected results to prior years to identify some surprising trends.

Banfield Pet Hospital has issued a report analyzing the most common diseases in dogs and cats. The “State of Pet Health 2011 Report” collected data from 2.1 million dogs seen at Banfield’s 770 veterinary hospitals in 2010.

Some of the more interesting findings included increases in diabetes, dental disease, ear infections, and flea infestations since 2006. Hookworms and whipworms in dogs also increased during that time period.

Incidence of diabetes mellitus in dogs rose 32 percent since 2006, a startling finding. The number of dogs affected, however, is still low, with 17.5 cases per 10,000 dogs seen. Diabetes is associated with being overweight or obese, one of the top five diagnoses in adult dogs in 2010, which might help explain the increase. Diabetes is also more common in small breeds, whose popularity has risen considerably in the last 10 years, with Chihuahuas and Shih Tzus leading the way.

Heartworm disease is one of the three top health risks for pets in the Southern states, with the highest rate of infection found in Mississippi, where 6.7 percent of dogs tested were found to be infected. Heartworm disease was diagnosed in dogs in all 43 states in which Banfield has hospitals, and the American Heartworm Society reports dogs testing positive in all 50 states. Incidence of heartworm disease was similar in 2010 to 2006.

Dental disease is the most common health issue in dogs, affecting about three-quarters of all dogs over 3 years of age. Many dogs aged 1 to 3 years are affected as well. Dental disease can affect the heart and kidneys, and causes pain that is not readily apparent. There has been a 12.3 percent increase in dental disease in dogs since 2006. While tartar was the most common finding, periodontal disease grade 1 (of 4) made the top 10 list of diagnoses in all dogs, and grades 1 and 2 were both in the top 10 for small dogs. Older dogs have greater risk of developing more severe forms of dental disease. The top breeds most likely to develop periodontal disease include the Toy Poodle, Yorkshire Terrier, Maltese, Pomeranian, and Shetland Sheepdog.

The best way to prevent dental disease in dogs is with daily brushing.

Otitis externa (infection or inflammation of the outer ear canal) was the second most common diagnosis in dogs, with a 9.4 percent in-

crease since 2006. In 2010, 15.8 percent of dogs seen in Banfield hospitals were diagnosed with otitis externa. Recurrent ear infections are usually linked to allergies. Breeds that are predisposed to otitis externa include the Basset Hound, Beagle, Bulldog (American and English), Cocker Spaniel (American and English), Golden Retriever, Labrador Retriever, Lhasa Apso, Poodle (all sizes), Pug, Shar-Pei, and English Springer Spaniel.

Incidence of flea infestation increased 16 percent in dogs since 2006. Tick infestations were also more prevalent, with a 6 percent rate of increase over the past five years. In addition, the number of dogs diagnosed with Lyme disease more than doubled since 2006. Fleas increase during spring and summer months before peaking in October, while ticks were most commonly found in May and June. Fleas are most prevalent in Southeastern states and along the West Coast.

Hookworm prevalence in dogs increased 30 percent and whipworms 8 percent over the last five years. Hookworms are most common in Southeastern states, while whipworms are more prevalent in Midwestern and Eastern states. Tapeworms were the most common parasite found in dogs.

Knowing which diseases are most common can help pet owners be proactive in protecting their pets through preventative care, such as keeping dogs lean; toothbrushing; using heartworm, flea, and tick preventatives as needed; and having a veterinary examination at least once a year. – *Mary Straus*

FOR MORE INFORMATION

❖ Banfield Pet Hospital State of Pet Health 2011 Report
tinyurl.com/banfield

NEW LYME DISEASE TEST

New test offers earlier diagnosis – and can identify the stage of the dog’s infection.

Researchers at Cornell University’s Animal Health Diagnostic Center have developed a new test for Lyme disease in dogs. Available as of June 15, the Lyme multiplex assay is capable of distinguishing between infection and vaccination when vaccination history is available, and between early and chronic disease stages, from a single blood sample.

Borrelia burgdorferi, the bacteria that cause Lyme disease, migrate by way of the tissues to the joints, nervous system, and organs, causing fever, pain, lameness, and sometimes kidney failure (Lyme nephropathy). By the time these clinical signs show up, the infection may have been present 6 to 8 weeks or longer. Bacteria spirochetes can persist in the body for at least a year after clinical signs are gone, while high antibodies persist for at least 17 months. All of these factors make it difficult to distinguish between dogs whose clinical signs are caused by Lyme disease, and those who may have been exposed in the past but have recovered from the disease.

Older tests for Lyme disease include whole cell enzyme-linked immunoassay (ELISA), indirect fluorescent antibody (IFA), Western blot, and C6 (SNAP® and ELISA). Whole cell ELISA and IFA tests cannot distinguish between antibodies

The incidence of flea infestations has increased 16 percent in dogs since 2006. We have to wonder: Is there a growing resistance among fleas? A symptom of the economy (preventives can be expensive)? Something to do with the climate?





induced from infection versus vaccination, while Western blot and C6 SNAP tests do not provide quantitative results. For this reason, two separate tests (ELISA plus Western blot) were required from Cornell's lab for diagnosis and treatment.

The new Lyme disease canine multiplex assay combines the advantages of ELISA and Western blot in a single test. In addition, by identifying three different antibodies, it is the only test that has the capability of distinguishing between early versus chronic infections. Different antibodies point toward dogs who have been vaccinated for Lyme disease, those with early infections (up to 3 to 5 months), and those with chronic infections. The test can detect disease as early as 2 to 3 weeks after exposure, compared to 4 to 6 weeks for ELISA tests and 3 to 5 weeks for C6 tests.

Cornell says that its multiplex assay has increased sensitivity and specificity compared to other tests (resulting in fewer false negative and false positive results), and provides advanced information beyond any of the current Lyme testing methods, resulting in a better definition of the dog's infection status. The fee for the test is \$36, though the cost to you will include additional fees to your vet for drawing blood and shipping.

The Lyme Quant® C6 quantitative antibody test offered by IDEXX can also distinguish between infection and vaccination and provide quantitative results from a single sample. It might have even greater specificity (fewer false positives) than the new multiplex test, which could cross-react with at least one vaccine. Vaccination information must be provided along with samples submitted for testing to Cornell's lab, so they can take that information into account when analyzing test results. That can be problematic for rescue dogs whose vaccination history is unknown. No such cross-reaction occurs with IDEXX's SNAP® 3Dx®, 4Dx®, or Quant C6 tests, as no currently available Lyme vaccine stimulates a C6 antibody response.

While the IDEXX Quant C6 test cannot differentiate between early versus chronic infections, it can better monitor response to treatment, by comparing pre- and post-treatment results. A unique property of the C6 antibody is that levels decline sharply after treatment. Other tests measure antibodies that can persist at high levels long after treatment, making it difficult to determine whether the spirochetes are still present.

Doxycycline is used to treat Lyme disease at a recommended dosage of 10 milligrams per kilogram of body weight twice a day for four to six weeks. A controversy exists regarding treatment of dogs who test positive for Lyme but who show no signs of disease. Early research indicated that all but about 5 to 10 percent of dogs were able to fight off infection on their own, with no signs of the disease. A more recent study of 62 Beagles infected with Lyme, however, found that 39 dogs (63 percent) showed symptoms of the disease, and almost all had synovitis (inflammation of the joint lining) at necropsy. Because of the potential for Lyme disease to cause kidney failure, and because not all disease signs are noticeable (subclinical infection), treatment in all cases is the safest option. — *Mary Straus*

FOR MORE INFORMATION:

- ❖ Cornell University College of Veterinary Medicine, Animal Health Diagnostic Center, (607) 253-3900; ahdc.vet.cornell.edu

“MASS MARKET” PET FOOD COMPANIES MOVING OUR WAY

Ainsworth Pet Nutrition a good example of recent industry trend toward better foods.

As we have noted previously, the “natural/holistic” segment of the pet food market is experiencing more robust growth than any other segment. So, more and more “mass market” pet food makers are experimenting with new products developed to compete in this niche – although, in our opinion, only some of the products can walk the walk; many lack true commitment to the concept. One of the best indications of the company's dedication to quality is the ingredients panel.

Recently, we received a press release from Ainsworth Pet Nutrition of Meadville, Pennsylvania. The name is new, though the company is not. Ainsworth was organized from the core of Dad's Pet Care, a family-owned business since 1933. Historically, Dad's foods are what we would characterize as carb-heavy foods sold for bargain prices. But the management wants to change that. “We have made several acquisitions and investments to expand our capabilities and have added exciting new products to our portfolio,” says Sean Lang, CEO of Ainsworth and the great-, great-grandson of Dad's founder. In the past few years, the company purchased Hampshire Pet Products (an organic certified facility for baked food and snacks), Targeted Pet Treats (maker of snacks and chews), Gaines of Canada (chews and dental bones), Arkat Animal Nutrition (pet food maker with its own manufacturing facilities), and Back to Basics. That last purchase was the one that pricked up our ears.

Back to Basics has had dry dog foods on our list of “approved” dry dog foods for many years. It was a small company with mostly regional sales. When we heard that a mass market company bought it and planned to reformulate its products, we feared the worst, but resolved to follow up to learn its fate.

Happily, it appears that Ainsworth plans to use Back to Basics as its foot in the door of the premium (a.k.a. natural/holistic) dog food market. The Back to Basics foods (there are only two varieties, one pork-based and one turkey-based) are now grain-free (and potato-free); each features fresh organ meat as its first ingredient. Ainsworth says the foods contain 74 percent animal -based ingredients (protein and fat). Both exceed WDJ's selection criteria for a top-quality dry dog food.

Ainsworth has assigned each of its products to one of three divisions. The Dad's Pet Care division will make Dad's products, Rachel Ray's Nutrish, and other mass market foods. The Ainsworth Custom division will be devoted to co-manufacturing and development for other companies. And Ainsworth Specialty Brands will make Back to Basics – and some new premium foods currently in the research and development phase. We're pleased to see companies like Ainsworth devote themselves to healthier foods; it's “all good” for our dogs. — *Nancy Kerns*

FOR MORE INFORMATION:

- ❖ Back to Basics Pet Food (800) 219-2558; backtobasicspetfood.com



Photo courtesy of
Walkabout Harnesses



HEALTH

A hind-end harness like this one from Walkabout Harnesses works well for dogs dealing with back-end issues. Plus, it's kind to the human's back.

ful chemical smell that takes a while to dissipate.

I was thrilled when I discovered a relatively inexpensive product called CarpetSaver, a lightweight, cotton blend, foam-backed terry runner that's machine washable. I ordered a remnant roll and was able to cut the fabric easily with household scissors to varying lengths. Although this product will never make the cover of *House Beautiful* and is only available in four basic colors, I've been pleased with the quality, durability, and wash-ability of the product, along with the ease with which my elderly Bouvier, Jolie, now navigates through the house without missing a beat. I've gotten a return on my investment many times over! Suggested retail price is \$20 and up; remnants and overstock sometimes available.

In some areas of our house, I've put down yoga mats for improved traction. They're easy to keep clean; just pick up and shake out or vacuum. I recently learned that yoga matting is available in bulk rolls. A trainer friend lined the cargo area of her Honda Element with roll matting, making her English Mastiff very happy. The matting offers a great, grippy surface to walk on, but I've also found that guest dogs in our home gravitate to the mats as a comfy place to nap. Although I purchased Jolie's yoga mats at a discount store for about \$10 each, I recently found a 24" x 104" x ¼" roll of matting online for \$125.

Even More Support

More assistive equipment to make your dog's life – and yours, too – a little easier.

BY LISA RODIER

In our March 2011 issue, we introduced you to a very small sampling of some of the neat “assistive equipment” options that are available to help our canine companions who have limited mobility or other physical issues. We received such a great response that we thought we'd share with you a few more finds that can help make life easier for you and your dog, particularly if he or she is aging or has orthopedic or neurologic issues.

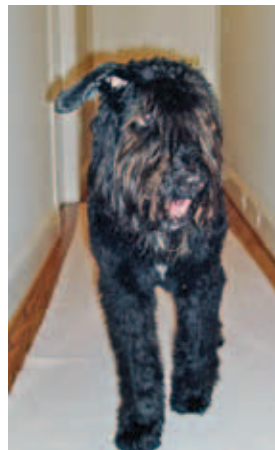
Remember: the products mentioned here are only the tip of the iceberg. There are numerous companies making innovative assistive products; what we're hoping to do here is to get you thinking about some of the possibilities!

NO SLIP SOLUTIONS

My husband and I purchased our home, in large part, to suit our dogs. What could be better than a one-level home with hard wood floors and no stairs to navigate? The single-level layout worked well as our dogs aged, but in their senior

eyes, the hardwood floors have become a skating rink.

I dreaded the thought of buying carpet runners. They'd need a rug pad so they wouldn't slip; they'd have to be vacuumed regularly; carpet is a breeding ground for fleas (especially here in the hot, humid south); and often, runners come with a dread-



FRONT LIMB CARE

The signature product of DogLeggs Therapeutic & Rehabilitative Products is their Standard Adjustable DogLeggs. This product offers coverage, padding, and protection for elbow joints, and is regularly used to treat and prevent elbow hygromas – fluid-filled swellings at the point of one or both elbows, which can arise as the result of trauma

Jolie, the author's 14-year-old Bouvier, moves easily on lightweight, washable, nonskid CarpetSaver runners.

or even from a dog lying for long periods of time on hard surfaces. In that case, over time, the point of the elbow bone traumatizes the soft tissue, causing inflammation and leading to the formation of a fluid-filled sac.

Standard Adjustable DogLeggs can also be used to help with a variety of other conditions, including elbow arthritis, decubital ulcers, pressure sores, and calluses, and a full length model for more coverage is available as well.

Consumers can measure their dogs themselves and order this product direct from the company; however, company spokesman John-Henry Gross believes that the best results are achieved when the client works with her dog's veterinarian to measure and order the leggings. It's also important to involve your veterinarian to be sure that what you're looking at on your dog is a hygroma. Suggested retail: \$108 (standard); \$128 (full).

HIND-END SUPPORT

In our March issue, we talked about full body harnesses. In some cases, such as when a dog requires only hind-end assistance (i.e., post surgery), a full body harness might not be necessary. For those times, the Walkabout Back Harness (as seen on the facing page) is a great option. It's made of a neoprene fabric



Photo courtesy of DogLeggs

The Standard Adjustable DogLeggs offer coverage, padding, and protection for elbow joints – great for treating and preventing hygromas.

with polypropylene webbing straps. It's sturdy; has long, substantial handle straps (to save our backs!); and fits both male and female dogs.

To put the harness on, lay it flat on the floor and put the dog's hind legs through two holes; the harness then wraps up over the dog's back, closing with Velcro and buckles. I've had the chance

to see the harness in action while being used to get a large dog (post-surgery, with two fractured hips) up and outside to eliminate, and it worked very well. While homemade works in some situations, I've seen firsthand that a product like this beats the old towel-under-the-belly, hands down. Suggested retail: \$35 - \$78.

Also in March, we mentioned one canine wheelchair, suggested by a veterinarian who specializes in canine rehab, as an example of the canine wheelchair-type products available. There are a number of other canine wheelchair makers, and each has products with unique features, benefits, and drawbacks. If your dog would benefit from a mobility cart, check out the offerings from the following companies to see what might work best for your dog, situation, and budget:

❖ **DOGGON' WHEELS**
888-7-DOGGON; doggon.com

What you can do . . .

■ **There are lots of resources to help your dog; ask friends, your rehab veterinarian, or check condition-specific message boards to discover other innovative solutions.**

■ **Always involve your dog's veterinarian in your decision to use any type of assistive equipment. You might just teach her something new!**

■ **Take advantage of this equipment sooner rather than later. It makes life easier and more comfortable for you and your dog.**



❖ **EDDIE'S WHEELS**
(888) 211-2700; eddieswheels.com

❖ **K9 CARTS**
(800) 578-6960; K9-carts.com

HEALING HEAT

Heat can offer our pets' aching joints relief from pain, especially in cold, damp weather. The HipHug is a 100 percent cotton, rice-filled pad that you can heat in the microwave. What's unique about the HipHug is that its cute bone shape is actually utilitarian: the way the pad is cut, it envelops and shapes to the dog's hips and lower back nicely. The rice creates moist heat, easing joint pain and relaxing muscles.

As someone who spent this past winter getting up early to heat a pad to warm 14-year-old Jolie's back and knees before her morning walk, I can attest that heat used properly can make a big difference in loosening up painful joints. Suggested retail: \$13 - \$25.

DogLeggs offers a similar product, the Buddy Bag, for hot or cold therapy.

HOW TO INTRODUCE NEW EQUIPMENT

Trainer and behaviorist Jean Donaldson posted a short video on YouTube of her Chow Chow, Buffy, gleefully accepting and wearing a stifle brace. In December 2010, then nine-year-old Buffy was

FOR MORE INFORMATION

❖ **CARPETSAVER, ANNAPOLIS, MD** (800) 442-0331; carpetsaver.com

❖ **DOGLEGG'S THERAPEUTIC & REHABILITATIVE PRODUCTS, RESTON, VA**
(800) 313-1218; dogleggs.com

❖ **HIPHUG, ATLANTA, GA**
(770) 365-9346; hiphug.net

❖ **ORTHOPETS, DENVER, CO**
(303) 953-2545; orthopets.com

❖ **WALKABOUT HARNESSSES, SANTA CRUZ, CA**
(800) 779-0439; walkabout-harness.com

❖ **YOGADIRECT.COM, ROCKY HILL, CT** (800) 331-8233; yogadirect.com

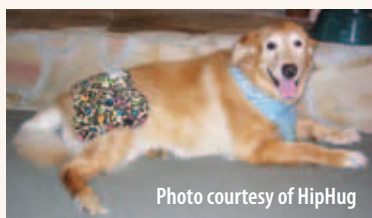


Photo courtesy of HipHug

The HipHug is shaped to fit your dog's hips and back for relieving aches and pains.

diagnosed with a CCL (cranial cruciate ligament) tear. Donaldson chose to manage the injury conservatively, rather than subject Buffy to surgery, and opted for a stifle (knee) brace from OrthoPets. The brace helps prevent re-injury while the dog builds scar tissue and muscle around the injured knee.

In the video, Buffy was pretty happy to have Jean put on her brace. Donaldson spent time desensitizing Buffy to the brace before asking her to wear it. In fact, she first prepared Buffy for the casting procedure performed by Buffy's veterinarian Anne Reed, DVM, which was required for fabrication of the brace. Dr. Reed was so impressed with Buffy's cooperation during the casting that she

asked Donaldson to write up a protocol for her to share with other brace clients. Donaldson graciously agreed to share it with us as well (see below).

After the casting, Donaldson prepared Buffy for the brace itself. Here's how, in her words: "Show brace, then big pay-off (chicken). Touch leg with brace, then big pay-off. Hold brace against leg, then big pay-off. Add duration, paying off throughout. Add duration, pay off at end. Put brace on briefly, paying throughout. Put brace on, pay with intervals between installments. Put brace on, short walkies. Longer walkies." She says it took only a few days for Buffy to willingly accept the brace but admits that the training she did for the casting likely sped up the process.

Buffy was rested for about eight weeks, then exposed to a gradual increase in length of walks and activity level, given supplements, and kept lean. Donaldson reports, "Buffy wears the brace for any activity where she might attempt a 'sudden sprint.' OrthoPets' recommendation is for a dog to wear it for a maximum of eight hours a day. Buffy's not a bouncing-off-the-walls kind of dog, so indoors she doesn't wear it." The plan is to gradually reduce the time Buffy wears the brace. See the video, "I'm Too Sexy for My Brace," at tinyurl.com/buffybrace. 🐾

Lisa Rodier shares her home in Georgia with her husband and senior Bouvier, Jolie.

JEAN DONALDSON'S PREP TRAINING FOR ORTHOPEDIC BRACE CASTING

The following protocol was written with a specific process in mind: preparing a dog to happily hold still long enough to make a cast of the dog's leg (needed for making a custom-fit mobility brace). But with a little imagination, you can customize Donaldson's protocol to train your dog to accept any equipment.

You will need 1) Glad Press 'n Seal Wrap; 2) a roll of gauze; 3) a measuring tape; 4) six jars of meat baby food; 5) your dog's normal ration for one meal (to be hand-fed); 6) six days lead time before your casting day. Plan on spending about 5 minutes per day in place of one of your dog's meals; don't cram multiple sessions into one day.

Any time she fusses or vacates the area, just say, "Oh, too bad!" and wait for her to come back and re-volunteer; whatever you do, don't coerce her.

❖ DAY 1

- ✓ Decide where the casting area will be; standardize this and train here every day.
- ✓ Assemble all the gear at one of your dog's mealtimes and go to the casting area.
- ✓ Put it all down, then pull out a length of the Press 'n Seal and crinkle it.
- ✓ Hand-feed your dog her ration.
- ✓ Pull out another length of Press 'n

Seal and wrap it around your dog's upper (injured) leg.

- ✓ Open one jar of baby food and let your dog lick it all out of the jar.
- ✓ Unwrap your dog's leg just before she finishes the baby food, then put everything away.

❖ DAY 2

- ✓ Get all the gear at one of your dog's mealtimes and go to the casting area.
- ✓ Wrap your dog's upper leg in Press 'n Seal and then hand-feed her meal as before.
- ✓ Unwrap her before she finishes eating.
- ✓ Pause a minute or so.
- ✓ Wrap her upper leg again in a fresh piece of Press 'n Seal.
- ✓ Open a jar of baby food and let her eat it as before, unwrapping just before she finishes.

❖ DAY 3

- ✓ Get all the gear at one of your dog's mealtimes and go to the casting area.
- ✓ Wrap your dog's upper leg in Press 'n Seal and then hand-feed her meal.
- ✓ Unwrap before she finishes eating.
- ✓ Pause a minute or so.
- ✓ Wrap her entire leg in a new piece of Press 'n Seal.
- ✓ Give her the jar of baby food, unwrapping just before she finishes.



Buffy is comfortable wearing her supportive, stabilizing brace. Photo by and courtesy of Jean Donaldson.

❖ DAY 4

- ✓ Get all the gear at one of your dog's mealtimes and go to the casting area.
- ✓ Wrap your dog's entire leg in Press 'n Seal and hand-feed her meal.
- ✓ Once she finishes, wrap her leg with dry gauze over the Press 'n Seal.
- ✓ Feed her the baby food, unwrapping everything just before she finishes.

❖ DAY 5

- ✓ Get all the gear at one of your dog's mealtimes and go to the casting area.
- ✓ With the measuring tape, do all kinds of measuring of your dog's leg (length-wise, circumference, lots of messing around) before wrapping her or feeding anything.

Continued on page 22

Listen By Looking

*Your dog is trying to communicate with you!
Learn to understand his language.*

BY PAT MILLER, CBCC-KA, CPDT-KA, CDBC

How many times have I heard a dog owner say, “If only they could speak!” And how many times have I bitten back my first retort: “But they *can* speak! You’re just not listening!”

We humans are a verbal species. We long for our beloved canine companions to speak to us in words we can easily understand. While they have some capacity for vocal communication, they’ll never be able to deliver a soliloquy, or carry on long meaningful conversations

with their humans. English is a second language for them. Their *first* is body talk – body language communication in which they generally say, quite clearly, exactly what they mean. Our problem, and as a result theirs, is that we humans tend to listen with our ears, rather than

our eyes, and miss much of what they are saying.

Dogs do use some vocalizations in their daily communication with us and with each other (see “Canine Vocalizations,” page 10). However, their body language is both more expressive and more prevalent – it’s continual! – so observing them in action is of more use than just listening to them.

There are those who have spent a lot of time trying to understand dog behavior and have become skilled at reading canine body language. They seem to interact naturally with dogs, using their own subtle body language to communicate, as much as or more than they use words. But time alone doesn’t grant this skill; there are also those who have spent a lot of time with dogs but are still woefully inept at properly interpreting the canine message.

Relaxed, open mouth; half-closed eyes, and ears partway to the side tell us that all is good with Otto’s world.

What you can do . . .

- Observe live dogs “behaving” with their owners in public places, especially interacting with dogs and humans – at parks, vet hospitals, training classes – and see if you can predict, by their body language, what will happen next.
- Watch videos to study dog body language. Watch several times with the sound off and record your own observations, then turn the sound up and see if the commentary matches your own observations.
- Observe dogs and watch videos with other knowledgeable dog behavior enthusiasts and compare your observations. When there is disagreement, try to explain and defend your opinions.



CANINE VOCALIZATIONS: IN THEIR OWN WORDS

Canine vocal communications can be classified as barks, growls, howls, whines, and whimpers. Within those classifications, the sounds can have varying meanings. Your dog's voice must be taken in context with the rest of his behavior and body language for you to truly understand what he's saying to you.

❖ BARKING

Dogs bark for many reasons, including alert (there's something out there!), alarm (there's something *bad* out there) boredom, demand, fear, suspicion, distress, and pleasure (play). (For more about dealing with barking, see "Positively Quiet," WDJ July 2007.)

The bark of a distressed dog, such as a dog who suffers from isolation or separation distress or anxiety, is high-pitched and repetitive; getting higher in pitch as the dog becomes more upset. Boredom barking tends to be more of a repetitive monotone. Alert bark is likely to be a sharp, staccato sound; alarm barking adds a note of intensity to the alert.

Demand barks are sharp and persistent, and directed at the human who could/should ostensibly provide whatever the dog demands. At least, the dog thinks so. Suspicious barks are usually low in tone, and slow, while fearful barking is often low but faster. Play barking just sounds . . . playful. If you have any doubt – look to see what the dog is doing. If he's playing, it's probably play barking.

❖ BAYING

Baying is deep-throated, prolonged barking, most often heard when a dog is in pursuit of prey, but also sometimes offered by a dog who is challenging an intruder. The scent hounds are notorious for their melodic baying voices.

❖ GROWLING

Growls are most often a warning that serious aggression may ensue if you persist in whatever you're doing, or whatever is going on around him. Rather than taking offense at your dog's growl, heed his warning, and figure out how to make him more comfortable with the situation. (See "Good Growling," WDJ October 2009.)

Dogs also growl in play. It's common for a dog to growl while playing tug – and that's perfectly appropriate as long as the rest of his body language says he's playing. If there's any doubt in your mind, take a break from play to let him calm down. Some dogs also growl in pleasure. Rottweilers are notorious for "grumbling" when being petted and playing, and absent any signs of stress, this is interpreted as a "feels good" happy sound.

❖ HOWLING

Howling is often triggered by a high-pitched sound; many dogs howl at the sound of fire and police sirens. (Two of my own dogs howl when our donkey brays). Some dog owners have taught their dogs to howl on cue, such as the owner howling.

Howling is generally considered to be communication between pack members: perhaps to locate another pack member, or to call the pack for hunting. Some dogs howl



This baying hound is speaking his mind; he's seen another dog in the distance and is expressing a challenge. He's also a tad frustrated at not being able to go greet the dog.

when they are significantly distressed – again, a common symptom of isolation and separation distress.

❖ WHIMPERING/YELPING

A whimper or a yelp is often an indication that a dog is in pain. This may happen when dogs play, if one dog bites the other dog too hard. The whimper or yelp is used to communicate the dog's distress to a pack member (or human) when they are friendly. The other dog or human is expected to react positively to the communication. Whimpers can also indicate strong excitement such as when an owner returns at the end of a long workday. Excitement whimpering is often accompanied by licking, jumping, and barking. Whimpering is softer and less intense than whining.

❖ WHINING

Whining is a high-pitched vocalization, often produced nasally with the mouth closed. A dog may whine when it wants something, needs or wants to go outside, feels frustrated by leash restraint, is separated from a valued companion (human or otherwise), or just wants attention. It is usually an indication of some increased level of stress for the dog.

❖ SPEAKING WORDS?

Some dogs are capable of replicating human speech sounds. When these sounds are selectively reinforced, dogs can appear to be speaking human words, sometimes even sentences. It is most likely that the dogs have no concept of the meaning behind the words they are "speaking" – although as we learn more about canine cognition, one can't ever be too sure. (See "What Do You Think," WDJ July 2011.)

It's interesting to note that one of the phrases most frequently taught to dogs by their owners is some version of, "I love you. . ." Youtube provides some entertaining footage of talking dogs here: tinyurl.com/dogscantalk

LET ME HEAR YOUR BODY TALK

The more you learn about your dog's subtle body language communications the better you'll be at reading them – and intervening appropriately, well before your dog is compelled to growl, snap, or bite. It's important that you not focus on just one piece of the message. The various parts of your dog's body work together to tell the complete story; unless you read them all and interpret them in context, you'll miss important elements. Be especially aware of your dog's tail, ears, eyes, mouth, hair, and body posture. For a basic vocabulary, see the "Canine Body Parts Dictionary" on pages 12-13.

Because dog communication is a constant flow of information, it's sometimes difficult to pick out small signals until you've become an educated observer. Start by studying photographs of dog body language, then watch videos that you can rewind and watch repeatedly, finally honing your skills on live dogs. Dog parks, doggie daycare centers, and training class playgroups are ideal places to practice your observation skills. Sarah Kalnajs' DVD set, "The Language of Dogs," is an excellent resource for body-language study.

OBLIVIOUS TO STRESS?

Dogs tell us when they feel stressed. The more aware you are of your dog's stress-related body language, the better you can help him out of situations that could otherwise escalate to inappropriate and dangerous behaviors. Many bites occur because owners fail to recognize and respond appropriately to their dogs' stress signals. Even aside from aggression, there are multiple reasons why it's important to pay attention to stress indicators:

- Stress is a universal underlying cause of aggression.
- Stress can have a negative impact on a dog's health.
- Dogs learn poorly when stressed.
- Dogs respond poorly to cues when stressed.
- Negative classical conditioning can occur as a result of stress.

Note: the reasons to pay attention to stress also apply to *all* species with a central nervous system, including humans.

The smart, aware owner is always on the alert for signs that her dog is stressed, so she can alleviate tension when it oc-

curs. Owners whose dogs are easily stressed often become hyper-vigilant, watching for tiny signs that presage more obvious stress-related behaviors, in order to forestall unpleasant reactions. If more owners were aware of these subtle signs of stress, fewer dogs would bite. That would be a very good thing.

Listed on pages 14-15 ("A Canine Stress Dictionary") are some stress behaviors that are often overlooked. With each behavior the appropriate immediate course of action is to identify the stressor(s) and determine how to decrease the intensity of that stressful stimulus. In many cases you can accomplish this by increasing the distance between your dog and the stressor, be it a child, another dog, uniforms, men with beards, etc.

If possible, remove the stressor from your dog's environment entirely. If he's stressed by harsh verbal corrections, shock collars, and warthogs, those are all things you can simply remove from his existence (unless you live in Africa, in which case warthog removal might prove challenging).

For those stressors that can't be eliminated, a long-term program of counter-conditioning and desensitization can change your dog's association with a stressor from negative to positive, removing one more trigger for stress signals and possible aggression. Another strategy is to teach the dog a new operant (deliberate) response to the stressor – for example, teaching your dog that the sound of the doorbell means "Run to your crate to get a high value treat." (See "Knock, Knock," WDJ February 2010.)

HAPPY TALK

We tend to focus on aggression signals because they are the most impressive and can predict danger. But any observant and aware dog owner knows that dogs offer a lot of happy communications as well. Behaviors such as jumping up, pawing, nudging, barking, and mouthing are often about happy excitement and attention-seeking.

Look for the signals that tell you your dog loves your new boyfriend, adores playing with the neighbor's kids, enjoys riding in the car, is happy to romp with your brother's dogs, and totally digs chasing the tennis ball. It's important to pay attention to those communications as well so you know what makes him happy.

Your dog speaks to you all the time. Remember to listen with your eyes. 🐾



Ears flat back, a hard stare, lowered body posture, and tension in the closed mouth are signs of a fearful dog. Approach with caution; better yet, don't approach at all.

"Without Warning"

The number of times a person has been bitten gives big clues as to his or her capacity to read, understand, and properly respond to canine communications. No sane person *wants* to be bitten by a dog. If someone has been on the receiving end of canine teeth numerous times, they aren't paying attention to what the dogs are saying, or they aren't responding appropriately.

Before they bite, dogs *almost always* give clear – albeit sometimes subtle – signals. The mythical "bite without warning" is truly a rare occurrence. Most of the time the human just wasn't "listening."

Pat Miller, CBCG-KA, CPDT-KA, CDBC, 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. See "Resources," page 24, for more information.

A CANINE BODY PARTS DICTIONARY



Forward posture and tail above horizontal suggest this dog is curious or on alert. The halfway-recumbant ear position signals that her arousal level is not high.

Despite conventional wisdom, a wagging tail doesn't *always* mean a happy dog. The following abridged Canine/English dictionary will help you become a skilled translator.

Remember that breed characteristics can complicate the message; the relaxed ears and tail of an Akita (prick-eared, tail curled over the back) look very different from the relaxed ears and tail of a Golden Retriever (drop-eared; long, low tail).

Also note that if body language vacillates back and forth it can indicate ambivalence or conflict, which may precede a choice toward aggression.



Forward ears, tight mouths, high tails and hard stares warn that these three junkyard dogs take their guarding job seriously.

❖ TAIL

Tucked under: Submissive/appealing, deferent, or fearful

Low and still: Calm, relaxed

Low to medium carriage, gently waving: Relaxed, friendly

Low to medium carriage, fast wag: Submissive/appealing or happy, friendly

High carriage, still/vibrating or fast wag: Tension, arousal, excitement; could be play arousal or aggression arousal

❖ EARS

Pinned back: Submissive/appealing, deferent, or fearful

Back and relaxed: Calm, relaxed, friendly

Forward and relaxed: Aware, friendly

Pricked forward: Alert, excitement, arousal, assertive; could be play arousal **or** aggression arousal



All three of these dogs have relaxed ears – they just look very different in dogs with different ear types.



She's the picture of appeasement: soft eyes, ears flattened, corners of mouth pulled back, body curved, and tail in neutral position.

❖ EYES

Averted, no eye contact: Submissive/appealing, deferent, or fearful; may be a subtle flick of the eyes, or may turn entire head away

Squinting, or eyes closed: Submissive/appealing, happy greeting

Soft, direct eye contact: Calm, relaxed, friendly

Eyes open wide: Confident, assertive

Hard stare: Alert, excitement, arousal; could be play aroused in play or aroused in aggression

A CANINE BODY PARTS DICTIONARY

❖ MOUTH

Lips pulled back: Submissive/appeasing or fearful (may also be lifted in “submissive grin” or “aggressive grin”)

Licking lips, yawning: Stressed, fearful – or tired!

Lips relaxed: Calm, relaxed, friendly

Lips puckered forward, may be lifted (snarl): Assertive, threatening



This could be trouble; the Cavalier King Charles is giving a very tense, hard stare at the Boxer, who calmly averts his eyes to avoid triggering a confrontation.



Don't be fooled! This Husky's erect tail is normal tail-carriage position for the breed. His relaxed eyes, mouth, and ears tell us he is not aroused.

❖ HAIR

Piloerection: Also known as “raised hackles,” this is simply a sign of arousal. While it can indicate aggression, dogs may also show piloerection when they are fearful, uncertain, or engaged in excited play.



There is tension between these two (note the direct eye contact and raised tails) but it could be play tension. The Pointer's lowered hindquarters, raised front paw, and relaxed mouth suggest that he may be about to do a play-bounce, inviting the Vizsla to romp.

Shock and pinch collars are aversive, pain-causing tools – not recommended by WDJ. They are also safety hazards at a dog park.

❖ BODY POSTURE

Behind vertical, lowered; hackles may be raised: Could be submissive and/or appeasing or fearful

Vertical, full height: Confident, relaxed

Ahead of vertical, standing tall; hackles may be raised: Assertive, alert, excitement, arousal; could be play arousal or aggressive arousal

Shoulders lowered, hindquarters elevated: A play bow is a clear invitation to play; the dog is sending a message that behavior that might otherwise look like aggression is intended in play.



This Jack Russell is offering a play bow – an invitation to the Pomeranian to play. The Pomeranian is politely declining, by avoiding eye contact and hiding under the stool.

A CANINE STRESS DICTIONARY

❖ ANOREXIA

Stress causes the appetite to shut down. A dog who won't eat moderate to high-value treats may just be distracted or simply not hungry, but refusal to eat is a common indicator of stress.

❖ APPEASEMENT/DEFERENCE SIGNALS



Appeasement and deference aren't always an indicator of stress. They are important everyday communication tools for keeping peace in social hierarchies, and are often presented in calm, stress-free interactions. They are offered in a social interaction to promote the tranquility of the group and the safety of the group's members. When offered in conjunction with other behaviors, they can be an indicator of stress as well. Appeasement and deference signals include:

- ✓ **Slow movement:** appeasing/deferent dog appears to be moving in slow-motion
- ✓ **Lip-licking:** appeasing/deferent dog licks at the mouth of the higher ranking member of the social group
- ✓ **Sitting/lying down/exposing underside:** appeasing/deferent dog lowers body posture, exposing vulnerable parts
- ✓ **Turning head away, averting eyes:** appeasing/deferent dog avoids eye contact, exposes neck



❖ AVOIDANCE

Dog turns away; shuts down; evades handler's touch and treats.

❖ BROW RIDGES

Furrows or muscle ridges in the dog's forehead and around the eyes.

❖ DIFFICULTY LEARNING

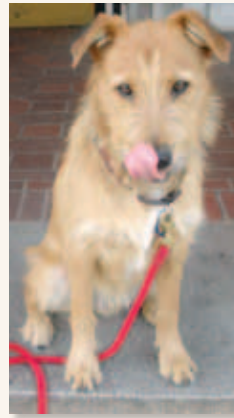
Dogs are unable to learn well or easily when under significant stress.

❖ DIGESTIVE DISTURBANCES

Vomiting and diarrhea can be a sign of illness – or of stress; the digestive system reacts strongly to stress. Carsickness is often a stress reaction.

❖ DISPLACEMENT BEHAVIORS

These are behaviors performed in an effort to resolve an internal stress conflict for the dog. They may be observed in a dog who is stressed and in isolation – for example a dog left alone in an exam room in a veterinary hospital – differentiating them from behaviors related to relationship.



- ✓ **Blinking:** Eyes blink at a faster-than normal rate
- ✓ **Nose-licking:** Dog's tongue flicks out once or multiple times
- ✓ **Chattering teeth**
- ✓ **Scratching**
- ✓ **Shaking off** (as if wet, but dog is dry)
- ✓ **Yawning**

❖ DROOLING

May be an indication of stress – or response to the presence of food, an indication of a mouth injury, or digestive distress.

❖ EXCESSIVE GROOMING

Dog may lick or chew paws, legs, flank, tail, and genital areas, even to the point of self-mutilation.

❖ HYPERACTIVITY



Frantic behavior, pacing, sometimes misinterpreted as ignoring, "fooling around," or "blowing off" owner.

❖ IMMUNE SYSTEM DISORDERS

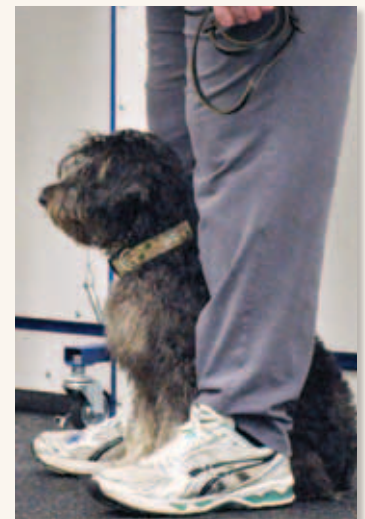
Long-term stress weakens the immune system. Immune related problems can improve when overall levels of stress are reduced.

❖ LACK OF ATTENTION/ FOCUS

The brain has difficulty processing information when stressed.

❖ LEANING/CLINGING

The stressed dog seeks contact with human as reassurance.



A CANINE STRESS DICTIONARY

❖ LOWERED BODY POSTURE



"Slinking," acting "guilty," or "sneaky" (all misinterpretations of dog body language) can be indicators of stress.

❖ MOUTHING

Willingness to use mouth on human skin – can be puppy exploration or adult poor manners, but can also be an expression of stress, ranging from gentle nibbling (flea biting) to hard taking of treats, to painfully hard mouthing, snapping, or biting.

❖ OBSESSIVE-COMPULSIVE DISORDERS

These include compulsive imaginary fly-snapping behavior, light- and shadow-chasing, tail-chasing, pica (eating nonfood objects), flank-sucking, self-mutilation, and more. While OCDs probably have a strong genetic component, the behavior itself is usually triggered by stress.

❖ PANTING



Rapid shallow or heavy breathing is normal if the dog is warm or has been exercising, otherwise can be stress-related. Stress may be external (environment) or internal (pain, other medical issues).

❖ STRETCHING



To relax stress-related tension in muscles. May also occur as a non-stress behavior after sleeping or staying in one place for extended period.

❖ STIFF MOVEMENT



Tension can cause a noticeable stiffness in leg, body, and tail movements.

❖ SWEATY PAWS

Damp footprints can be seen on floors, exam tables, rubber mats.

❖ TREMBLING

May be due to stress – or cold.

❖ WHINING

High-pitched vocalization, irritating to most humans; an indication of stress. While some may interpret it as excitement, a dog who is excited to the point of whining is also stressed.

❖ YAWNING

Your dog may yawn because he's tired – or as an appeasement signal or displacement behavior.

Noses and Toes Gone Wrong

Numerous conditions, some quite painful, that can affect your dog's feet and face.

BY CJ PUOTINEN AND MARY STRAUS

Yikes! What happened to Fido's nose? And what's wrong with Fluffy's paw pads? The possibilities are many, and a surprising number of nose and paw pad problems are related. Because illnesses in this category often have similar or identical symptoms, a veterinarian's diagnosis can be important. The following overview will help you identify, prevent, or treat these disorders.

PIGMENT PROBLEMS

The most frequently asked questions about dogs' noses concern color. Dogs have black or dark noses and paw pads because of melanin, a pigment that darkens skin. When melanin production slows or stops, the skin lightens uniformly or in patches.

Nasal hypopigmentation, also known as **nasal depigmentation**, is most commonly seen in the Golden Retriever,

yellow Labrador Retriever, white German Shepherd, Poodle, Doberman Pinscher, Irish Setter, Pointer, Samoyed, Siberian Husky, Malamute, Afghan Hound, and Bernese Mountain Dog. Nose color is normal at birth but gradually fades to a light brown or whitish color.

Considered harmless, hypopigmentation does not make the nose more sun-sensitive and does not require treatment. However, this cosmetic im-

perfection matters to breeders because the loss of nose pigment is a conformation fault in the show ring.

Vitiligo (pronounced vit-ill-EYE-go) creates white spots of varying size and location on the skin when pigment cells, or melanocytes, are destroyed, preventing melanin production. Dogs with this immune system disorder develop white spots on the nasal planum (the hairless, leathery part of the nose), muzzle, and inner lining of the cheeks and lips, as well as patches of white hair and scattered white hairs through the coat. A skin biopsy confirms the diagnosis. Vitiligo is most associated with the German Shepherd Dog, Doberman Pinscher, Belgian Tervuren, and Rottweiler. Color loss is vitiligo's only symptom.

Dudley nose, which is named for an English town known for animals with flesh-colored noses and light eyes, is a syndrome of unknown cause that may be a form of vitiligo. A puppy's solid black nose may gradually fade to a solid chocolate brown or liver color, or, if the nose loses all of its pigment, pale pink. Some depigmented noses spontaneously regain their dark color while others remain pale.

Snow nose is a similar condition in which the nose's dark pigment fades during winter months (without losing all of its color) and darkens again in spring and summer. No one knows what causes it, but one theory blames increased light exposure reflected on snow and another blames cold winter temperatures.

COLOR TREATMENT

There are no proven cures for the pigment problems mentioned here, but anecdotal recommendations abound. For example, supplementing with melatonin, the hormone associated with sleep, may help with seasonal changes. Vitiligo may respond to oral doses of folic acid (1 mg twice per day for an 80-pound dog) combined with vitamin C (500 mg twice daily) and injectable vitamin B12 (50 micrograms every 14 days). Some

Pigment loss on your dog's nose is not generally a health problem, though some dogs with light noses may suffer sunburns. Using a sunscreen formulated for dogs is recommended to give a pink nose protection from the sun.





Hyperkeratosis: Milo's nose kept developing rough spots and cracking, causing the English Shepherd extreme pain. Photo courtesy of Katie Palmer.

form of vitamin A that treats acne as well as keratosis and is sold by prescription), and petroleum jelly.

sions, and ulcers. The nasal planum, which is usually soft, shiny, and moist, becomes dry, hard, and rough, especially on the dorsum (top) of the nose.

Digital hyperkeratosis, which involves the entire surface of all paw pads, is most pronounced along the

edges, as excess keratin (the skin's tough, fibrous outer covering) is worn away on the weight-bearing surfaces in the center of the pads. The keratin may have a feathery appearance. Excess keratin in hard, cracked paw pads can make walking so painful that it causes lameness.

No one knows what causes this condition, which is associated with older dogs, particularly American Cocker Spaniels, English Springer Spaniels, Beagles, and Basset Hounds. Skin pigment is not affected, and the nose retains its natural cobblestone or pebbly appearance. Secondary bacterial or yeast infections in fissures can cause inflammation and increase discomfort. Other parts of the body are not affected.

Nasodigital hyperkeratosis has no specific diagnosis; it is determined by the exclusion of other conditions that might cause similar symptoms, such as discoid lupus erythematosus or pemphigus complex diseases. Veterinarians usually prescribe topical corticosteroids and antibiotics to control secondary inflammation and infection. Other treatments involve shaving or cutting away excess keratin, which must be done with care, along with the application of wet dressings and topical ointments. Bag Balm, a lanolin-based antiseptic ointment, is a popular treatment, as are Tretinoin Gel (a natural

Foot pads can be soaked in a solution of 50-percent propylene glycol.

Two products with numerous fans among breeders, owners, trainers, and veterinarians for the treatment of dry, cracked noses are Snout Soother, which contains unrefined shea nut butter, organic hempseed oil, kukui nut oil, sweet almond oil, jojoba, candelilla wax, rosemary extract, and natural vitamin E; and Nose Butter, a blend of shea butter, vitamin E oil, and essential oils.

Nasodigital hyperkeratosis is a lifelong condition. Treatment may start with soaking and topical treatments twice a day. Once improvement is seen, ongoing treatment once or twice a week or as the growths recur is required.

Milo, an 11-year-old English Shepherd belonging to Katie Palmer in Frederick, Maryland, has lived with this condition for five years. "It started as a rough spot on his nose and continued to get worse," says Palmer. "If I leave it alone his nose cracks open and he yelps if he bumps it. Then it starts to slough off. Putting vitamin E oil on it makes it softer and not as cracked looking. Milo was fed kibble until one and a half years ago, when I got a Bernese Mountain Dog and put both of them on a raw diet. His nose still looks pretty bad but it's better than before. I hoped the diet change might fix it, but so far it hasn't gone away."

In Denver, Colorado, Vanessa Graziano O'Grady's 7-year-old yellow Labrador Retriever, Chisum, developed hyperkeratosis when he was a year and a half. His paw pads were treated with prednisone (a corticosteroid drug that suppresses inflammation), Accutane (a prescription form of vitamin A), and

dog owners have reported success giving blueberry extract.

Juliette de Biracli Levy's natural rearing methods have been popular since the publication of her *Complete Herbal Handbook for the Dog and Cat* in 1955. "I introduced seaweed to the veterinary world when a student in the early '30s," she said. "It was scorned then, but now it is very popular worldwide." She credited kelp and other sea vegetables with giving dark pigment to eyes, noses, and nails, stimulating hair growth, and developing strong bones.

It's important not to overuse kelp; it's rich in iodine, and too much iodine can suppress thyroid function. Levy's NR Seaweed Mineral Food contains deep-sea kelp, nettle, and cleavers or uvi ursi, herbs that are associated with thyroid, skin, coat, and kidney health. The recommended daily dose is a pinch for small dogs, 1/8 to 1/4 teaspoon for medium-size dogs, and 1/2 teaspoon for large dogs. Kelp fed by itself should be limited to half these amounts.

Pink noses exposed to sunlight may burn or blister, and they are more at risk for the development of cancer. Sunscreen can protect pink noses; see the sunscreen recommendations under Collie nose (page 18). Another option is to have a dog's pink nose tattooed with black ink, which shields the cells below, to give the nose permanent sun protection.

NASODIGITAL HYPERKERATOSIS

The term nasodigital refers to both nose and toes. A thickening of the outer layer of skin (hyperkeratosis) at the edges of the nose or paw pads can develop into painful cracks, fissures, ero-

When hyperkeratosis affects the paw pads, they develop an excess of crusty, feathery tissue that cracks and can cause pain, as seen in this "before" photo of Chisum, a 7-year-old Lab. Chisum's paws responded nicely to the topical use of Bio Balm, a French ointment. Photo courtesy of Vanessa Graziano O'Grady.



Kerasolv (an ointment containing salicylic acid that is no longer available).

“No luck with any of those,” says O’Grady. “Our vet completely trimmed all the excess off and it all grew back. Then our veterinary dermatologist introduced us to Bio Balm, a French ointment that moisturizes and helps heal noses and paw pads. It’s a blend of essential oils, soy oil, and palm oil. Within two weeks of using it nightly, the excess footpad skin started crumbling in my hands and falling off! We use it every night at bedtime on the edges of each pad and it keeps his pads smooth. The dermatologist was so stunned that she asked for pictures to share with colleagues.”

Chisum’s nose was affected, too, but despite two biopsies, his dermatologist couldn’t confirm a diagnosis. “We tried long courses of tetracycline and niacinamide but they didn’t do much, and neither did prednisone,” says O’Grady. “What seems to help the most is Protopic, a prescription ointment for eczema, which we apply once or twice per day. His nose is not perfect but it seems to be holding steady and hasn’t gotten worse.”

COLLIE NOSE

Named for the breed most associated with its symptoms, **Collie nose (nasal solar dermatitis)** generates crusty lesions on the nose, lips, or eyelids. Its cause is a lack of pigment and inherited hypersensitivity to sunlight. Collie nose is usually classified as a type of discoid lupus erythematosus (see below) but is sometimes

Crustiness around Dagr’s nose advanced into open sores and bleeding. The German Shorthaired Pointer was finally diagnosed with discoid lupus erythematosus. (DLE). Supplements and sunscreen keep the condition in check. Photo courtesy of Barbara Gordon.



considered a separate illness.

Whatever its cause, nasal solar dermatitis tends to worsen in sunny climates and can result from other skin diseases or scarring. In advanced cases, the nose may become ulcerated, bleed easily, or develop skin cancer.

For Collie nose and similar disorders, sun avoidance is the most recommended treatment. Sunscreen can be applied to the noses of outdoor dogs within an hour of sun exposure and repeated frequently. Zinc oxide and other preparations containing zinc are not recommended, as excessive zinc is toxic to dogs. Sunscreens should be fragrance-free, non-staining, and contain UVA and UVB barriers similar to SPF 15 or SPF 30. Preparations made specifically for dogs include Doggles Pet Sunscreen, Epi-Pet Sun Protector, and Vet’s Best Sun Relief Spray. Dr. Mark Macina, a dermatologist at the Animal Medical Center of New York, recommends the human product Bullfrog SunBlock, and some caregivers report good results from Water Babies Stick Sunscreen. Both are widely sold.

DISCOID LUPUS ERYTHEMATOSUS (DLE)

Systemic lupus erythematosus is an

autoimmune disease that affects the entire body. **Discoid lupus erythematosus (DLE)**, a less severe form of the illness, affects only the face, causing depigmentation of the nose followed by open sores and crusts. Australian Shepherds, Brittanies, Collies, German Shepherds, German Shorthaired Pointers, Shetland Sheepdogs, Siberian Huskies, and crosses of those breeds may be predisposed to the disease.

There is no known cure for discoid lupus, which is the most common inflammatory disease of the nasal planum. In most cases, the nose becomes smooth and shiny rather than pebbly, it can lose pigment, and the skin of the nose becomes inflamed, crusty, atrophied, cracked, and ulcerated. DLE can affect the bridge of the nose, lip margins, the eye area, the inside of the ear flap, and in some cases the genitals. DLE can also cause inflammation of the third eyelid.

Because it’s aggravated by sunlight, discoid lupus erythematosus is usually worse in summer and is seen most often

KEEP THE SYMPTOMS STRAIGHT! CONDITIONS THAT AFFECT DOGS’ NOSES AND TOES AND THEIR SYMPTOMS						
SYMPTOM	NASAL HYPOPIGMENTATION	NASODIGITAL HYPERKERATOSIS	NASAL SOLAR DERMATITIS	DISCOID LUPUS	PEMPHIGUS ERYTHEMATOSUS	PEMPHIGUS FOLICAEUS
LOSS OF PIGMENT ON NOSE	X		X*	X	X	X
LOSS OF COBBLESTONE APPEARANCE OF NOSE				X	X	X
FOOT PADS AFFECTED		X		X	X	X
OTHER PARTS OF FACE AFFECTED				X	X	X
OTHER AREAS OF BODY AFFECTED						X
CRUSTS, CRACKING, FISSURES, ULCERATION		X	X	X	X	X
FEATHERY APPEARANCE		X				
SENSITIVE TO SUNLIGHT			X	X	X	X

* Caused by lack of pigment; does not cause the lack of pigment

at high altitudes, where ultraviolet light exposure is highest. Veterinarians use oral and topical corticosteroid drugs to manage symptoms, and many recommend vitamin E as a supplement (400 to 800 IU given every 12 hours, two hours before or after meals) and essential fatty acids (both omega-3 and omega-6).

The combination of tetracycline (a broad-spectrum antibiotic) combined with niacinamide (a B-complex vitamin) has helped an estimated 50 to 70 percent of patients. More severe cases may require immunosuppressive drugs.

The application of sunscreen during periods of sun exposure is recommended (see Collie Nose, above, for more on sunscreen). Tattooing with permanent black ink can protect depigmented areas from sunlight, a procedure that is best done on young dogs with light pigment before lesions develop. Recently, reconstructive surgery has replaced ulcerated areas with normal skin.

Because this is an autoimmune condition, immune-enhancing supplements that strengthen or boost the immune system, such as echinacea, should be avoided, but immune-modulating supplements such as fish oil may help. Limiting vaccinations may also improve this condition, which is life-long despite periods of remission.

Barbara Gordon of Goffstown, New Hampshire, noticed crustiness around the nose of her German Shorthaired Pointer, Dagr (pronounced Dagger), during the summer of 2010. "We thought it might be a sunburn," she says, "so we applied Bag Balm. Then in the fall it was still there, so we treated him for allergies with Benadryl. It started getting worse, with open sores and bleeding. The vet looked inside and couldn't see anything, so she referred him for a rhinoscopy on February 1, 2011."

Biopsies from the inside and outer edge of Dagr's nose tested positive for discoid lupus erythematosus. The veterinarian recommended protecting Dagr's nose with sunscreen and prescribed a daily treatment for the 55-pound dog of 500 mg niacin (vitamin B3), 1-1/2 teaspoons of the fish oil supplement Welactin, and 2 tablets doxycycline in the morning, followed by another 500 mg niacin and 1 doxycycline at night. To this regimen Gordon added Nupro, a supplement containing liver, kelp, and other nutrients, beginning

with 1 ounce daily for a month and continuing with a maintenance dose of 1/2 ounce daily.

"I don't know if stress aggravates it or not," she says, "but the DLE flared up for a few days after we brought home a new puppy. He's doing better now. His coat is awesome and his nose looks perfect." Stress has been associated with the onset and flare-ups of lupus in people; it makes sense that the same would apply to dogs.

PEMPHIGUS FOLIACEUS

One of several related skin disorders known as **pemphigus complex**, which develops when the body produces antibodies against the skin's outer layer or epidermis, **pemphigus foliaceus** (PF) is the most common autoimmune disorder in dogs. It is also the most serious and has the highest fatality rate. Pemphigus foliaceus is both more common and more severe than discoid lupus.

The Akita, Chow Chow, Dachshund, Bearded Collie, Doberman Pinscher, Schipperke, Finnish Spitz, and Newfoundland are most commonly affected by pemphigus foliaceus, which usually develops on the head and feet before sometimes spreading to more of the body.

The initial symptom of PF is the formation of pustules (pus-filled blisters that look like pimples), which lead to severe crusting, scales, shallow ulcerations, and inflammation. Footpad overgrowth and cracking can result in lameness. A loss of pigment can change the color of the nose. Severe cases may produce fever and a loss of appetite. The blisters associated with pemphigus foliaceus are not always obvious, for they may rupture without being noticed. Chows and German Shepherds may be more prone to secondary bacterial infections.

Unfortunately, the treatment of pemphigus foliaceus isn't always successful. Mild to moderate facial forms may be treated with tetracycline and niacinamide, similar to DLE, with about 30 percent of dogs responding.

The initial symptoms of pemphigus foliaceus are the development of pustules on the head and/or feet, which lead to severe crusting and lameness. Conventional treatment failed to help this dog, Jack, but he improved with Chinese herbs and acupuncture. Photo courtesy Julie Cassera.

What you can do . . .

- **Avoid plastic food and water dishes.**
- **Check your dog's nose and paw pads for skin thickening, pigment loss, erosion, crusting, or other symptoms.**
- **If your dog's nose is pink or pale, protect it from sun damage with sunscreen, or see your vet about tattooing the nose black.**
- **If topical home treatment doesn't work, see your veterinarian for an accurate diagnosis.**



Prednisone is commonly prescribed for the life of the dog to control scabs and scaling, and it is often combined with antibiotics or immune-suppressing medications like azathioprine or chemotherapy drugs, all of which require careful monitoring.

Dogs on prednisone may drink more water than normal and can develop urinary incontinence. Because cortisone stimulates the appetite, they may experience metabolic changes, gain weight easily, and eventually develop diabetes. Secondary infections are common because open sores attract bacteria.

Promeris, a topical flea and tick control product, was recently linked to PF and will be removed from the market soon (see "Promeris Discontinued," WDJ June 2011).

Julie Cassara of Rocklin, California, knows how complicated pemphigus can be. In 2008, Jack, her American Pit Bull Terrier/English Bulldog-mix, was 12 years old and in trouble. After being diagnosed with chronic renal failure



and having a tooth extracted, Jack began limping. He soon developed crusty paw pad erosion, was diagnosed with pemphigus foliaceus, and was given prednisone, doxycycline, and daily foot baths in distilled white vinegar and water. "He reacted badly to the prednisone," Cassara says. "His eyes had a glazed zombie look, he became extremely pushy with us as well as his sister, and he was relentless when it came to food."

Three months later, the antifungal drug Flucanazole was added to his regimen. Because of Jack's fragile health, Cassara worried about the effect of all

these drugs on his organs, but their vet insisted this was the only way to treat PF.

Cassara soon transferred Jack's care to Signe Beebe, DVM, a Sacramento veterinarian who co-wrote *The Clinical Handbook of Chinese Veterinary Herbal Medicine* and serves on the faculty of the Chi Institute of Chinese Medicine.

"Dr. Beebe stopped the doxycycline, weaned him off the prednisone, and started him on Chinese herbs and acupuncture," says Cassara. "Jack never had another PF flare and he lived a wonderful life under Dr. Beebe's care until the end of May 2010, a month before his

14th birthday, when his kidney failure progressed to the point where he lost interest in everything. We helped him to the bridge so he could pass away with the dignity he so deserved."

Emmett, an Australian Shepherd belonging to Lisa Howard in Lewiston, Maine, was only 10 months old when he developed small scratches next to one of his nostrils. "It got all puffy," she says, "and then the red puffiness moved to the top of his nose, grew larger, and developed blisters." Punch biopsies, which remove small circles of skin, provided the pemphigus foliaceus diagnosis.

Prednisone cleared the condition, but symptoms returned when the dose was reduced, so it was increased again. Then Emmett swallowed some bone shards and developed bloody diarrhea, dehydration, anemia, elevated white blood cells, and a high liver count.

"The vet's theory was that bone fragments damaged the lining of his prednisone-weakened intestines," says Howard, "and that allowed bacteria into his bloodstream."

Emmett spent two days in the hospital and after five days resumed his low dose of prednisone. That's when the pemphigus erupted, covering his nose, eyelids, one ear, an elbow, both front legs, and the tip of his tail with swollen, red, blistering crusts and hair loss.

A canine dermatologist started Emmett on cyclosporine, a medication designed to suppress the immune system, and began weaning Emmett off the prednisone.

"He looks much better now," says Howard. "All the blisters have gone except for those on his ear, which still have a way to go but are much improved. His hair has regrown and his energy is back to normal for a 19-month-old Aussie. Our goal is to get him down to cyclosporine only once a week."

Other illnesses in the pemphigus complex are **pemphigus vulgaris**, the most severe form, which severely ulcerates the skin around the nose, mouth, anus, or vagina; **pemphigus erythematousus**, a milder form associated with Collies, Shetland Sheepdogs, and German Shepherds; and pemphigus vegetans, a rare and less-severe form that produces warty growths that may ulcerate. Pemphigus erythematousus so closely resembles discoid lupus erythematousus that a biopsy may be needed to confirm the diagnosis.

CORNS AND WARTS

Corns and plantar warts may be common on human feet, but they're rare in dogs – unless the dog is a Greyhound. This breed is prone to corns.



PHOTO COURTESY ROBERTA MIKKELSEN

Corns are keratin calluses on the front center paw pads, such as under the second toe bone, which lacks subcutaneous tissue or padding.

A common treatment for corns is their removal with a small curette or scalpel, followed by smoothing with a pumice stone and the application of salicylic acid pads or ointments. Roberta Mikkelsen of Pearl River, New York, hoped that hulling (surgical removal) would help her Greyhound, Chip, recover from his painful corns. "This is such a common problem in the breed," she says,

"that there is an online forum where people list the things that did or didn't help. So far there isn't a cure." After Chip's corn was removed, it grew back.

According to Dr. Bob Taylor of Animal Planet's "Emergency Vets" program, an effective treatment is to cover the corn with a small piece of duct tape that does not cover healthy paw pad skin and replace it daily or every three to five days.

Canine warts cause a thickening of the skin and tend to occur on the back or underside of the paw. "Seed warts," which contain black dots caused by broken blood vessels within the warts, are named for their resemblance to small black seeds. Warts are believed to be caused by the papillomavirus, but despite their viral connection, they are not contagious to dogs or humans.

Warts have so many anecdotal treatments that it's impossible to list them here. Some are one-application wonders – a single drop of essential oil, a baking soda dressing, or an herbal salve makes a wart disappear for good. Other warts are so difficult to remove that they result in toe amputations.

Any wart or corn on a dog's paw can be painful, resulting in lameness. Long walks on concrete and other hard surfaces worsen the severity of corns, so walking on softer surfaces as much as possible and wearing well-padded booties can make a positive difference. Thera-Paw boots and slippers were designed for dogs with corns or warts.

OTHER CONDITIONS

A number of other conditions can affect the nose and footpads, as well as other parts of the body.

Plastic dish dermatitis occurs when the plastic chemical p-benzylhydroquinone inhibits melanin synthesis, altering a dog's nose and lip color. In addition to losing pigment, skin damaged by plastic can become irritated or inflamed. This dermatitis can affect any dog. Switching to glass, ceramic, or stainless steel bowls prevents this condition.

Vitamin A-responsive dermatosis is a rare disease seen primarily in Cocker Spaniels and reported in Labrador Retrievers, Miniature Schnauzers, and Shar-Pei. Rather than a nutritional deficiency, this appears to be a vitamin A deficiency in the skin caused by problems with the epidermis. Scaling, a dry coat, prominent pus-filled bumps, hair loss, crusts, and waxy ears are common symptoms. The diagnosis is confirmed by a positive response to vitamin A supplementation (usually in the range of 8,000 to 20,000 IU twice daily), which must be continued for life.

Zinc-responsive skin disease, which primarily affects 1- to 3-year-old Siberian Huskies and Alaskan Malamutes, is caused by a problem with zinc absorption. Zinc supplementation is required for these dogs for life. This disorder can also be caused by diets that are high in plant phytates or calcium, which bind zinc in the digestive tract, or by zinc-deficient commercial or home-prepared diets, or by diets that are over-supplemented with vitamins and minerals, especially calcium. Great Danes, Doberman Pinschers, Beagles, German Shorthaired Pointers, Labrador Retrievers, and Rhodesian Ridgebacks are susceptible to these nutritional problems, and their symptoms usually resolve within two to six weeks of dietary correction.

Commonly affected areas include mucocutaneous junctions (where smooth skin meets haired skin, such as around the eyes and mouth), as well as the chin, ears, foot pads, genitals, and pressure points. The coat is often dry and dull. Water soaks and anti-dandruff shampoos can loosen and remove the scaling and crusting.

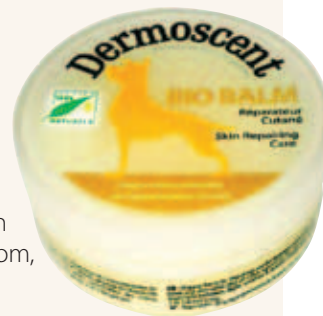
Nasal keratosis associated with xeromycteria results from damage to (or the absence of) the nasal gland that keeps the nasal planum moist. Without it, the nose becomes dry and may be crusty at

FOR FURTHER INFORMATION

- ❖ **COMPLETE HERBAL HANDBOOK FOR THE DOG AND CAT**, by Juliette de Bairacli Levy. Sixth Edition, Faber & Faber, 1992, \$17
- ❖ **THE CLINICAL HANDBOOK OF CHINESE VETERINARY HERBAL MEDICINE**, by Signe Beebe, DVM; Michael Salewski, DVM; Lorena Monda, DOM; and John Scott, DOM. Herbal Medicine Press, 2006, \$25
- ❖ **GREYHOUND CORNS FORUM**
<http://groups.yahoo.com/group/CornHound/>
- ❖ **SIGNE BEEBE, DVM**. Integrative Veterinary Center, Sacramento, CA (916) 454-1825; integrativeveterinarycenter.com
- ❖ **STACEY HERSHMAN, DVM**. Natural Vet for Pets, Hastings-on-Hudson, NY. (914) 478-4100; naturalvetforpets.com

PRODUCTS

- ❖ **BAG BALM**. See bagbalm.com. Also sold in pet supply stores and pharmacies.
- ❖ **BIO BALM**. Made by Dermalogics. We found Bio Balm in several online pet supply stores, including EntirelyPets.com, (800) 889-8967
- ❖ **DOGGLES PET SUNSCREEN**. (530) 344-1645 or (866) DOGGLES; doggles.com
- ❖ **EPI-PET SUN PROTECTOR**. (866) 204-0002; epi-pet.com
- ❖ **MUSHER'S SECRET**. See musherssecret.net; (860) 345-4888
- ❖ **NOSE BUTTER**. (218) 243-2845; theblissfuldog.com
- ❖ **NR SEAWEED MINERAL FOOD**. (541) 899-2080; NaturalRearing.com
- ❖ **NUPRO DOG FORMULA**. See nuprosupplements.com; sold in pet supply stores.
- ❖ **PROTOPIC OINTMENT**. See protopic.com. Available through veterinarians.
- ❖ **SNOUT SOOTHER**. Natural Dog, (888) 471-8288; naturaldogcompany.com
- ❖ **THERA-PAW BOOTIES AND SLIPPERS**. (908) 439-9139; therapaw.com
- ❖ **TRETINOIN GEL** is a prescription medication commonly used to treat acne in human patients. A veterinary prescription is required to obtain it for dogs.
- ❖ **TUF-FOOT**. See tuffoot.com; (888) TUF-FOOT. Sold in pet supply stores.
- ❖ **VET'S BEST SUN RELIEF SPRAY**. See vetsbest.com; (800) 272-6336. Sold in pet supply stores.
- ❖ **WELACTIN HIGH-POTENCY FISH OIL FOR DOGS**. Nutramax Laboratories, nutramaxlabs.com; (888) 886-6442. Sold in pet supply stores.





When Emma, a young French Bulldog, developed allergies, her main symptom was red, raw, itchy feet. Homeopathic treatments and a change of diet successfully treated the condition. Photo courtesy of Martha Sloane.

the tip. This condition can be linked to middle ear infections and may resolve with treatment. It can also be associated with dry eyes (keratoconjunctivitis sicca) and benefit from pilocarpine therapy. Topical moisturizers such as those recommended for nasal keratosis can help alleviate symptoms.

Nasal parakeratosis of Labrador Retrievers, a rare, hereditary condition, occurs in puppies (males more than females) with lesions on the nose or paw pads developing between six months and one year of age. Topical vitamin E, petrolatum (petroleum jelly), and propylene glycol help repair the lesions.

Proliferative arteritis is a rare, inherited vascular disease affecting the nasal philtrum, the vertical groove between a dog's nostrils. Large dogs such as St. Bernards, Giant Schnauzers, and Newfoundlands between three and six years of age may be predisposed to this condition, which causes ulceration and hemorrhage. The V-shaped sore doesn't usually become painful or infected, and symptoms may wax and wane. Proliferative arteritis, a lifelong condition, is often treated with glucocorticoids, tetracycline, niacinamide, and fish oil.

Familial paw pad hyperkeratosis, which is also rare, affects some lines of

French Mastiffs and Irish Terriers and is also seen in Kerry Blue Terriers, Labrador Retrievers, Golden Retrievers, and mixed breeds. Lesions develop in very young puppies, before six months of age, and affect all of the paw pads dramatically. Thickened skin that resembles horns, fast-growing nails, fissures, splits in the skin, and secondary infections can lead to lameness. This condition may be a subgroup of ichthyosis, uncommon skin disorders that cause excessive dry surface scales due to abnormal epidermal metabolism or differentiation.

Hard pad disease, which develops two weeks after a dog contracts an active distemper infection, causes thick, horn-like callusing of the nose and paw pads. This symptom usually resolves when the dog recovers from distemper.

Leishmaniasis, a worldwide zoonotic disease that arrived recently in North America, causes lesions on paw pads and other body areas. Foxhounds are most associated with leishmaniasis, but other breeds are now affected. Nearly all infected dogs develop dry, hairless skin lesions that begin around the head or paw pads before spreading.

Allergies can affect a dog's paw pads. Emma, Martha Sloane's French Bulldog, was four years old and living in Upper Grandview, New York, when she began to itch all over. Sloane took Emma to veterinary homeopath Stacey Hershman, DVM, of Hastings-on-Hudson, New York. Emma's feet were so red, itchy, and painful that she was barely able to walk.

In homeopathy, treatment depends on the patient's individual symptoms, so there is no standard treatment for any

of the conditions listed here. (See "How Homeopathy Works for Your Dog," WDJ December 2007.) Emma was treated with nutrition and a series of homeopathic remedies, and within two months her feet – and the rest of her – were completely free from allergy symptoms.

Opportunistic infections, including bacterial, yeast, and fungal infections, are a problem whenever the skin cracks or is injured. The fungal condition aspergillosis can erode nasal passages, reshaping them so the dog develops chronic nasal discharge and in some cases bleeding. *Malessezia*, a form of yeast that commonly causes skin infections, can produce allergy symptoms, severe itching, hair loss, and crusty skin. Bacterial infections can produce skin lesions, pustules, hair loss, itching, and dried discharge. The treatment of secondary infections depends on their correct diagnosis.

What about garden-variety **tender feet**? Hunting dogs, sled dogs, and other active dogs can develop sore, cut, abraded, or injured paw pads. Blends of herbs, balsams, and natural waxes can help toughen the skin to help prevent minor injuries or protect pads from winter salt and chemicals, ice build-up, snowballing, summer sand irritation, hot pavement, and rough terrain. Popular remedies include Tuf-Foot and Musher's Secret. 🐾

Next month, we'll publish an article on one more condition that affects dogs' toenails: Symmetrical Lupoid Onychodystrophy.

Freelance writer CJ Puotinen lives in Montana. She is the author of The Encyclopedia of Natural Pet Care and other books and a frequent contributor to WDJ. See "Resources," page 24 for book purchasing information.

Mary Straus is the owner of the DogAware.com website.

JEAN DONALDSON'S PREP TRAINING FOR ORTHOPEDIC BRACE CASTING PROTOCOL, CONTINUED FROM PAGE 8

- ✓ Hand-feed her a couple of handfuls of her ration.
- ✓ Wrap her leg in Press 'n Seal and hand-feed the rest of her meal.
- ✓ Pause briefly.
- ✓ Wrap the gauze over the Press 'n Seal.
- ✓ Feed her the baby food, unwrapping everything just before she finishes.

❖ DAY 6

- ✓ Get all the gear at one of your dog's mealtimes and go to the casting area.
- ✓ Do some measuring, then feed her a couple of handfuls.
- ✓ Wrap her leg in Press 'n Seal and feed her a couple more handfuls.
- ✓ Pause briefly.
- ✓ Wet the gauze, then wrap that over

the Press 'n Seal.

- ✓ Feed her the rest of her ration followed by the baby food, unwrapping before she finishes.

For the actual casting, have really good treats and a few jars of baby food on hand and be generous with these throughout the procedure. 🐾

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TRAINING AND INSTRUCTION

- ❖ Pat Miller, CBCC-KA, CPDT-KA, CDBC, Peaceable Paws Dog and Puppy Training, Fairplay, MD. Train with modern, dog-friendly positive methods. Group and private training, rally, behavior modification, workshops, intern and apprentice programs. Trainers can become "Pat Miller Certified Trainers" (PMCT) by successfully completing Pat's Level 1 (Basic Dog Training and Behavior) and both Level 2 Academies (Behavior Modification and Instructors Course). (301) 582-9420; peaceablepaws.com
- ❖ Jean Donaldson, The Academy for Dog Trainers, Emeryville, CA. The world-class dog trainer program, is finally available as a self-study course. Renowned, academically advanced program; science-based curriculum; sophisticated, force-free techniques. Study in your own home, on your own time. (510) 655-5760; academyofdogtrainers.com

HOLISTIC VETERINARIANS

- ❖ American Holistic Veterinary Medical Association (AHVMA), PO Box 630, Abingdon, MD 21009. Send a

self-addressed, stamped envelope for a list of holistic veterinarians in your area, or search ahvma.org

BOOKS AND DVDS

- ❖ WDJ Training Editor Pat Miller is author of *Positive Perspectives: Love Your Dog, Train Your Dog*; *Positive Perspectives 2: Know Your Dog, Train Your Dog*; *Power of Positive Dog Training*; *Play With Your Dog*; and *Do Over Dogs: Give Your Dog a Second Chance at a First Class Life*. Available from Dogwise, (800) 776-2665 or dogwise.com
- ❖ Sarah Kalnajs' DVD, "The Language of Dogs," is an excellent resource for studying canine body language. \$40. Available from Dogwise (800-776-2665 or dogwise.com) or BlueDogTraining.com; (608) 213-5304.
- ❖ *Love Has No Age Limit: Welcoming an Adopted Dog into Your Home*, by Patricia McConnell, PhD, and Karen London, PhD. Available from Dogwise (see above) and from patriciamcconnell.com; (608) 767-2435.

WHAT'S AHEAD ...

❖ **A CANINE CONNECTION TO THE WORLD**

What we can learn from therapy dogs trained to assist autistic children.

❖ **NO WIGS NEEDED**

What chemo is like for dogs; what to expect, how to prepare.

❖ **FOUND DOG**

The first five things you should do if you find a stray dog.

❖ **SHEDDING TOENAILS?**

Symmetrical Lupoid Onychodystrophy affects the dog's nails; here's how to treat it.

❖ **IT'S IN THE CAN**

WDJ's 2011 wet food review.

❖ **FRUSTRATED?**

How to cope with training plateaus and setbacks.

❖ **DON'T DRINK THE WATER**

Giardia, Coccidia, and Cryptosporidium, oh my.

❖ **HATES CRATES**

What to do when your dog just can't stand confinement.

"Jump up and wag your tail! The lady over here will feed you a cookie!" Otto's cousin Hannah shows him how to "work" the neighbor.

