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The Whole



Dog Journal™

A monthly guide to natural dog care and training

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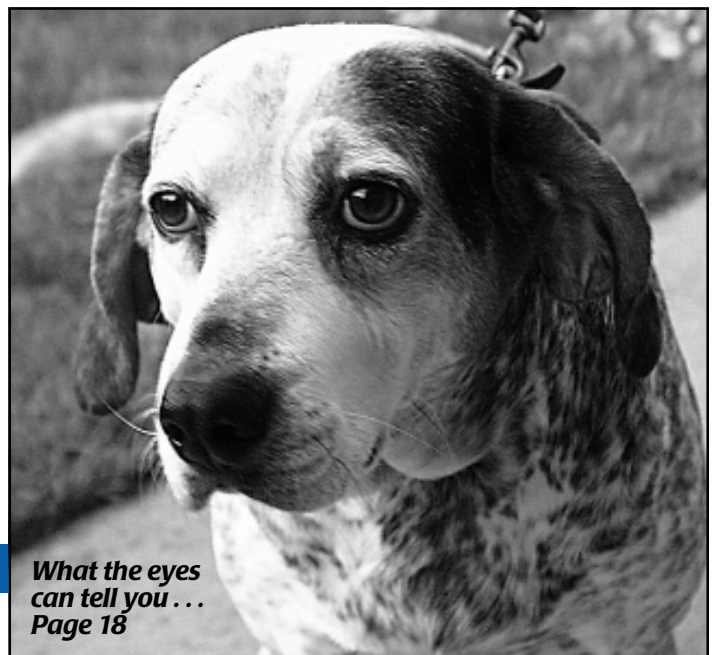
The Pet Fund pays for urgent pet care for those who can't afford it. Learn how you can help save dogs' lives, by helping this nonprofit association.



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Won One, Lost Others

A WDJ "regular" passes unexpectedly.

BY NANCY KERNS

There are a number of things I need to mention in a small amount of space:

First, the keyword "search" feature on the WDJ Web site (whole-dog-journal.com) is working again. Now you (and I) can just type in something like "barking" or "cancer" to find all the articles we've ever published that deal with that topic. Of course, you still have to pay to access them, either in print or in digital form – back issue sales help support our basic mission – but at least you can find the correct issue easily!

An editing error (that is, mine) appeared in Dr. Randy Kidd's article last month on canine allergies ("Walking the Allergy Maze"). Dr. Kidd discussed a drug called cyclosporine, which has been used recently (and not without problems) to suppress an overactive immune response in cases of severe allergy. The error appeared in the text describing the drug's introduction to the market. Cyclosporine was actually introduced for use in organ transplant cases (to prevent rejection) in the early 1980s.

Several of you wrote to express your dismay that "Beyond Food and Water," an article in the July issue, did not mention or credit Sue Sternberg, who has worked for many years in upstate New York to establish and promote minimum mental and physical health guidelines

for shelter animals. I apologize for the oversight; I deeply appreciate Sue's work.

Finally, I want to extend heartfelt sympathy to the family who has had the pleasure of sharing their home for the last five years with Jessie, who was one of WDJ's most frequent and reliable models until her untimely, unexpected death in her sleep in July.

Adopted from a shelter when she was a few months old, Jessie was a challenge early on; she displayed some aggression at times. But her family did everything right – puppy classes, socialization, training, lots of exercise, and tons of love and patience – and she developed into a big-hearted, affectionate, humorous, and *mostly* well-behaved member of the household.

Because Jessie was the "right" color, well-trained, and living two doors away, I often asked if she could come over and wear something, chew something, or demonstrate something for my camera. Jessie was movie-star fabulous at maintaining eye contact with the lens, making for some of WDJ's best photos. Plus, her family was ridiculously generous in sharing her with me, even to the point of giving me a house key, so I could go get her when no one was home! Jessie will be sorely missed by everyone who knew her.

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.

The Whole Dog Journal

EDITOR-IN-CHIEF
Nancy Kerns

TRAINING EDITOR
Pat Miller

PUBLISHER
Timothy H. Cole

EDITORIAL OFFICE
1175 Regent Street, Alameda, CA 94501
Ph (510) 749-1080 • Fax (510) 749-4905
WholeDogJ@aol.com

BACK ISSUES, WEB INQUIRIES
www.whole-dog-journal.com
Customer Service, Whole Dog Journal
PO Box 2626, Greenwich, CT 06836-2626
customer_service@belvoir.com
(800) 424-7887

REPRINTS
For price quote, contact:
Mona Kornfeld
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Still, Spay or Neuter

Most experts say the benefits of surgical sterilization outweigh the risks.

BY C.C. HOLLAND

In some dog-related circles, the question of surgical sterilization, otherwise known as spaying (females) and neutering (males), is sure to spark hot debate. Humane associations and shelters are vocal proponents of sterilization for population control, a stand that makes sense considering they're often the ones who deal firsthand with the tragic consequences of unplanned breeding. But some breeders – an even a few holistic veterinarians – are challenging the need for what they see as knee-jerk spay and neuter policies.

Many breeders, protective of their livelihood, resist any legislative attempts to limit the number of puppies they can legally produce or to mandate sterilization of *any* dogs.

We won't discuss this position further here.

Our concern today has to do with the assertions of some – voiced publicly by just one veterinarian we know of – that sterilization is wrongly touted as a health and behavior boon for dogs. In fact, the allegation goes, it may even be a threat to their well-being.

Population control

Sterilization keeps dogs from breeding indiscriminately. It is *de rigueur* for dogs adopted from shelters to be sterilized before release (or a sizable deposit is taken, refundable when proof of surgery is provided). Humane societies in this country are unanimous in their recommendations for



This apparently purebred Rottweiler was picked up as a stray by animal control officers in Oakland, California. She looked like she had been on the streets for some time, but she was in the shelter for barely 12 hours when she delivered 10 puppies, which also appeared to be purebred. One can only speculate why she was pregnant and homeless.

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WHAT YOU CAN DO . . .

- **If you choose not to sterilize your companion dog – or choose to delay his or her sterilization until after puberty – you must ensure that he or she is never given an opportunity to engage in unwanted breeding. Your constant vigilance and control is required, 24/7.**
- **If you choose to leave your dog intact for life, schedule regular vet exams to detect signs of cancer – mammary and ovarian cancer in females, and testicular and prostatic in males -- that are more common in intact dogs.**

sterilization of companion animals.

According to the Humane Society of the United States, 6 to 8 million dogs and cats enter shelters each year, and at least half of them are euthanized. The organization also calculates that a fertile dog can produce two litters of 6 to 10 pups in a year; that means that the female and her offspring can, theoretically, produce 67,000 unwanted dogs over a span of six years.

By all accounts, widespread sterilization programs have been pivotal to reducing pet overpopulation in the last few decades.

Health benefits of sterilization

Many veterinarians and dog experts recommend sterilization for another reason: the health of the dog.

“As far as disease is concerned, it certainly reduces the risks of mammary tumors and ovarian cancer,” says Richard Bowen, DVM, Ph.D, a professor at the Animal Reproduction and Biotechnology Laboratory

of Colorado State University. “Anything associated with an active reproductive tract will be eliminated, and that’s a big deal.”

“If you neuter a female dog prior to puberty, she has an almost zero risk of developing breast cancer,” concurs Dr. Olson. Texas A&M’s College of Veterinary Medicine reports that intact female dogs have seven times the risk of developing mammary tumors than do females sterilized early in life.

Male dogs, too, may benefit, with the risk of testicular cancer eliminated – and rates of prostatic cancer reduced.

From a behavioral standpoint, sterilization is widely believed to reduce aggression toward other dogs, territorialism, and roaming, which can in turn protect dogs from the risk of injury associated with those behaviors, such as fights and getting hit by cars. Neutered males, particularly males who were neutered before puberty, are less likely to exhibit inappropriate urine-marking.

Finally, some veterinarians and veterinary behaviorists say that intact, nonbreeding animals suffer stress caused by hormonal drives that are not met.

A dissenting voice

Myrna Milani, DVM, is the author of seven books on canine and feline health and behavior. The veterinarian, based in Charlestown, New Hampshire, has researched and lectured about spaying and neutering, and doesn’t buy into the “PR campaign,” as she calls it, that responsible owners must sterilize their pets.

“When all of the responsible people neuter their dogs, who’s left breeding?” she asks, answering, “The irresponsible ones.”

Dr. Milani feels it’s unfair that owners are frowned upon if they opt to control breeding by carefully supervising their dogs instead of sterilizing them.

“It is really funny that we’ve equated responsibility with neutering, when in reality you could almost make a case for it being the opposite,” she says. The decision to *not* sterilize but carefully supervise a dog is “very mature, it takes a tremendous amount of commitment, and it requires a tremendous knowledge of and respect for that dog,” she says.

One reason sterilization is so popular in the United States is that few owners can claim that level of care, says Patty Olson, DVM, Ph.D., a diplomate of the American College of Theriogenologists. She cites Sweden as an example of a society where owner responsibility outweighs sterilization

as the preferred choice of birth control.

“In Sweden, 93 percent of dogs are intact,” she says. “They don’t neuter. They have some pretty amazing ordinances by which dogs are controlled, there are very significant fines, and they do seem to have more responsibility. What we’ve had to do in the U.S. was institute something because of, if you will, irresponsibility.”

Temperament issues

Beyond the issue of birth control is that of personality. Conventional wisdom has it that sterilized dogs make better pets, are less aggressive, and exhibit fewer behavioral problems.

“Neutering reduces aggression,” says Richard Bowen, DVM, Ph.D, a professor at the Animal Reproduction and Biotechnology Laboratory of Colorado State University. “The earlier you can neuter, the fewer aggression problems you’ll have. Roaming around, urine-marking, sexual behavior toward people and other animals . . . Most of those behaviors are dramatically decreased.”

A study by Sherman et al., published in *Applied Animal Behaviour Science* (April 1996), found that in cases of non-household aggression where neutering and a head halter were the suggested as remedies, 52 percent of owners reported improvement. An earlier study by Heidenberger and Unshelm, published in 1990 in *Tierärztliche Praxis* (Feb. 18:69-75), found that behavioral problems in most cases were reduced or eliminated after neutering, with 74 percent of the male dogs showing improvement.

Again, Dr. Milani dissents. Dr. Milani says that most of the dogs she treats for aggression or dominance problems are already sterilized.

“I can count on one hand the intact dogs I’ve seen with behavioral problems in the last 10 years,” she says. “If I have a client who has an (intact) male dog who’s aggressive, I do not recommend they get the dog neutered until after they have a behavior modification program up and running, because otherwise it might make the dog’s behavior worse.”

Dr. Milani says she suspects a “placebo effect” may be occurring: “Somebody has convinced (the owners) that it’s these testicles that are causing the dog’s problem. As soon as they’re out of there, the owner relaxes; and because the owner relaxes, that take the pressure off the dog, so the behavior improves.”

Further, Dr. Milani also believes that ster-

ilization – particularly pediatric sterilization, which is done on very young puppies — may actually *cause* behavior problems.

“One of the reasons why people are shy-ing away from early neutering of females for behavioral reasons is this condition known as androgenized or masculinized females,” she says. This describes a female pup, born into a predominantly male litter, whose body is awash in testosterone. “So you can actually have a female pup that’s more male than female. If they go through a heat or two, you get that softening effect of the female hormones. Whereas if you neuter them, they’re kind of in a no-man’s land,” she explains.

According to Dr. Milani, these pups have a very difficult time bonding with humans or other dogs and tend to be very aggressive and unpredictable. “I don’t know much in the way of studies . . . but I think they never make it into the studies because they don’t live that long,” she concludes.

Allegations of health risks

Even ardent supporters of sterilization admit that the practice poses health risks. Some of the major concerns include:

■ **Urinary incontinence.** Studies estimate that more than 20 percent of all spayed females will develop incontinence during their lifetimes. Incontinence can develop shortly after surgery or many years later.

■ **Cardiac tumors.** A study by Ware and Hopper (*Journal of Veterinary Internal Medicine*, March/April 1999) examined over 700,000 dogs’ records between 1982 and 1995 and concluded that neutering appeared to increase the risk of cardiac tumors, especially hemangiosarcoma, in both male and female dogs. According to the study, the relative risk for spayed females was more than four times that for intact females. The risk for castrated males was slightly greater than that for intact males.

■ **Delay in growth-plate closure.** Sterilization, particularly early sterilization, causes the growth plates of the bones to close later. There are fears that this delay can increase the likelihood of fractures.

■ **Osteosarcoma.** In addition to the growth-plate issue, there is growing concern that the lack of sex hormones in a sterilized dog can foster the rise of bone cancer. A 2002 study at the University of Purdue of 683 Rottweilers – a breed known to be at

high risk of bone sarcoma – concluded that the risk for bone sarcoma was significantly influenced by the dogs’ ages at sterilization. According to the study, “Exposure to endogenous sex hormones appears to be protective, as suggested by the high risk for bone sarcoma in male and female dogs that undergo gonadectomy within the first year of life.”

The Purdue study quoted data from a 1998 study (Ru G., Terracini B., Glickman L. T.: Host related risk factors for canine osteosarcoma) that found neutered dogs were at 2.2 times greater risk of osteosarcoma than sexually intact dogs.

■ **Unknow side effects.** Dr. Milani also fears that denying the dog the presence of reproductive hormones may have effects that we haven’t yet calculated or considered.

“We know reproductive hormones affect the whole body. If the reason for (an animal’s) physical existence is reproduction, it makes sense that everything evolved to support than function,” she says. Dr. Milani is concerned about cutting off the potential effects those hormones may have on the growing animal, in terms of both physical and brain development.

Not much supporting research

Of the concerns listed above, Dr. Olson and Dr. Bowen acknowledged that increased urinary incontinence is a well-known and well-documented side effect of sterilization in females. But both expressed doubt that the growth-plate issue is a cause for concern.

“That sounds bogus to me,” says Dr. Bowen. “Yes, if you do castration before growth plate closure, it will delay (the closure) so the animals will be slightly larger. But it’s a minor change. For example, one study showed that if a bitch is not spayed, the growth plates close at 42 weeks; if she was spayed at 7 weeks, the closure occurred at 60 weeks.”

“It’s something they determine in millimeters in X-rays – it’s minuscule,” agrees Dr. Olson.

Neither was convinced you could draw a compelling link between the growth-plate closure issue and subsequent problems such as fractures.

We were unable to find any veterinarian



Potential adopters are happy to see puppies when they visit shelters, but staffers understand the more puppies they see, the more adult dogs will lose the opportunity to find a home.

who was familiar with the data about cardiac tumors and sterilization.

Timing of surgery

Once upon a time, conventional wisdom had it that it was best to allow a female to have one heat before sterilization. However, over the last 10 years there’s been an increasing move to neuter animals at a much younger age – between 6 and 14 weeks – in a procedure called pediatric neutering.

“Out here (on the East Coast, it’s not uncommon for a puppy to show up at a shelter, be taken away from the mother, vaccinated, spayed, and be in a new home by eight weeks of age,” says Dr. Milani. “In terms of animal health, I have concerns about sterilization at any age and these are multiplied a thousandfold when we’re talking about very young animals.”

A number of studies on pups sterilized at two months of age or earlier have showed no serious side effects. However, a study by Spain, Scarlett, and Houpt, published in the February 1, 2004, edition of the *Journal of the American Veterinary Association*, suggested that pediatric sterilization may have negative effects on females.

“Because early-age gonadectomy appears to offer more benefits than risks for male dogs, animal shelters can safely gonadectomize male dogs at a young age and veterinary practitioners should consider recommending routine gonadectomy for client-owned male dogs before the traditional age of six to eight months,” wrote the authors.

“For female dogs, however, increased urinary incontinence suggests that delaying gonadectomy until at least three months of age may be beneficial.”

Best for your dog?

Unfortunately, there’s no easy answer here, and the final decision is a very individual one. The bottom line is that sterilization is a surgical procedure that fundamentally alters your dog’s physiology, and as such carries some risks. However, it’s also an undeniably effective form of birth and population control, and one that enables owners to be more relaxed about their dogs in sexually mixed company.

We’ve spent enough time in shelters to be gravely concerned with the issue of dog overpopulation. However, we also advocate strong owner responsibility and care, and are very sensitive to issues that might compromise the health of our canine companions.

If you choose not to sterilize your companion dog (or choose to delay his or her sterilization until well after puberty), it is imperative that you ensure that he or she is contained in a safe, secure environment and is never – repeat, never – given an opportunity to engage in unwanted breeding. That means keeping females in heat in the house or in a secure kennel during estrus; ensuring that intact males are not physically capable of breaking out of your yard and have no chance of dashing for freedom through an open door; leashing your dogs at all times when outside the home, kennel, or yard; and taking any other precautions necessary to minimize risk. If you cannot *guarantee* constant vigilance by both you and other family members, you should have your dog surgically sterilized.

If, in contrast, you are concerned about the potential risks outlined above, you may wish to wait until your dog is at least six months old (or, for females, has gone through at least her first estrus) before the surgery. Doing so would give the secondary sexual hormones an opportunity to work their “magic” on the dog’s physiology, *potentially* protecting the dog (to an as-yet unknown extent) against the development of urinary incontinence, cardiac tumors, osteosarcoma, and other issues concerning the bone growth plates. Of course, you *must* be hypervigilant against unwanted breeding until the dog is sterilized. 🐾

C.C. Holland is a freelance writer in Oakland, California, and regular contributor to WDJ.

Fine Tuning

Amateurs often get “stuck” – private lessons can put them back on track.

BY NANCY KERNS

Believe me, I’m not a dog trainer, but I do get to play one . . . not on TV, of course, but behind the scenes of WDJ. Because I assign and edit the articles, and take most of the photos that accompany the articles, I have to completely understand and be able to illustrate what our expert authors discuss.

I often rely on one of the many talented positive dog trainers in my area to demonstrate for my camera the principles and practices described by our authors – most frequently our Training Editor, Pat Miller. But sometimes the article begs for a non-professional trainer – an ordinary dog owner. In that case, I have to be able to describe and demonstrate the article’s principles to my models, who are often my more-or-less willing family, friends, and neighbors.

So, in order to assign, edit, and illustrate WDJ’s training articles, I find myself “playing” trainer with my own dog, as well as dogs belonging to everyone I know. But of course, I’m *not* a “real” trainer, just a highly interested, motivated, and knowledgeable amateur. And, as with most amateurs, I sometimes get in over my head as I seek to put my knowledge into practice.

Problems in the park

This occurred recently, as I was dog-sitting Hannah, my brother’s big dog, for a fortnight. As I strove to help Hannah understand the rules in my home and home office, and supply the fit young dog with ample opportunities to exercise, I found myself spending a *lot* of time training her. And at least once a day, I found myself getting stuck – perplexed about how to best deal with something or other, despite my having paid *deep* attention to seven years’ worth of articles about training written by some of the best positive trainers in the world, and attendance at numerous training seminars and conferences!

Take, for example, the morning I found myself yanking on Hannah’s leash quite

angrily and punitively, after her sudden charge toward a squirrel she sighted across the park (seemingly) threatened to rip my arm out of its socket. I was *really* mad for about three seconds. Then the shocked, hurt expression on Hannah’s face brought me up short. “Oh my goodness!” I thought to myself. “I’m the editor of the Whole Dog Journal, a leading advocate for nonviolent training methods, and I’m yanking this dog’s leash! What the heck am I doing?!”

(Well, I’m human. And Hannah’s impulsive dash took me by surprise, scared me, and *hurt!* These are not excuses, mind you; just explanations.)

My next thought was, “I wish I could have a private training session with Pat, so I could see how she would handle this!”

Consultation is invaluable

The more I thought about it, the more I liked the idea of having a professional trainer like Pat “coach” me through some specific issues with Hannah. WDJ has given me a very good theoretical understanding of how to train dogs in an effective and humane manner, but I am sometimes at a loss as to how to deal with a specific aspect of training or handling in a “real-time” application.

Pat lives and trains on a gorgeous farm-based facility in rural Maryland, and I’m in California, so an in-person consultation was out. But we cooked up the following photo spread as a way to accomplish two things: help me with the problems I was having with Hannah, and possibly help some of you, who may be struggling with similar issues with *your* dogs. I imagine that many of you *are* like me – increasingly educated about training but still able to benefit from direction when actually practicing with your dog.

There is no substitute for a personal consultation with a trainer. But while private, personal lessons are ideal, telephone consultations can also be incredibly helpful. Pat has provided me with invaluable guidance on numerous occasions via telephone or e-mail. *This* format – a written

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WHAT YOU CAN DO . . .

- **Most dogs can benefit from some additional training. Think about the most annoying or inconvenient thing about your dog’s behavior – and then develop a modest plan for improving it.**
- **Don’t hesitate to seek out professional help if you get stuck or in over your head. Sometimes a brief consultation – even just a phone consultation – with a positive trainer can put you back on the best path to success.**
- **Use short but frequent training sessions. It’s more effective to practice something 10 times a day for a minute than once a day for 10 minutes.**

and photographic description of the problems Hannah and I were having – proved to be even more useful.

I had my brother, Keith, take pictures of Hannah and me on a walk. After sending them to Pat, I asked her for suggestions regarding what I saw as the biggest challenges to safety and enjoyment while walking Hannah: her frequent pulling; her occasional strong lunges toward squirrels and fascination with them; her aroused behavior when passing other dogs (and sometimes just people); and her occasional fear of something or someone on the street. I’ve used many techniques that Pat and our other expert trainers have described in past articles, and had much success, but Pat’s suggestions helped me be even more effective.

DEALING WITH: PULLING ON LEASH



Hannah quickly learned that she had to stop pulling when I stopped. But sometimes it would take a moment (or minutes) before she would step back or even just glance in my direction. I have treats in my hand to reward her if she does so.



Eventually, Hannah would look at me like, "What *are* we doing?" I'd say "Good girl!" sometimes give her a treat, and start walking again. If she offered a sit, I always gave her treats and warm praise – more if she looked at me, less if she was looking away.



Pat's Comments: You've got the right idea – standing still when the leash tightens prevents Hannah from being rewarded for pulling. Equipment suggestions: a waist belt to avoid those painful socket-ripping events, and a front-clip harness, which would turn her back toward you when she pulls. Your responses in each scenario are on solid positive footing – and a little fine-tuning might help the two of you accomplish your training goals a bit more quickly.

Rather than just praising Hannah, use a reward marker – the word "Yes!" or a mouth click or the sharp "Click!" of a clicker, to more precisely mark the exact instant of rewardable behavior (when she turns toward you). If it takes several minutes for her to turn her attention to you, you can use "penalty yards." Instead of just standing still, back slowly away from Hannah's target, using gentle pressure (no jerking!) to draw her with you. Not only will you get her attention sooner, but she should make the connection, sooner or later, that pulling gets her *farther away* from her target.

Finally, remember to use your reward marker and a high rate of reinforcement (lots of treats!) when she is walking nicely with you, so she realizes that "with you" is a very good place to be.

My favorite waist belt is the High Sierra Walk-A-Belt from White Pine Outfitters, WhitePineOutfitters.com or (715) 372-5627. My favorite front-clip control harnesses are the K9 Freedom Harness, available from waynehightower.com or (800) 246-6336; and the SENSE-ation Harness, from softouchconcepts.com or (510) 429-2100.

DEALING WITH: BARKING AND/OR LUNGING TOWARD PASSERS-BY



When I saw someone coming toward us that I thought Hannah was likely to get excited about (another dog and/or walker, a bicyclist, or a mom with a stroller), I looked for a place to "pull over" with Hannah – creating more space for the passers-by – and asked her to sit and look at me.

I'd also lavish treats on her as people passed, trying to use classical conditioning to foster a more positive association with passers-by. If she growled or tried to get loose, I'd keep a tight grip and drop treats in front of her.

Pat's Comments: Classical conditioning and desensitization (CC&D) is the right approach. Be sure when you "pull over" that you aren't pulling *on* Hannah's leash – the tension is likely a stressor for her. Invite her to "pull over" with you using a cheerful voice, and treats if it's necessary to lure her.

Also, make sure you're using the proper sequence of events to create the most effective counter-conditioning. She should notice the stimulus (walker, dog, mom with stroller) without getting aroused, and immediately start getting those treats from you. You want her to think the stimulus *makes* the treats happen.

Asking her to sit and look at you is operant conditioning – fine to use as long as she gets to notice the stimulus while it is still far enough away to avoid an intense reaction on her part.

Eventually, you want her to look back to you of her own accord – rather than you asking for her attention – because she *knows* the jogger or bicyclist *makes* those treats appear.

If she's growling or trying to get loose, the stimulus is getting too close for this stage of the counter-conditioning. Try to find a place to practice where you can keep passers-by at a greater distance.

When she does well at a distance you can start the desensitization part of CC&D, increasing the intensity of the stimulus by moving closer to the action.

DEALING WITH: DOGS (ESPECIALLY OTHER AROUSED DOGS)



Hannah is very playful and friendly with other dogs at home; on leash, she can be aggressive. I tried to keep a lot of space between her and any other dog we saw when walking.

Pat's Comments: Lots of dogs who are otherwise good with other dogs are aggressive on leash due to restraint/barrier frustration. Keeping lots of space is a good strategy. So are "U-turns" as described in Patricia McConnell's excellent booklet, *Feisty Fido* (available from DogWise at dogwise.com or 800-776-2665). When another dog appears unexpectedly and unavoidably close, wheel around, say "U-turn!" (or whatever cue you choose to use) in a cheerful voice, and march off in the other direction. Hannah will pick



up on your stress in these encounters, so try to stay (or at least act) as calm and cool as possible.

The counter-conditioning described in the last section works really well with this behavior, too. Again, try to find practice locations where dogs will be far enough away to avoid an intense reaction while you convince Hannah that other dogs make treats happen, too. The outer edges of a pet supply store or vet office parking lot can be good practice locations.

When unaroused, Hannah was very gentle when taking treats. When aroused, she would grab them (and sometimes me). I quickly learned to just drop the treats in front of her.

DEALING WITH: SCARY THINGS



This truck and its "beep, beep" backup signal scared Hannah into bolting away and growling, fur up slightly.

Pat's Comments: You handled this very well in the moment. Since you now know "beep-beep" backup signals scare Hannah, find opportunities to do counter-conditioning with the "beep-beeps" at a far enough distance to avoid bolting and growling. Maybe you could follow your friendly neighborhood garbage truck around for a morning!

Then make a list of all the things you can think of that



When the guy got out of the truck, I backed up to give us more room. Hannah was growling and spooky.

might elicit this spooked reaction from her, and design practice counter-conditioning and desensitization programs for as many of them as possible.

You could also read Patricia McConnell's *The Cautious Canine* and Jean Donaldson's *Dogs Are From Neptune* (both available from DogWise) for more information on this behavior in particular and counter-conditioning in general.



I just kept dropping treats, and as she relaxed, I praised her and let her take a bunch from my hand.

DEALING WITH: SQUIRRELS (AND CATS, PIGEONS, ETC.)



Squirrels thickly populate this park, jumping from tree to tree, chattering. The noise sets Hannah off into fits of pulling and jumping. They also adopt casual poses on the grass, waiting to dash for the safety of a tree until dogs are just yards away. This drives Hannah, and most dogs, MAD!



Here's a typical scene. We'd be walking along, and Hannah would see or hear a squirrel. I paid close attention to her body language so I could say her name, trying to get her to look at me for a treat instead of bolting. It worked about half the time. Other times, I just stopped so I could brace myself against her bolt.



Usually, Hannah would hit the end of the leash with a BOING! and then freeze, staring at the squirrel. My strategy was to refrain from admonishing her in any way, but to watch her so I could reward her with a treat if she slacked the leash, looked away from the squirrel, or, especially, came back to me.



Sometimes the wait took a while! The squirrels were far more fascinating than my treats, unfortunately. I should have had much tastier treats.



I had dried liver, which worked better when dealing with lesser distractions. Eventually, though, Hannah would get bored and come back for a bite to eat.

The waist belt and front-clip harness will help you here, too. Again, rather than waiting for her to slacken the leash and look back (operantly conditioned response), reach forward and drop treats for her (classical conditioning), to change her association with squirrels from "CHASE!" to "Where are my treats?!"

If standing and watching squirrels is highly exciting, she is getting rewarded for that, even if she never gets to chase them, so your treats may never be good enough. Instead, I would consider using the Premack principle.

Premack says that you can use a more rewarding behavior as the reinforcer for a less rewarding behavior. It's also known as "Grandma's Law" – you have to eat your vegetables in order to get your dessert.

With Hannah's squirrels, it would work like this: As soon as she notices the presence of a squirrel, call her to you, backing away from the squirrel (penalty yards) if necessary, until she comes to you. When she comes, take hold of her collar, give her your reward marker, and then tell her "Go get the squirrel!" (Caution – have her on a long line for this, or get ready to run very fast!) Let her run that darned squirrel right up a tree, and when you catch up to her, tell her she's swell.

Theoretically, once she learns that coming to you earns her permission to chase her favorite prey object, she'll come to you quite promptly in order to be able to chase the squirrels with impunity. Then you can put the behavior on an intermittent reinforcement schedule, in which she gets to chase the squirrels only *sometimes* when she comes.

In practice, it can work quite well. Before you try it, though, she should already have a good "Come" response outside of the squirrel temptation zone. Also, it's a good idea to start practicing Premack exercises in a more controlled environment with a lesser temptation – such as a plate of cat food – before you graduate to Advanced Squirrel Premack. 🐾

Pat's Comments: This is, indeed, a challenge – the prey drive is so strong in some dogs that you have to work very hard to overcome it. However, you're making several mistakes here, in addition to the one you've already identified: treats too low in value to compete with the thrill of squirrel chasing.

In your "typical scene," you say Hannah's name to get her to look at you. First mistake: You're trying to use operant conditioning – response to her name – to overcome a very strong classically conditioned response – chase prey objects. Operant will lose to a strong classical response every time.

You need to start dropping those *very high value treats* in front of her the instant she perceives the first sign of squirrel. If you want to have a prayer of a chance of convincing her that squirrels make *better* stuff happen, you've got to have top-notch "better stuff" and consistently get them to her *before* she leaps into squirrel-arousal mode.

Second: You mention bracing yourself against her lunge.

The New Meat Market

Alternative sources of meat for meat-based home-prepared diets.

BY NANCY KERNS

We've always said that a home-prepared diet, comprised of fresh, wholesome foods, is ideal for all dogs. We recognize that many people can't or won't shop for and prepare their dogs' food; they may not shop for and prepare their own! This is why we review the best-quality commercial dry and canned foods every year.

However, a growing number of brave folks want to realize the benefits of home-made food for *their* dogs. People who have raised generations of dogs on home-prepared diets say their dogs grow and age more gracefully, experience far fewer health problems, look and feel terrific, and even exhibit fewer behavior problems. And who wouldn't want all that for their dogs?

Of course, we *all* want that for our dogs. But not everyone is willing to deal with the continual shopping and food preparation that a home-prepared diet entails. Interestingly, it's the *meat* component that seems to discourage the largest percentage of dog



People who make home-prepared diets for their dogs may appreciate the ability to buy the meat portion (or the meat and bone, or meat, organ meat, and bone portion) of the diet in a can or in a frozen, raw form.

owners who are interested in homemade diets but who have not yet taken steps to give it a try.

Acknowledging that shopping for, storing, and preparing meat can be daunting for some people, a number of companies now offer a wide variety of whole, raw meat products just for dog owners. (There are also many companies who sell frozen *complete* diets that contain raw meat; that's not what we're talking about this month, though we will be reviewing these before year's end.) This month, we're focused on companies who manufacture meat products intended to be fed in a supplemental fashion, or (more frequently) as the meat component of a home-prepared diet.

Different approaches

For those of us who don't shop for fresh food every few days, keeping a ready supply of meat on hand can be a hassle. That's why manufacturers focused their efforts in this market on two different methods of preserving meat. Some offer frozen, raw meats, and

some offer canned meats.

Anyone can buy a quantity of meat and freeze it, so the manufacturers who sell frozen meat products add value for dog owners. Many offer a wider variety of meats and cuts than most of us have access to in our local grocery stores. Some offer pasture-fed, free-range, and/or organically grown meats that are simply not available locally.

Most significantly, many offer meats that have been ground with fresh, raw bone included. This is important, because any diet that contains meat (which is high in phosphorus) must also contain a source of calcium to maintain the optimum calcium-phosphorus ratio (1.2:1 to 1.4:1).

Fans of the so-called BARF diet (Bones And Raw Food, or Biologically Appropriate Raw Food) include raw bones in their dogs' food as a matter of course. Some feed their dogs whole or crushed raw poultry wings, necks, and backs as a source of both meat and bone. Others, fearing a bone-related problem (perforated stomach or intestine, broken teeth) use powerful meat grinders

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WHAT YOU CAN DO . . .

- **Don't jump into a project like making your dog's food without ample research. Buy a book (or two or three) from our suggested reading list (page 13) and familiarize yourself with various approaches to canine diet.**
- **Calculate and compare prices of comparable ingredients, including shipping costs.**
- **Ask company representatives for suggested recipes and nutritional analyses.**

FROZEN MEAT VENDORS	DESCRIPTION OF PRODUCTS
<p>A Place For Paws Columbiana, OH (800) 354-4216; aplaceforpaws.com</p>	<p>Offers a wide variety of frozen products: chicken; beef and bone (contains muscle and organ meat); tripe; organ blends; whole raw meaty bones including chicken and turkey backs and necks; and recreational chew bones. Also sells veggie mixes and meat/organ/veggie mixes. Manufactured weekly, to order, in limited batches.</p>
<p>BARFWorld Saskatoon, Saskatchewan, Canada (866) 282-BARF; barfworld.com</p>	<p>Australian veterinarian Ian Billinghurst, one of the original proponents of "BARF" diets, founded this company. Sells "complete" diets, as well as separate components of a home-prepared diet: an assortment of ground meat and bone "minces" (chicken, beef, lamb, pork, kangaroo); an organ (what Aussies call "offal") blend containing beef liver, heart, kidney, and tripe; a fruit/vegetable pulp; and supplements.</p>
<p>Celeste Yamall Foods Westlake Village, CA (888) CEL-PETS; celestialpets.com</p>	<p>Sells complete diets, as well as several types of muscle and organ meats including: beef heart; beef kidney; beef liver; beef muscle and heart; chicken heart; chicken liver; chicken muscle meat and heart; lamb heart; lamb kidney; lamb liver; lamb muscle meat and heart; turkey heart; turkey heart and gizzard; turkey liver; turkey muscle meat and heart. Also sells supplements.</p>
<p>Columbia River Natural Pet Foods Ridgefield, WA (360) 834-6854; columbiarivernaturalpetfoods.com</p>	<p>Sells a variety of ground meat, ground meat and bone, and ground meat, organ, and bone mixes, including: tripe, chicken, chicken and buffalo heart, chicken and buffalo liver, turkey necks, duck (meat and bone), rabbit (meat, bone, heart, and liver), guinea hen (meat and bone), quail (meat and bone), venison, and lamb. Also sells raw recreational chew bones, veggie mix, and meat/veggie mixes.</p>
<p>Grandad's Pet Foods Lodi, CA (209) 368-3025; grandadspetfoods.com</p>	<p>Sells several ground meat and meat and bone mixes, including: chicken (meat and bone); beef heart, kidney, and liver; beef heart and chicken necks, backs, and breast bones. Also sells meat and vegetable mixes, and offers a more finely ground mix for puppies, kittens, and toy breeds. All chicken used is Petaluma Poultry's "Rocky" free-range chicken.</p>
<p>Halshan Premium Raw Food Harbor City, CA (888) 766 -9725; halshan.com</p>	<p>Another company with a wide range of homemade diet components: ground meats (including duck, beef, Coleman Organic Beef, chicken, turkey, venison, and ostrich); "Rocky" free-range chicken necks; muscle meat and vegetable mixes, and organ meat and vegetable mixes. Also sells supplements, including calcium supplements for those who don't use raw bones.</p>
<p>Oma's Pride Avon, CT (800) 678-6627; omaspride.com</p>	<p>Sells complete diets, as well as dozens of separate products: ground meat (chicken, turkey, beef, lamb, ostrich, venison, kangaroo, buffalo, North Atlantic salmon); ground meat and bone (chicken, turkey, lamb); organ meats (beef heart, beef liver, beef kidney, beef tripe, turkey heart, chicken liver, chicken gizzard, and various combinations of same); and a frightening selection of meaty bones (including chicken necks, backs, wings, frames, and feet; turkey necks, tails, drumsticks, pelvic bones, and wings; veal riblets; lamb riblets, necks, shanks; pork neck bones; whole rabbits, ducks, and mackerel; buffalo marrow bones and knuckle bones; and beef ribs. Also sells supplements.</p>
<p>OmegaFarms Alvordton, Ohio freewebsite.hostdepartment.com/O/ OmegaFarms/</p>	<p>If you thought the carnage was complete, you were wrong! OmegaFarms provides ingredients for domestic pet foods as well as foods for exotic animals (these foods include worms, baby chicks, baby rabbits, etc.). For dogs, it sells many frozen ground meats (beef, goat, rabbit, poultry) and meat and bone mixes, and goat meat and bones, crab, eggs, and frozen raw milk.</p>
<p>Raw Advantage Stanwood, WA (360) 387-5185; rawadvantagepetfood.com</p>	<p>Sells complete diets plus ground mixes that include muscle meat, bone, gizzard, heart, and liver (in turkey and chicken varieties). Also offers a ground beef, beef heart, and beef liver mix; chopped turkey and chicken necks; recreational chew bones; and supplements.</p>
CANNED MEAT VENDORS	DESCRIPTION OF PRODUCTS
<p>Evanger's Dog & Cat Food Co. Wheeling, IL (847) 537-0102; evangersdogfood.com</p>	<p>Evanger's is an old company, but in 2002 it was acquired by new owners, who completely revamped its product line, adding many innovative products. These include complete diets as well as canned meat and meat and organ mixes, including: chicken; chicken and liver; beef; beef and liver; beef, chicken, and liver; buffalo; duck; rabbit; and pheasant.</p>
<p>Wysong Corporation Midland, MI (989) 631-0009; wysong.net</p>	<p>Wysong sells complete dry, canned, and even frozen diets, but also was a leader in offering separate diet components. Canned meat and organ (generally heart and liver) mixes include beef, chicken, duck, rabbit, turkey, and venison. Also sells supplements.</p>

Books on Home-Prepared Diets for Dogs

Diet plans for dogs have become almost as popular – and almost as polarized – as diets for humans. Heated arguments over various aspects of a dog's diet can break out between people that you'd *think* would be on approximately the same page (chapter, anyway!), given that they all prepare their dogs' food from scratch.

The major debates center on cooked vs. raw foods; the use of raw bone (whole or ground) as the main calcium source in the diet vs. the use of bonemeal or other calcium supplements; and the inclusion of grains vs. grain-free diets. A somewhat more minor battle centers on the need (or lack thereof) to include vitamin, mineral, fatty acid, or other supplements.

The books described below have one thing in common: they

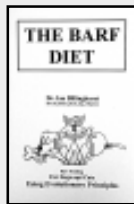
all describe diet plans that call for the use of meat. If you have already strongly identified your position in these debates (for example, as a ground-bone, cooked-meat, grain-free believer), you will find that some of the books confirm your views, while others aggravate you to no end. If you are new to the idea of preparing your dog's food, however, you may want to select and read books that describe opposing approaches, and see which ones make the most sense to you.

Here's a little something to keep in mind: *All* these approaches work, with some dogs, sometimes. You have to keep an eye on your dog to see whether any given diet plan promotes his optimum health. Don't be stubborn! If your dog's health declines on a diet you really believed in, you gotta try something else.

The BARF Diet (2001, ISBN 0958592519)

by Ian Billinghurst, BVSc

Billinghurst's latest book, a primer for dog owners who are new to diets that include raw meat and bone. Contains new suggested recipes and troubleshooting tips. Billinghurst does not include grains in these diets.



Complete Guide to Natural Health for Dogs & Cats

(1995, ISBN 0875962432)

by Richard Pitcairn, DVM, and Susan Hubble Pitcairn

Several chapters on diet and nutrition, including recipes, which include grains and raw meats (though cooking is approved in certain cases) but do not incorporate bones.

The Encyclopedia of Natural Pet Care

(2000, ISBN 0658009966)

by CJ Puotinen

One chapter on natural diets, including recipes, which include raw meat and bones, and grain.

Feeding Your Dog for Life

(2002, ISBN 0944875793)

by Diane Morgan

All about canine nutrition, including commercial foods. Promotes diets based on raw meat, with or without grain. Discusses pros and cons of raw bone but leaves decision up to owners. Takes a "guidebook" rather than a "recipe book" approach.



Give Your Dog a Bone (1993, ISBN 0646160281)

by Ian Billinghurst, BVSc

Billinghurst's first book on raw diets, which are based on feeding raw meat and bones, and include some grains.

Grow Your Pups with Bones (1998, ISBN 0958592500)

by Ian Billinghurst, BVSc

Contains lots of basic information about the BARF diet, emphasizing diet for breeding dogs and puppies. Billinghurst considers grains optional at this point.

Holistic Guide for a Healthy Dog (2000, ISBN 1582451532)

by Wendy Volhard and Kerry Brown

Includes several chapters on nutrition, including many recipes. Volhard's diet uses grains but no raw bone.



Home-Prepared Dog & Cat Diets

(1999, ISBN 0813821495)

by Donald R. Strombeck, DVM, PhD

Includes dozens of recipes, including special diets for dogs with specific health problems. All recipes are formulated to be "complete and balanced" and include basic nutritional analysis.

Strombeck does not advocate raw diets or diets including bone.

K9 Kitchen

(2002, ISBN 097309480)

by Monica Segal

All about canine nutrition. Includes many recipes. Diets should be approached individually, says Segal, so her diets include grain and grain-free plans, raw and cooked meats, and diets that use raw bone *or* other calcium sources.



Natural Diet: Meeting Your Dog's Needs (1999, self-published)

by Wendy Volhard

A detailed description of Volhard's "Natural Diet," which includes whole grains and does not include raw bone. Includes many recipes and suggestions for dogs of all ages and sizes.



Raw Dog Food (2004, ISBN 1929242093)

by Carina Beth MacDonald

Takes a "guidebook" rather than a "recipe book" approach to home-prepared diets. MacDonald advocates use of raw meat and bones, and is okay with grains and cooked foods for certain dogs.

Reigning Cats and Dogs, 2nd Edition (2002, ISBN 0963239449)

by Pat McKay

Most of the book is devoted to nutrition, and includes many recipes. McKay advocates raw, grain-free diets, and does not use raw bone.

The Ultimate Diet (1998, ISBN 1561706361)

by Kymthy R. Schultze

The book is all about Schultze's diet plan, which is based on a pyramid-style guide, though some sample recipes are included. The Ultimate Diet incorporates raw meats and bones, and no grains.



Shelter From the Storm

The best thing you can do for a lost or stray dog? Your homework.

BY PAT MILLER

One day in November some 17 years ago, my husband and I (both humane officers in California at the time) were conducting undercover surveillance of cockfighters in San Jose, when a scruffy little Terrier mix ran across a busy road in front of our car. Without a word, Paul pulled the car over to the curb and I hopped out to rescue the youngster from imminent danger.

I knelt down and called to her, and she crawled to me on her belly. I scooped her up and deposited her in the back seat of the car, where she settled on a blanket Paul laid out. We continued with our work, agreeing

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WHAT YOU CAN DO . . .

- Investigate shelters in your and surrounding communities *before* you find a stray and must decide what to do with her. Know where you're comfortable sending a foundling dog, and where you're not.
- Keep a list of shelter phone numbers handy in your home and in your car, for easy access when the need arises, either to call for a pickup, or to leave "found dog" reports.
- Get involved in efforts to improve any substandard shelters you find in your community.
- Support the full-service shelters that are doing a good job in your area with donation dollars and volunteer time.



Depending on a shelter's size, budget, and number of incoming animals, a "found" dog's stay there might be precipitously short before he is euthanized to create space for more pets. Ask about the average length of stay before dropping off a found dog.

we would take her to the Humane Society of Santa Clara Valley (HSSCV), where Paul was Director of Operations, on our way home. At that time, HSSCV housed all stray animals found in the San Jose area.

The Terrier rode quietly with us for the rest of the afternoon. In fact, her presence gave us an excuse to stroll past cockfighters' homes rather than just drive by – we had to walk our dog! By the end of the day, Paul and I agreed that this dog was too exceptional to take to HSSCV, where the high volume of animals handled (40,000 per year) made her prospects dim despite the many good programs the shelter offered.

We decided to keep her until Monday, at which time I would take her to the shelter where I worked as Director of Operations, the Marin Humane Society. Her chances of finding a lifelong loving home there were far better than at HSSCV. Meanwhile, Paul filed a "found" report with a detailed de-

scription of her at *his* shelter, in case someone came in looking for her.

Finding strays

If you're like most dog lovers, sooner or later you'll find yourself rescuing a stray dog. If she's lucky, the dog will be wearing a tag with current owner information, and all you will have to do is make a quick phone call so the owners can come retrieve her.

All too often, however, there are no tags, and you must decide what to do with the foundling. You have several options:

- **Take her to the nearest Animal Services shelter.** These are the shelters that provide government services: impounding and housing strays, investigating complaints, selling licenses, inspecting kennels and other animal-related business, doing rabies control, and issuing citations for violations of animal control laws.

■ **Take her to a private shelter.** While some private shelters contract to provide the previously listed services, many do not. They may or may not accept strays, and are more likely to accept and adopt out owner-surrendered animals, offer spay/neuter services, and conduct fundraising events and public education programs. Private shelters may be full service (accepting all animals) or limited intake (which can include shelters sometimes known as “no-kill”).

■ **Take her to a rescue group.** This is a viable option especially if your foundling appears to be a purebred or near purebred dog. Some rescue groups may ask that you take her to a shelter for the legal holding period first, and they’ll rescue her from there. Some will ask (beg, plead with) you to keep her at your home while they work to find a foster home or adopter. Some will take her immediately and willingly.

If she is a mix, or a member of a commonly found breed such as the Labrador Retriever, rescue groups are more likely to be full to the brim, and less likely to leap to your rescue. If she is an unusual breed, such as the Nova Scotia Duck Tolling Retriever, there is probably a readily available rescue/foster opening. A quick search on the Internet will turn up rescue contact information for just about every breed of dog you can imagine.

■ **Take her home temporarily.** This gives you a chance to find the owner yourself or, failing that, rehome her, without the risks inherent in taking a dog to a shelter. However, you must take all the steps described in the sidebar “If You Take a Stray Dog Home” (right).

■ **Take her home permanently.** While this is sometimes a viable solution, it only works if you have the right environment and enough resources to care for your canine foundling. You can’t keep them all.

Of course, even if you were tempted to keep the dog from the moment you found her, you must still make every effort to find her original owner.

Shelters: pro and con

It’s best if you know what shelters are located in your area *before* you need one. It gives me comfort to know exactly where I would take a stray dog – even as I’m trying to catch him – to give him the best opportunity to be returned safely to his owner or find a new, more secure home. I’ve toured

shelters in areas where I was house-hunting even before I’ve toured potential homes!

Understand when you go to look at shelters that even the best facility in the world is not a good place for a dog. Dogs do best when they live in small, stable social groups in a structured environment. Shelters, even good ones, are noisy, chaotic, and stressful. Dogs rarely get enough socialization, exercise, or mental stimulation; thus long-term confinement is not conducive to good mental or physical health.

Countless dogs suffer from kennel stress at shelters, often to the degree that their behavior deteriorates to the point where they are considered unadoptable. Some grow increasingly dog-aggressive and obsessively engage in fence-running and fence-fighting. Some begin to display aggression to people – it’s pretty much impossible to get adopted after that. Some attempt to relieve their stress by nonstop barking, spinning, tail-chasing, pacing, or chewing on themselves. Dogs like this are almost always euthanized for humane reasons. Even the best full-service shelters sometimes run out of room, and dogs must be selected for euthanasia for “space” reasons.

Having said that, however, a good shelter is a wonderful temporary haven from the hazards of running loose on the streets: bad weather, starvation, disease, injury, theft, poison, shooting, and more. I never hesitate to take a dog to a *good* shelter; he has ac-

cess to a warm meal and a soft, dry bed, and prospects for long-term survival are much higher than on the streets.

I did at one time, I regret to say, live in a community where the local shelter was so wretched that I judged dogs’ chances for survival were better on the streets than in that shelter; it was the only time in my life that I passed by stray dogs rather than automatically stopping to pick them up.

Evaluating shelters

So how do you tell if a shelter is “good enough” to give a dog his best chances for survival? You’ll need to make personal visits to the shelters in your area, for starters.

A good shelter doesn’t have to be brand spanking new. The Marin Humane Society, originally built in the 1950s, with an Education Center added in the early 1980s, is still considered a leader in the animal protection field. Regardless of age, a shelter should be clean and well-maintained. Lack of cleanliness fosters disease, and deferred maintenance allows for dogs to be injured and possibly escape. Conversely, a poorly designed and constructed new shelter poses as many risks as a poorly run old one.

When you visit, let your nose and eyes judge the facility. Are cages, equipment, and trash cluttering the grounds, kennels, and hallways? Are you assailed with eye-watering odors as you enter the front doors? There will be some smell, of course, but it

If You Take a Stray Dog Home

If you find a stray dog without identification, and you are loathe to take him to any of your area shelters due to high rates of euthanasia, you *must* file “found” reports with all shelters in your and surrounding communities in case he really is lost (and not just abandoned). This will give an owner who is really doing all she can do to find the dog the best chance to find *you*. Most shelters will also have files of “lost dog” reports that you can look through to try to identify your canine foundling. But this isn’t *all* you should do, especially because the lost and found dog files at many shelters can be outdated or difficult to wade through. Plus, some people may search for their dogs only in the shelter kennels, not knowing there *are* separate “found dog” files.

It’s also a good idea to take him to a vet hospital or shelter that has microchip scanners, to see if he has been implanted with that invisible high-tech form of identification. Make sure the scanner is either “forward and backward” (capable of detecting any type of microchip) or that two different scanners (125-kHz and 134.2-kHz or “ISO” scanners) are used (see “Collar, Tag, and Chip,” WDJ August 2004).

You should also put up highly visible posters in the area where you found the stray; place a “found dog” ad in the newspaper (most newspapers offer these ads at no charge); and watch for “lost dog” ads and posters.



Most shelters offer lost and found pet reports that you can look through, but they may not be organized or up to date.

should be the occasional tolerable essence of freshly deposited urine or feces, not the pervasive odor that denotes long-term inattention to sanitation.

Walk through the various shelter kennels and catteries. Are they reasonably clean? A pile or three somewhere in the facility kennels can be expected. Piles of poop and puddles of pee in every kennel shout of unacceptable lack of attention to cleanliness. Is the chain link in good repair? Patched wire is okay, but protruding wires that can cause punctures, and holes that can trap and strangle dogs or allow their escape, are not.

Ideally, there is no more than one dog per kennel, possibly two dogs housed together, except for litters of pups, which can stay in a group. Municipal shelters don't have the luxury of turning animals away, so they must sometimes, out of necessity, house larger groups of dogs. If dogs are housed in pairs or groups, are they segregated by sex and size? Males should not be with females, small dogs should be kept safe from large



All dogs in shelters should have a raised bed or clean bedding daily.

ones, and timid dogs should be housed separately from assertive, aggressive ones.

If group housing is the norm, does the shelter make maximum use of all kennels? One shelter I know of at one time housed as many as 10 to 15 dogs per crowded run, while keeping other runs totally empty – just because it was easier for staff to clean a few very dirty runs than lots of moderately dirty ones. Totally unacceptable.

After observing the condition of the physical plant, spend a little time talking to staff. Shelter staff members are usually quite busy and won't have time to stand around and chat, but they should be friendly, courteous, and willing to answer a few reasonable questions. Customer service staff in the front office, if there is one, are probably better equipped to answer your

questions, but animal care staff should be pleasant as well. Here are some good questions to ask:

■ **How long do dogs stay at the shelter?**

Best answer – there is no maximum time limit; better shelters keep dogs as long as they have room, and as long as they are physically and mentally healthy.

■ **How often are dogs euthanized just for “space” reasons?**

Best answer – rarely. In reality, many shelters must euthanize for space daily, or near-daily. This doesn't make them bad shelters – incoming numbers may be beyond their control – but it might influence whether you leave a dog there.

■ **How are animals euthanized?** The only acceptable answer is “by injection of a barbiturate” (sodium pentobarbital). This is the fastest, most painless method available.

Sadly, a number of quite inhumane methods of euthanasia are still in use. Decompression (high altitude) chambers and gas chambers have been outlawed in some states. Carbon monoxide chambers are considered more humane than these because the gas induces drowsiness before death. Unbelievably, gunshot is still used by some shelters, despite its violence. None of these methods are considered acceptable by most animal protection professionals due to their potential for inflicting a painful and terrifying death.

■ **Do you do behavioral assessments of dogs prior to making them available for adoption?**

Best answer – yes; but then find out what the criteria are for passing an assessment. If your foundling is sensitive about having her ears or paws touched, for example, she may not pass some assessments. Some shelters are rigid about the results of “temperament tests” and may euthanize animals that are quite capable of rehabilitation, if more time and attention were taken with their placement.

■ **Can I adopt her if she isn't reclaimed?**

Best answer – you will need to go through the normal adoption process, and if approved, pay all adoption fees. Be forewarned – if you don't think you'll qualify for adoption and aren't willing to risk that you might not get the dog back, keep her and leave a “found” report instead. If the shelter doesn't have an adoption process, your foundling could go to any potential home, including unsuitable ones.



Most shelter administrators struggle to do the most for as many animals as they can, but all of them have much less space and money than they need.

■ **Do you require spaying and neutering of your adoption animals?** Only acceptable answer – yes, for obvious reasons.

■ **Will you call me if she's going to be euthanized?**

Likely answer – sorry, they can't. It's reasonable for staff to expect that if you want to adopt the dog you'll do so when she's available, not as a last minute lifesaving intervention. The reality of life at many shelters means it's very difficult for staff to call at the last minute, then hold the dog for you, especially if it will take you several days to arrange to come in and adopt.

■ **What percentage of incoming dogs are reclaimed by their owners or adopted?**

Sadly, the national average rate of shelter euthanasia is somewhere between 50 and 70 percent. Shelters in southeastern states tend to have the worst euthanasia averages – 80 percent and higher; while those on the West Coast tend to have higher adoption and reclaim rates. So, any shelter that manages to get 30 to 50 percent of its animals reclaimed or adopted is doing better than the national average.

Please note that your shelter's adoption numbers may give you some idea of your foundling's chances for avoiding euthanasia, but averages mean nothing for the individual dog who is selected to be euthanized for any of the above-mentioned reasons: illness, injury, stress, or space.

Keeping the dog?

When all is said and done, you'll need to decide if you're willing to accept any risk at all that the dog you found may be euthanized. If you are, and feel that one of the shelters you've evaluated can offer her

humane housing and care and a good chance for a lifelong loving home, then surrendering her is a reasonable choice.

If not, consider a rescue group, or look for a *responsible* limited intake shelter within driving distance – and know that *good* limited intake shelters are often full with a long waiting list, as well as selective about the dogs they accept (see sidebar, below.)

If you're not willing to risk euthanasia, or no decent shelters near your community can accept the dog, then you're faced with taking him home. If you cannot locate the owner, you'll then have to decide whether

to make an effort to rehome the dog yourself or let your heart rule your head and add another dog to your pack.

That's what happened with that scruffy little Terrier that Paul and I found in San Jose so many years ago. Fortunately for us, no one ever responded to the "found dog" report we filed at the shelter in the community where we saved her from certain death on the road. I have never once regretted our decision to keep her. She was an exceptional dog, bright, loving, and sensitive. She brought much joy to our lives and was one of the best teachers I've ever had. It was

Josie who taught me that there was a better way to train than the use of choke chains and painful ear pinches, and started me on the path to positive training. It was a fine day for us when she ran in front of our car, and an even finer one when we decided to give her a permanent place in our home and our hearts. 🐾

Pat Miller, CPDT, is WDJ's Training Editor. She is also author of The Power of Positive Dog Training, and Positive Perspectives: Love Your Dog, Train Your Dog. For contact information, see "Resources," page 24.

No-Kill Shelters: Fact or Myth?

All animal lovers dream of the day no companion animals are euthanized simply for the lack of adequate homes. In recent years, some organizations have promoted themselves as sanctuaries where that dream is a reality, where homeless dogs and cats can live in safety – for life, if necessary – until an adopter is found. Since the "no-kill shelter" concept was introduced in San Francisco in the late 1980s by Richard Avanzino (then-President of the SF SPCA), the concept has spread like wildfire.

Unfortunately, the reality only rarely resembles the dream.

The problem is not in the concept of a "no-kill shelter" – it's in the implementation. Recognizing that animal lovers are far more likely to support an organization that purports not to kill, many shelters have changed their policies (or just their public relations messages) so they can promote themselves as "no-kill" when, in fact, just as many animals are getting killed in their communities as ever.

In some so-called "no-kill" sanctuaries, dogs and cats are often warehoused for months, years, and even lifetimes. Administrators of these facilities are willing to sacrifice quality of life for a "life at any cost" philosophy. Some accept many more animals than they have resources for, and neglect their charges when they are unable to properly care for them.



**You need to know:
Is it a sanctuary or
a warehouse?**

Many no-kill shelters are able to promote themselves as such only by virtue of their proximity to full-service shelters. By cherry-picking the most adoptable animals from the full-service shelters, and/or accepting only a few owner-surrendered animals for whom

they are sure they can find new homes, these "limited intake" shelters are able to skirt the issue of euthanasia.

The most responsible of this genre are honest with their clients and donors. They explain up-front that only reason they can proclaim themselves no-kill is because the full-service shelter down the road, which accepts *all* animals, is willing to perform the necessary but unpleasant chore of euthanizing those for whom no homes can be found.

Less ethical are those shelters and shelter administrators who pretend to be no-kill, but send their "unadoptable" charges to a

vet hospital or full-service shelter for euthanasia. "We don't kill," they say, while neglecting to mention that animals surrendered to them may, in fact, still be euthanized – just by someone else.

Some play semantic games with the term "adoptable." The citizen who just surrendered a young, healthy Jack Russell Terrier to a no-kill shelter assumes that the dog is adoptable. When the dog contracts kennel cough – a non-fatal, easily treatable disease but one that is very contagious in a shelter environment – the JRT is no longer healthy, is re-labeled "unadoptable," and euthanized. Meanwhile, the shelter continues to boast that it euthanizes no "adoptable" animals.

COMPETITION FOR DONOR DOLLARS

One of the most insidious elements of the kill / no-kill debate is the ongoing competition for donation dollars. Well-meaning animal lovers are happier giving their money to shelters that don't kill. The shift of donation dollars to no-kill organizations drains money away from agencies that struggle to care for animals most in need of help – those that no one else is willing to accept.

Sadly, community pressure and unreasonable expectations created by the false promises of no-kill advocates have created untenable situations for many capable animal shelter administrators. Top executives from coast to west coast have been forced out of their jobs or chosen to resign because they can't meet those expectations. Many organizations around the country that were once lured by the no-kill dream are beginning to realize the impossibility of short-term no-kill goals, and they are returning to more realistic long-term programs and goals for reducing euthanasia numbers.

We would all like to stop the killing, but wishing it were so won't make it happen. This will require more resources and energy committed to spay/neuter campaigns, responsible owner education programs, education of dog owners about canine behavior and the vital importance of training, and a cultural shift that values animal life more highly.

There is a place in the animal protection world for limited intake adoption agencies that choose to allocate their resources only to animals with a high probability of finding homes, but they need to do it honestly, as supporters of and resources for local full-service shelters, rather than as adversaries.

Seeing is Believing

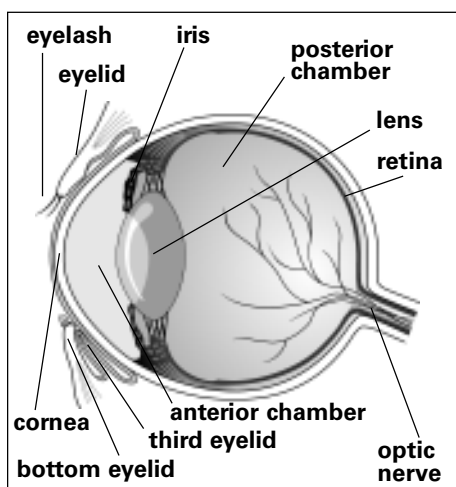
Our new series will tour the dog from head to toe. First stop? The eye.

BY RANDY KIDD, DVM, PHD

The dog's eye is pretty much a garden-variety mammalian eye, with some notable adaptations that have evolved over the millennia. It is a globe with two fluid-filled chambers (anterior and posterior). The chambers are separated by the lens, the structure that helps focus light beams onto the rear part of the eye, the retina. The eye's outer, clear surface, the cornea, offers protection to the inner eye and helps the lens focus light onto the rear of the eyeball, the retina.

Looking into the healthy dog's eye, you'll see a dark center (pupil) surrounded by a colored ring known as the iris, and outside the iris is the white sclera. The iris is some shade of brown in most dogs, but some dogs have one or two blue eyes. Attached to the iris are muscles that function to open or close the lens, letting in more or less light, depending on the available light.

Dogs have a prominent third eyelid (nictitating membrane) located at the bottom of the inner part of the eye, between the lower eyelid and the globe of the eye. The third eyelid is thought to offer protection for the eyeball and to help in removing foreign bodies. Third eyelids are normally concealed beneath the lower eyelids, but one or both



A dog's eye is a fairly typical mammalian eye. Compared to humans, dogs have an enhanced ability to see at night.

may become prominent with certain diseases, for several hours after general anesthetic, and with irritation from a foreign body.

Dogs have upper and lower eyelids, and irritations or scratches may arise when the hairs on these lids project toward the eyeball – a condition either genetic or a result of a wound that scarred the lid.

The muscles surrounding the eyeballs (the orbicularis oculi) move the eye's globe so it can be directed toward what the dog wants to see.

The function of the dog's eye

While the human has evolved as a diurnal (active in the daytime) species, dogs initially evolved as nocturnal or crepuscular (active at dawn and dusk) predator species. As a result, we humans have great visual acuity, color perception, and depth perception, but we do not see well in the dark.

Dogs, in contrast, have well-developed night vision and their sight is well adapted to detect movement. There is some trade-off between visual acuity (the ability to see detail) and the ability to see in the dark. The dog's visual acuity has been estimated at six times poorer than an average human; admittedly, this is a bit of a guesstimate (how do you get a dog to read an eye chart?).

Compared to the human eye, the dog has a larger lens and a correspondingly larger corneal surface, enhancing its ability to capture light and thus see in reduced lighting conditions. In addition, behind the dog's retina is a reflective surface, the tapetum, which further enhances low-light vision. The eerie glow you see when a beam of light hits your dog's eyes at night is the reflection from the tapetal surface of his eye. The tapetum is also easy to see during a routine eye exam using an ophthalmoscope.

Much like the human retina, the dog's



One blue and one brown iris – perfectly normal.

retina is lined with rods (the sensing cells adapted to work best in low light and used for motion detection) and cones (cells that work best in mid to high levels of light, with the ability to detect color). The proportion of rods to cones is much higher in dogs than humans, thus the enhanced night vision in dogs.

In addition, dogs only have two types of cones (dichromat), whereas humans have three types (trichromat). This expansion of cone-cell types allows the human to see a wider spectrum of color; the dog's world probably consists of yellows, blues, and grays, while the human color range expands into the reds and greens.

A dog's lateral eye placement allows better wide-angle vision but hinders depth perception and close-up viewing because there is minimal visual overlap between the two eyes (called binocular convergence). Thus, your dog can easily snag a ball moving sideways but may have trouble catching a ball tossed right at his nose.

Specialized eye exams can detect the focal point of the lens – whether it is right on the retina (normal or emmetropia), in front of (myopia or nearsightedness), or behind it (hyperopia or farsightedness). At one time it was assumed all dogs were myopic, but judging from new information on these evaluations, most dogs are likely very near normal (emmetropic). Some breeds, however, *are* especially prone to being myopic. (Of the examined dogs, the breeds that had a higher incidence of myopia included German Shepherds, Rottweilers, and Schnauzers.)

As a person ages, his lenses “harden” and may eventually develop cataracts. As the lens hardens, its ability to bend (or “refract”) the incoming light to focus it on the retina diminishes, so the person's visual acu-

ity is diminished over the years and the person typically becomes myopic. Dogs, too, experience this hardening of the lens (see information on cataracts below), and conventional medicine often recommends surgically removing them. However, recent information indicates that after surgery, without the refractive ability of the lens, dogs become terribly hyperopic. Recent advances have produced intraocular prosthetic lenses that help correct for this loss of focusing ability.

Other ways of seeing

Dogs “see” with much more than their eyes; in fact, in comparison to humans, dogs rely far less on their vision. While the dog’s visual perceptions are relatively fuzzy and less colorful compared to ours, the canine nose and ears provide him with profoundly more sensation than do ours. Dogs may smell us long before they see us, and they can hear sounds that don’t even touch our zone of hearing. (More about these senses/organs in later articles.)

In addition to these differences between species, though, we have to consider that the dog’s (and our) eyes are backed up with a myriad of body senses that add to what they actually see. Animals “see” with their entire bodies, a sense that is augmented in haired areas of the body – the “feeler” whiskers on the snout, for example.

Watch dogs at play and it is quite apparent they have an incredible sense of balance. We know that diminished vision (or dizziness) adversely affects this ability to orient the body to the horizon. The sense of balance is enhanced by the nerve endings on the pads of the feet, the joints, and the nerves throughout the spine. All these send kinesthetic information back to the brain, which the animal then processes into information that gives him the current balance status.

There are even more, often subtle, ways of “seeing” that we know little about. What is it, for example, that a dog “sees” in an individual that makes him growl in distrust? Do some (or all) dogs see auras? How is it that the pineal gland, located deep inside the brain, “sees” nature’s cyclic differences in light patterns to trigger reproductive and sleep patterns?



This older dog’s prominent eyes make it easy to see the white sclera around her brown irises, which are still clear and sharp.

An alternate look at eyes

We can describe the eye in terms of anatomy and physiology. But there are other ways of understanding the eye, and in terms of natural health, these ways may be even more important than the mechanistic descriptions.

Traditionally, the eye has been seen as the portal to the animal’s spirit or soul, and in all cultures there is an abundance of folklore about the eyes: about the connections between eyes and the gods, the relationship of the eyes and the sun or moon or other natural phenomena, and about the eyes as they signify the well being of the animal and of the species.

Many holistic health practitioners also consider the eyes to be sentinels – expressing on the outside the current inner health status of the animal. A healthy animal has eyes that literally shine – giving off a radiant vitality that speaks of whole-body health. A common comment I get from clients after we’ve taken their dog’s pain away with chiropractic and acupuncture is, “I’m not sure he’s walking a whole lot better, but his eyes have their old gleam back.” And, I’ve had clients say, “Doc, you’ve given me my dog back. I can see his old self in his eyes.”

In contrast, a sick animal often mirrors his illness through his eyes. Obvious symptoms include eye discharges or color changes. Reddened eyes, for example, can indicate any number of inner diseases, and severe liver disease may change the normally white sclera to a yellowish tinge. An animal who is sick oftentimes has eyes that have simply lost their luster, seem to be darker or greyer, and/or have lost their ability to mirror vital energy.

Chinese medicine gives another perspective on the eyes. In Chinese medicine the Liver organ system opens into the eyes, and the state of all the “organs” is reflected in the eyes because the pure *Jing Qi* (activated source of life) of all the organs “pours through the eyes.”

The general appearance of the eyes is especially important for

perceiving the animal’s spirit (its *Shen*). Lively eyes indicate that the *Jing* (source of life) is uninjured. Stiff, “wooden,” inflexible eyes show a condition that is considered “deficient.” If the whites of the eyes are red, it is a sign of an excess (or “heat”) condition, caused by either “external influences” or an “excess of heat” from an organ, usually the liver.

Additionally, some methods use the eyes specifically as an aid to diagnosis. Iridology,

for example, claims to be able to diagnose diseases by observing the iris. According to this method, areas of the iris are correlated to organs and areas of the body. When there is a disease within the body, it will be reflected as a change in color or shape in the corresponding area of the iris.

Finally, the time comes at the end of an animal’s life when all

vitality seems to be drained, when the eyes seem to be emptied of nearly all of their normal energetics. It’s as if the eyes are telling us it is now time to go on to another life – and veterinarians I know use this eye-sensitive way to help clients decide when it’s time for euthanasia.

Natural care of eyes

You can care for your dog’s eyes naturally. As with any organ system, preventing diseases is always much easier than trying to cure them after the fact.

■ Exercise and the eyes

Whole-body exercise is a prime component of any program of natural eye care. The eye’s structures are extremely sensitive to oxidative stress and to other toxins. Exercise is our first line of defense and perhaps our most natural antioxidant, helping move oxygen through all the eye’s structures and helping eliminate a buildup of toxins.

For healthy body, mind, spirit, and eyes, walk with your dog for at least 20 minutes a day, and (if your vet has checked him out as basically healthy) occasionally give him some anaerobic exercise by tossing the ball or letting him take a good swim.

■ Food for the eyes

Nutrition is equally important as exercise,



One sore, infected eye, with a pus-filled exudate. Take this dog right to the vet.

and there are some general eye-care nutrients as well as some that have specific healing qualities for eyes.

Good food for the eyes includes a healthy dose of antioxidants such as vitamins B, C, and E; beta-carotene (and other carotenes such as lutein); co-enzyme Q10; and alpha-lipoic acid. Antioxidants are abundant in green leafy vegetables and other highly colored foods such as corn, squash, and egg yolks, and many herbs (including the common culinary ones) are high in antioxidant activity. Zinc, selenium, and magnesium are also important “eye nutrients.” Water is a critical eye nutrient because the membranes of the eye are susceptible to drying when the animal is dehydrated.

Lutein and alpha-lipoic acid have been mentioned in recent human medicine literature as being especially beneficial for eyes, with the usual caveat that results are still preliminary.

■ Immune system care

Many holistic practitioners feel there is a connection between many (if not all) chronic eye conditions and an imbalanced immune system. In addition to the antioxidants mentioned above, herbs such as echinacea (*Echinacea spp.*) and Siberian ginseng (*Eleutherococcus senticosus*) can enhance and rebalance the immune system.

To improve eye conditions, try to avoid anything that compromises the immune system: excess stress; food additives such as synthetic preservatives and artificial flavors and colorings; environmental toxins such as pesticides and herbicides; and the excess use of vaccines.

Since the liver is a major detoxifying organ and (according to Chinese medicine) directly connected to the eyes, it is important to keep it healthy. Nutrients such as the B-vitamins, choline, and inositol enhance

liver function. Herbs that are beneficial to the liver include milk thistle (*Silybum marianum*), turmeric (*Curcuma domestica*), and dandelion root (*Taraxacum officinale*).

Practitioners of Chinese medicine believe that anger and depression adversely affect the liver and these emotions also stress the immune system. If a dog is angry (for constantly being left home alone, for example) or depressed (possibly from the recent loss of one of his companions), consider flower essences or aromatherapy for their remedial effects on the emotions.

■ Eye massage

One way to ease eye tensions and to improve circulation to the eye is to give your dog a massage. Use your fingertips to make a circular motion that begins at the corner of the eye and moves clockwise around the bony structures surrounding the eye. Let your fingers gently dip into tissues surrounding the eye; located here is the *Orbicularis oculi*, the muscle mass responsible for rotating and turning the eyes.

Concentrate on the corners of the eye (both lateral and medial). Do this circular massage several times, first clockwise, then counter-clockwise – as long as your dog enjoys it. Then, gently lay your fingers over the eye and very gently add pressure to the eyelid. (Practice on yourself first to see how much pressure is comfortable.) This very simple massage not only is relaxing and rejuvenating to the eyes, it stimulates several key acupuncture points.

A continuation of the eye massage is to massage areas that contain key eye-related acupuncture points and “trigger points” (areas that are sore when the associated organ is affected). Give your dog a general neck massage along the sides (from the mastoid bone to the sternum) and upper part of the dog’s neck (from the base of the skull to the

shoulders); massage deeply around the upper shoulders; and also massage along the muscles where the two jaw bones attach.

Holistic medicines and the eye

As a general rule holistic medicines function extremely well for treating chronic ocular problems, and western medicines may be more appropriate for some of the acute or traumatic conditions.

Cataracts are an example of a condition that typically arises slowly and gradually, over time. Preventing their occurrence with holistic methods (nutrition, herbs, and food supplements) is the best course of action. Once they have developed, western medi-



This dog was already blind when rescued by her owner. The eye on the left has cataracts; the eye on the right has detached retina.

cine might recommend cataract surgery to remove them. But I personally would use this only as a last resort, considering holistic options first, whenever possible.

On the other hand, if a dog has just been kicked in the eye by a mule and there is immediate swelling and perhaps blood, I’d make a quick trip to the best eye specialist I could find.

A red eye (conjunctivitis) might be an example of a case that is in the gray zone – whether you should consider western medicine, alternative therapies, or consult a veterinary ophthalmologist will depend on the severity of the case, whether it came about acutely or over time, and your own gut feelings for what you feel would be the right way to proceed.

Conventional Western medicine tends to be fast-acting, but typically addresses conditions only at their surface, palliating symptoms with little concern for the underlying cause, which results in a lack of deep healing. Alternative medicines are, as a general rule, slower to act, perhaps because they tend to delve deeper into the cause of the condition. While adverse side effects can

Make a Natural Eye Wash

For mild eye irritation caused by dust or other irritants, make a simple, soothing salt solution, or brew this herbal bath made from eyebright (*Euphrasia officinalis*). Mix ¼ teaspoon of sea salt into a cup of distilled or filtered water. For the herbal eye wash, use one teaspoon of the herb in a cup of water, boil, strain, and add ¼ teaspoon of sea salt into this cup of brew.

Use a clean cloth or gauze soaked in the solution to clean away crusts and secretions from the eyes and lids, or place several drops directly into the eye. This solution can be used frequently as an eye wash and for its soothing properties, and it can be used to remove simple intruders such as dust or airborne irritants. After the eyes are clean, add a drop of soothing, fresh, pure almond oil to each eye. (Make sure the oil used is *not* essential or aromatherapy oils.)



Use a wash to keep eyes clean & bright.

occur with any medicine (or almost any substance, for that matter), they occur far less frequently with alternative medicines. Some of us feel that many of the conventional Western medical methods actually create long-term, chronic problems.

Acupuncture has been successfully used to treat many eye conditions. Keratitis, chronic conjunctivitis, and all sorts of eye irritations typically respond favorably to acupuncture, and cataracts or even blindness may respond.

A typical acupuncture approach to eye conditions might seem strange to a western-trained practitioner. Chinese medicine visualizes the eyes as connected to the Liver (an “organ system” concept that correlates somewhat, but not entirely, to Western medicine’s understanding of the form and function of the liver).

An acupuncturist might therefore diagnose a condition of conjunctivitis as an example of excess/heat of the Liver, and her needling points would be positioned to bring the Liver back into balance and to further bring the whole body back to a state of harmony of *Yin* and *Yang*.

Many **healing herbs** can be applied topically to the eyes and have proved to be successful for treating all kinds of eye conditions. In addition, herbs can be taken internally for their nutrient value – vitamins, minerals, and antioxidants.

Some herbs, notably bilberry (*Vaccinium myrtillus*) and eyebright (*Euphrasia officinalis*) are reputed to have a direct effect on the eyes when taken internally. In addition, many herbs enhance liver function and the immune system, the other important components of overall eye care. [Editor’s note: Dr. Kidd’s book, *Dr. Kidd’s Guide to Herbal Dog Care*, contains much more information on herbs for dogs. See Resources, page 24, for purchasing information.]

At first glance it may seem that **chiropractic** adjustments would have no effect on the eyes. But the eyes are, after all, connected directly to the brain. Trigger points along the neck muscles may refer to conditions occurring in or around the eyes, and these trigger points may be due to underlying misalignments of vertebrae. So, in addition to massage, chiropractic adjustments may alleviate these trigger points and concurrently help eye conditions.

Common eye diseases, diagnoses, and natural treatments

Following are brief discussions of the diag-

noses and treatment protocol a holistic practitioner might use for the most common eye diseases of dogs: eye irritants, conjunctivitis and keratitis, cataracts, and dry eyes. Remember that every case presents its individual problems and solutions, and that there is no one-treatment/dosage-fits-all in holistic medicine. Remember too that holistic medicine (at least as I define it) includes the possibility that we may use some of conventional Western medicine’s methods as well those normally considered alternative.

All the treatments listed below assume that, along with these treatments, we will also be doing some or all of the above mentioned therapies: periodic cleansing and soothing eye washes; nutrient and herbal support; massage; exercise; enhancing the immune system and avoiding anything that might diminish its abilities; and giving attention to the liver as it is associated with the eyes.

Finally, I absolutely recommend that you immediately see a veterinarian (who may want to refer you to a Board Certified Ophthalmologist) whenever the eye symptoms have a sudden onset; you see blood, either around the eye or within the globe itself; the eyeball itself appears swollen or the eyelids are severely swollen; and the pain or irritation is driving your dog nuts.

■ Eye irritations

Intruders into the eye can be almost anything from dust particles, pollen, irritating chemicals (pesticides, herbicides, etc.), and smoke to larger splinters, thorns, or plant awns (such as foxtails). A common, temporary intruder, especially for inquisitive puppies, is a cat’s claw. The extent of the damage caused by these intruders depends on whether they have scratched or ulcerated the cornea and on the amount of pain or irritation they produce.

Signs that your dog has acquired an eye irritant include tearing and redness; whining, scratching at the eye(s), rubbing on the floor; swelling of tissues surrounding the eye(s); prominence of the third eyelid(s); and if the condition has been ongoing for a while, a mucoïd (gunky) or purulent (pus-containing) discharge.

If only one eye is affected, the irritant is likely limited to that eye (think foreign body such as a fox tail here, or irritation from a scratch). If both eyes are affected, it is likely

from an environmental irritant, but with bilateral involvement we also have to consider the possibility of generalized disease.

Removal of the irritant is, of course, the first step. For dust particles and mild chemical irritants, the eye wash listed earlier will probably suffice. Larger particles may need to be removed mechanically and this often requires anesthesia. It always surprised me the number of seemingly huge foreign bodies (oftentimes foxtails) I removed from behind the third eyelid when I was managing an emergency clinic in California. These are typically hidden from view and require anesthesia to remove.

If the redness and irritation persist after you’ve washed out the irritant, there may be a scratch on the cornea. Have your vet stain it to be sure, and use the follow-up treatment that is appropriate for the extent of the damage.

■ Conjunctivitis and keratitis

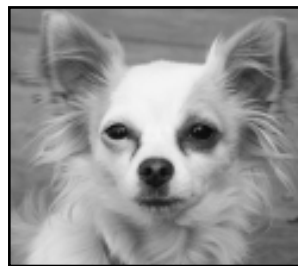
Conjunctivitis is inflammation of the membrane that lines your dog’s eyelids and the front of the sclera; keratitis is inflammation of the cornea. The presence of either of these diseases may indicate a generalized disease or one limited to the eyes, and their symptoms are much the same as those that occur with irritants (perhaps without the intense pain). Conjunctivitis and/or keratitis can be caused by any number of infectious agents – bacterial, viral, or fungal.

Some herbs have antibiotic activity, and herbal medicines are typically effective against a broad range of potential pathogens. For mild conjunctivitis, a soothing tea with additional antimicrobial activity can be brewed using one or more of the following herbs: chamomile (*Matricaria chamomilla*), calendula (*Calendula officinalis*), elder flowers (*Sambucus nigra*), or Oregon grape root (*Mahonia spp.*). Strain the brew and soak a clean cloth or gauze to be used as a compress over the eye, or put several drops directly into the eye several times a day.

In Chinese medicine the most common cause of conjunctivitis is Liver Heat. Acupuncture can be used to “calm” the heat and restore immune system balance.

■ Cataracts

A cataract is a spot on the lens (or over the entire lens) that has lost its transparency.



The tear stains around both of this dog’s eyes indicate a long-term irritation.

When a dog's pupils appear blue or gray in normal light, he likely has cataracts. (A scar on the cornea – from an old, healed wound, for example – may also appear as a gray or blue spot. Your vet can tell whether you are dealing with an old scar or cataracts.) Cataracts develop gradually, typically over several years.

In humans almost everyone over the age of 65 has some degree of opacity, and after 75, cataracts are common. Cataracts usually occur in both eyes, are painless, and almost never cause total blindness. While they are commonly a factor of old age, cataracts may also be caused (or precipitated) by trauma, chemicals (especially steroids), X-rays, and high blood sugar as observed with diabetes mellitus.

Conventional therapy consists of removing the lens surgically, but cataracts are an example of a condition that may respond very well to alternative therapies.

Nutrition is especially helpful, concentrating on antioxidants: alpha-lipoic acid, Coenzyme Q10, and lutein (the carotenoid that is concentrated in the pupil), have all been mentioned as especially important here. In addition, vitamins A, C, and E are important, as is zinc and the B vitamins. Make sure the dog drinks plenty of water, to prevent the membranes of the eye from dehydration.

Good **herbs** to add to the diet include eyebright and bilberry, and any others with antioxidant activity. (Almost all the common culinary herbs have significant antioxidant activity, making them a good nutritional supplement for their medicinal quality as well as for their ability to stimulate the aging appetite.)

Acupuncture might be helpful for improving circulation to the head, immune-system function, and to promote healing.

■ Dry eyes and arthritis

Tears are not just water. They have three separate components: oil (from the Meibomian glands in the eyelids); mucus (from goblet cells deep inside the eyelids); and watery tears (from the lachrymal glands located in the conjunctiva of the eyelid). Tears wash away intruders and lubricate the eyes and lids.

Dry eyes can be caused by eye diseases or systemic conditions, and evidence is

Veterinary Ophthalmology

Board Certified Veterinary Ophthalmologists are veterinarians who have taken extra training in the specialty of ophthalmology, and their expertise is invaluable in many instances. They are especially helpful for treating severe emergencies and for providing specific diagnoses of problem cases. They see enough cases that their diagnostic and treatment capabilities far exceed those of the general practitioner veterinarian. (I saw quite a few traumatic eye cases when I ran an emergency clinic, but I still felt more comfortable when the ophthalmologist had re-checked my diagnosis and treatment.)

While most ophthalmologists may have not had training or experience in alternative medicines, their initial input is often invaluable, and I've generally found this group to be accepting of alternative methods. If you are concerned about your dog's progress, or if you have any questions, have your vet refer you to a Board Certified Veterinary Ophthalmologist – they can be found in most large cities and almost all veterinary schools.



mounting that common causes are related to other chronic and immune-mediated medical conditions such as arthritis, diabetes, and systemic lupus. Many medications, such as antihistamines, antidepressants, diuretics, gastrointestinal medications, and cold remedies, can also cause dry eyes.

Symptoms of dry eyes – the result of corneal drying and possible ulcerations – include redness, pain and itching, and even excessive tearing at times. Diagnosis of dry eyes is confirmed by a test called a Shirmer test which uses a test strip of paper placed on the lower lid to measure the production of tears.

Conventional treatment

consists of restoring the tear film with artificial tears. There are three types of artificial tears: preserved (with benzalkonium chloride or EDTA), transiently preserved, and nonpreserved. Preserved tears, while perhaps the safest in avoiding potential contamination, can be irritating to some patients. Transiently preserved tears are more cost-effective while being minimally irritating. Nonpreserved tears are meant for single-dose administration and are the most expensive.

Similasan eyedrops, a **homeopathic herbal** preparation containing apis, euphrasia, and sabadilla, can be substituted for the other artificial tear preparations.

Nutritional support is especially important for treating dry eyes. Antioxidants are very helpful. Be sure to include vitamin A or other carotenoids (those with a vitamin A

deficiency often have dry eyes, skin, and hair); B vitamins; zinc; magnesium (dilates the small blood vessels that bring blood to the tear glands); and calcium. Again, make sure the dog drinks plenty of water.

Since there is good evidence of a connection between dry eye and arthritis, when treating dry eye, many holistic practitioners add supplemental therapies for arthritis from the outset, such as glucosamine and chondroitin sulfate. 🐾

Dr. Randy Kidd earned his DVM degree from Ohio State University and his Ph.D. in Pathology/Clinical Pathology from Kansas State University. A past president of the American Holistic Veterinary Medical Association, he's author of Dr. Kidd's Guide to Herbal Dog Care and Dr. Kidd's Guide to Herbal Cat Care (see page 24).



"Doggles" can protect eyes; see doggles.com or call (866) DOGGLES.

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WHAT YOU CAN DO . . .

- **Eyes respond well to natural health prevention methods, so keep them healthy with nutrition, exercise, care of the immune system, and avoidance of toxins and stressors.**
- **Use alternative therapies – by themselves or in combination with conventional medicine – to treat short- or long-term eye problems.**

Help Prevent Tragedies

The Pet Fund pays for urgent vet care for those who can't afford it.

BY NANCY KERNS

We hear about a lot of amazing people who are doing great deeds for and with dogs – people involved with rescuing and fostering dogs, search and rescue, training service or therapy dogs, etc. We also know that dog lovers are asked, frequently, to donate money to these and many other animal-oriented good causes. But because our primary mission is to provide our readers with information they can use to benefit their *own* dogs, we don't often highlight these admirable canine-oriented social services in the pages of WDJ.

We're making an exception for the Pet Fund, largely because it's possible (but we hope it doesn't happen) that the organization *could* provide you or someone you know with a lifesaving service someday.

Saving lives

In its simplest description, the Pet Fund pays for urgent veterinary care for pets whose owners cannot afford it.

The people behind the Pet Fund deplore the fact that dogs (and other pets) are sometimes euthanized, relinquished to shelters, or suffer without medical care because their owners cannot afford expensive surgery or emergency vet visits. Pet insurance programs are available, but often even these programs cannot cover the total cost of necessary medical care. The Pet Fund can, for a limited number of qualified owners, step in and make a huge difference, sometimes with only a modest grant.

Here's how it works. Either a participating veterinarian or an individual contacts the Pet Fund. The veterinarian discusses her diagnosis, prognosis, and recommended treatment of the animal needing assistance with a Pet Fund staff member. Depending on the level of funding available and the urgency of the needed treatment, the Pet Fund staff decides whether or not to fund the animal's care, based on several factors.

The decision is based on the stated financial need of the owner, the opinion of

the treating vet as to the medical necessity and urgency of the treatment needed, and the demonstrated capability of the animal owners to be responsible for their animals.

According to Karen Leslie, Executive Director of the Pet Fund, "The owner's responsibility is crucial, since we will not fund treatment for animals whose owners do not seem to be able to care for the animals' basic needs now or in the future. One of the greatest benefits of the Pet Fund is keeping animals out of shelters, so giving funds to irresponsible owners would not accomplish this goal. There is a significant difference between pet owners who are responsible but have incurred financial difficulties and irresponsible owners who view their animals as objects and unnecessary expenses."

If the funding needed for a particular course of treatment is available and approved after the consultation with the veterinarian, the Pet Fund staff informs the vet of the level of funding that will be granted. (Funds are dispersed only to treating veterinarians, never to individuals.) The most urgent cases are funded first, with other less urgent requests put on a waiting list for available funding.

The people behind the Pet Fund are clear that its intent is *not* to grant funds for any "heroic" lifesaving measures which would cause unnecessary suffering to animals, nor to fund basic medical care, such as vaccinations, spay and neuter surgeries, or routine veterinary care. "We feel it is the responsibility of all pet owners to budget for these expenses," says Leslie. "The Pet Fund can best serve in urgent situations where serious medical treatment is needed beyond routine care."

Other goals

Recognizing that preventive care could help many pet owners avoid many future medical problems for their companion animals, the Pet Fund provides information about

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WHAT YOU CAN DO . . .

- Investigate whether you or someone you know could benefit from the Pet Fund. See thepetfund.com or call (916) 443-6007.
- Donate to the Pet Fund, at 1510 19th Street, Sacramento, CA 95814. Encourage your favorite pet products company to donate, too.

available products, services, and healthy pet practices on its Web site. Information about pet insurance plans *and* financial services (such as savings plans and debt counseling agencies) is also made available to interested pet owners.

"If we do not provide a way for the pet owner to develop financial freedom, we have not totally remedied the situation or accomplished our goal," says Leslie. "It's a large part of our objective to ensure that our clients provide a more secure future for their

companion animals by developing their resources in order to become independent and stable. The Pet Fund therefore truly benefits both animals and people."

At this point, most of the Pet Fund's grants fall into the \$500 range, making up the difference between the cost of an animal's treatment and what each client is able to pay. The grants have provided assistance to hundreds of companion animal owners; we think helping the Pet Fund reach its goal of helping *thousands* of animals is a *great* idea. 🐾



WHAT'S AHEAD

"Adverse Events" – Pet Food Nightmares

Dog food can occasionally make dogs sick, or even kill. Know how to protect your dog.

What to Do During Down Time

Keeping a fit, active dog quiet for a few days or – horrors! – a few months while he recovers from surgery can be a huge challenge. The good news? You can use the time to significantly further his training!

Tour of the Dog

Holistic veterinarian Randy Kidd leads us on a journey of the dog's anatomy. Next stop? The canine ear.

Anesthesia-Free Teeth Cleaning

This sounds like a great idea, especially for older dogs. But is the service really as beneficial as a "regular" cleaning?

Dance with Your Dog?!

Musical freestyle is a super-fun sport for dogs and their people. Go ahead and giggle! Learn a few steps, and you'll be hooked.

RESOURCES

BOOKS

WDJ Training Editor Pat Miller is author of two books: *The Power of Positive Dog Training* and the brand-new *Positive Perspectives: Love Your Dog, Train Your Dog*. Both books are available from DogWise, (800) 776-2665 or dogwise.com

Dr. Kidd's Guide to Herbal Dog Care and *Dr. Kidd's Guide to Herbal Cat Care* are published by Storey Books, (800) 441-5700 or storeybooks.com

HOLISTIC VETERINARIANS

American Holistic Veterinary Medical Association (AHVMA), 2214 Old Emmorton Road, Bel Air, MD 21015. (410) 569-0795. Send a self-addressed, stamped envelope for a list of holistic veterinarians in your area, or search ahvma.org

TRAINING AND INSTRUCTION

The Association of Pet Dog Trainers (APDT) has references to member trainers in your area. Write to PO Box 1781, Hobbs, NM 88241, call (800) 738-3647, or view its database of trainers at apdt.com

Pat Miller, CPDT, Peaceable Paws Dog and Puppy Training, Hagerstown, Maryland. Train with modern, dog-friendly positive methods. Group and private training, Rally, behavior modification, workshops, intern and apprentice programs. Call her at (301) 582-9420, or see peaceablepaws.com

ATTENTION, BUSINESS OWNERS!

In response to a number of requests from dog-related businesses, including veterinarians, pet supply stores, groomers, and trainers, our publisher has a new program that will enable businesses to buy copies of WDJ in bulk for reselling to their customers.

If you are the owner of a dog-related business, and you would be interested in buying copies of WDJ for your customers each month (at a special price), contact Dean Lage at dlage@belvoir.com or (941) 929-1720.

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