

The Whole Dog Journal™



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A monthly guide to natural dog care and training

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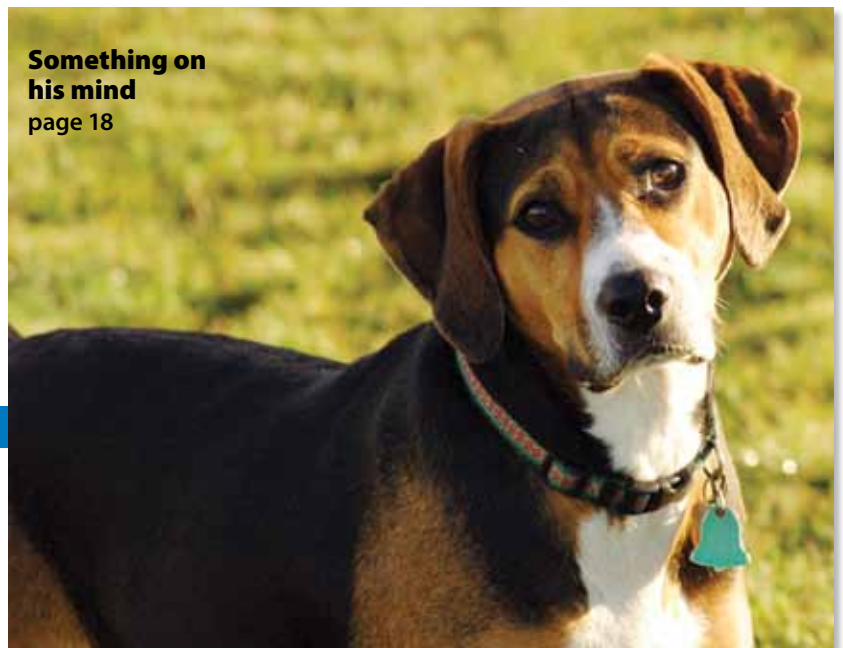
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The Whole Dog



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PAW EDITOR'S NOTE

Bad Words?

It's important to use language that respects every living being.

BY NANCY KERNS

A few years ago, I asked WDJ's readers about the use of the words "owner" versus "guardian." The response was polarized; either term makes some people see red. Perhaps that's why the phrase "pet parent" has become so popular – it seems to avoid the third-rail effect of the other options, and conveys both caring and responsibility. But I have to admit; when one of my friends talks about her "canine son," I tense up a little. I can't even tell you why; it's weird.

This isn't the only term having to do with our canine companions that twists my tail. I can't stand the word "command" – as in, "Give your dog the command to sit." I'm not royalty, and slavery was abolished in this country long ago, so what's with the *commanding*? When training, I believe in giving the dog a *cue* that alerts him to the opportunity to perform a behavior and earn a reward. When hanging out with my dog – you know, socially – I usually "ask" him for certain behaviors; I might even *insist* that he sit or down when I give him the cue to do so . . . but *command*? The concept is not representative of my relationship with anyone I know.

WDJ's Training Editor Pat Miller was the first to ask me to omit the use of "it" when discussing any sentient being – as in, "I wanted to pet the dog, but it bit me." I'm glad she sensitized me to this issue. It's difficult to distance yourself from (or elevate yourself above) another living creature when you're forced to consider (at a minimum) his or her gender. You'd never say, "A kid got hit by a car; it suffered serious injuries;" or "A tourist got its shoes muddy at the beach." Using *he*, *she*, *his*, and *her* when talking about any species of animal, human or nonhuman, preserves the respect for the individual.

This principle can be extended a bit farther. In WDJ, we also use the word "who" when talking about individuals. So we'd say, "The dog who earned a treat is happy," rather than "The dog *that* earned a treat is happy."

These are small things, but consideration for all sentient beings is not.



More congratulations for Pat Miller are in order. She was recently welcomed to the Board of Directors for the Certification Council for Professional Dog Trainers (CCPDT).

The certification program administered by the CCPDT was the first national certification for dog trainers in the U.S. Candidates who pass the CCPDT's written examination earn the title Certified Professional Dog Trainer-Knowledge Assessed and may use the designation, "CPDT-KA," after their names. All certified trainers must earn continuing education credits to maintain their designations. They must also adhere to a strict code of ethics in their dog training practices.

A dog trainer as professional, educated, and ethical as Pat Miller will be a terrific asset to the CCPDT Board and its mission.

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.

Be More Rewarding

Five ways to reward your dog when you don't want to use treats.

BY MARDI RICHMOND, MA, CPDT-KA

Food treats are an easy and effective reward for a dog when training. But food rewards are only one way to build strong behavior. There may be times when you do not want to or cannot use food, and there may be times when the best reinforcement is something other than a hot dog! Here are five great ways to reward your dog when you don't want to reach for the treat pouch.

1 Play with your dog! Anyone who has trained for an active sport like agility or flyball knows the value of using toys, games, and play in training. But toys, games, and play don't apply only to the sports-minded. Playing with your dog can be a powerful relationship-building tool, as well as a potent reward. Tugging and retrieving may be the most obvious play rewards, but playing games with your dog is limited only by your (and your dog's) imagination.

2 Use "life rewards." These are things that your dog enjoys in his daily life, such as going for a walk, running in the backyard, or splashing in a sprinkler – and they can be harnessed by using the Premack Principle.

This principle says a "low-probability

behavior" (one that the dog or other subject is less likely to perform, such as waiting calmly at the door) can be reinforced by a "higher probability behavior" (one that the dog prefers, such as getting to race happily around the yard). For example, to strengthen your dog's sit, ask him to sit before giving him access to any of the things he really enjoys – running with his pals, swimming in the pond, or cuddling next to you on the couch. This type of reward is easy to integrate into your daily life, and can be especially helpful for dogs who need assistance with self-control.

3 Offer a warm word. Praise, "happy talk," or a simple "Good dog!" may be the most common type of reward there is! Some dogs naturally find praise rewarding, but even dogs who don't seem to can become praise seekers if you frequently pair your praise with other great things. For example, if you teach your dog to "down" with a click, followed by a treat or tug, you can add in "Good dog!" as you deliver the treat or play the game of tug. Soon, your dog will learn to associate that happy praise with the treat or tug, and "Good dog!" will become its own reward.

A quick game of tug o' war can be a great reward; other dogs might prefer to chase after a ball or Frisbee, or jump enjoy a round of "chase me!"

4 Touch him where he likes it. Touch can be a wonderful reward for some dogs, but it is also a tricky reward to use. Before using petting, rubs, or massage as a reward, first consider two things: What types of touch does my dog enjoy? And, when does he enjoy being touched? For example, your dog might enjoy a chest scratch, but may shy away from a head pat. Long, slow strokes may feel good and be rewarding when he is settled next to you, but irritating if he is waiting for a run in the backyard. Pay attention to what your dog does when you touch him; if he ducks away or does not engage with you, it probably is not rewarding. If he engages, comes toward you, or asks for more, then it probably is rewarding.

5 Create space. You can use space as a reward by increasing distance or by removing social pressure. In the right situation, space can be very powerful reinforcement. For example, a dog can be rewarded for an appropriate behavior (such as looking away) in the face of an anxiety-producing trigger (such as a scary person) when you increase distance by moving the dog away from the trigger. (This tactic, described as "Behavioral Adjustment Training" or BAT, is more fully discussed in Pat Miller's article, "When Packmates Fight," in WDJ April 2010.)

In your day-to-day interactions with your dog, you can also use space in smaller or subtler ways by removing social pressure. If you are teaching your dog to stay out of the kitchen by using gentle body blocks, for example, you can reward your dog's acceptance of the kitchen door boundary by simply backing up a little bit – or removing the social pressure of the body block.

These are just some of the many ways you can reward your dog when you don't want to use food or treats. Remember, when you are thinking about rewards, you can consider anything your dog finds valuable – from that great smell on the grass to that just right tickle spot behind the ears. Rewards can be found everywhere and your options are limitless. 🐾

Mardi Richmond is a writer and dog enthusiast in Santa Cruz, California.



NEW RECOMMENDATION FOR FEAR-BASED BEHAVIOR PROBLEMS

Another option for helping dogs cope with storm phobias and other fears.

In May, I attended a seminar given by noted veterinary behaviorist Nicholas Dodman, section head and program director of the Animal Behavior Department of Clinical Sciences at the Tufts University Cummings School of Veterinary Medicine. The seminar, "The Well Adjusted Dog: Secrets to Understanding Canine Behavior," covered a number of behavior problems, including aggression, separation anxiety, phobias, post-traumatic stress disorder, and canine compulsive behavior. I was most interested in his recommendations for dogs with sound sensitivities, having had a dog whose severe noise phobias eventually degenerated into generalized anxiety disorder, from which she never really recovered (see "Chill Pills," WDJ July 2006).

One of the important things I learned is that Dr. Dodman now recommends clonidine instead of alprazolam (Xanax) when quick-acting help is needed for dogs with storm and other noise phobias. He prefers clonidine due to the high frequency of paradoxical excitement he sees in dogs treated with alprazolam, and because it is non-addictive, unlike alprazolam. He calls clonidine his "new favorite secret weapon" for treating storm phobias and other fear-based behavior problems, including separation anxiety and fear aggression.

See your veterinarian sooner, rather than later, if your dog suffers from recurrent episodes of fear.



Early treatment could keep the condition from spiralling into a permanent affliction.

Clonidine is an alpha-2 agonist; "agonist" is the opposite of "antagonist," meaning it mimics or increases the effects. Used to treat high blood pressure in humans, clonidine acts in the central nervous system to inhibit the release of norepinephrine (related to adrenaline), a modulator of the "fight or flight" response. According to Dr. Dodman, this drug has few side effects, with sedation being the most common. Because of its effects on blood pressure, it should not be used for dogs with severe cardiovascular or renal disease.

Clonidine can be combined with other drugs used for treating fear and anxiety, including selective serotonin reuptake inhibitors (SSRIs), such as fluoxetine (Prozac, Reconcile), and tricyclic antidepressants (TCAs), such as clomipramine (Clomicalm). Due to the cumulative effect on blood pressure, caution should be used when combining with beta-blockers, digitalis, or calcium channel blockers. Like all of these other drugs, it should not be combined with monoamine oxidase inhibitors (MAOIs), such as selegiline (Anipryl, l-deprenyl) and amitraz (Mitaban, also used in Preventic collars).

Clonidine is a short-acting drug, and so is best used for dogs who need only occasional relief, or combined with other longer-acting drugs, such as Prozac or Clomicalm, as needed for additional effectiveness in treating separation anxiety and other fear-based behavior problems. Because of Prozac's safety margin, Dr. Dodman now prefers a combination of Prozac and clonidine rather than clomipramine and alprazolam for treating fear-based behavior problems.

Dr. Dodman recommended dosages up to 0.05 mg/kg clonidine (about 1 mg for a 40-pound dog) as needed or twice a day, but would start with 0.01 to 0.02 mg/kg and increase as needed. The drug takes effect in about half an hour, and lasts for three to four hours. If used long-term, it should be weaned off to avoid a spike in blood pressure.

Dr. Dodman also uses melatonin for storm phobias. He says he gives the standard human dosage, 3 milligrams, to dogs weighing 40 to 60 pounds, but will increase that amount to 6 or even 9 milligrams as needed. Melatonin is a hormone that is very safe to use; he said you couldn't poison a dog with melatonin if you tried. It can be combined with other behavior-modifying drugs as needed.

Medications can provide the help that is needed for behavior modification therapy to work. Behavior problems respond better and more quickly when treated with a combination of behavior modification and drug therapy. For those who need more help, Tufts offers remote behavioral consultations through its PETFAX and VETFAX services.

I wish I started drug therapy for my dog earlier and more aggressively; it might have prevented her phobic behavior from escalating until it ruined her life. I encourage anyone whose dog shows increasing fear-based behavior to explore drug therapy. Don't make the mistake I did of not wanting to "drug" your dog; the right behavior medication can improve quality of life and allow your dog's natural personality to reemerge.

— Mary Straus

FOR MORE INFORMATION

- ❖ Tufts PETFAX and VETFAX Behavior Consultation (508) 887-4640; tufts.edu/vet/behavior

Time to Step It Up

The protocols used to protect dogs from heartworm may have lost some effectiveness; here's what you can do to protect your dog now.

BY MARY STRAUS

As we reported in WDJ in March 2011, there is now ample evidence that at least one strain of heartworms has developed resistance to some of the market's best-known preventives. In addition, there is evidence to suggest that one of the most popular heartworm preventives, Heartgard, has an efficacy rate of less than 100 percent. The U.S. Food and Drug Administration's Center for Veterinary Medicine has sent at least one warning letter to Merial, the maker of Heartgard, asking the company to stop claiming 100 percent effectiveness for heartworm prevention. Given these developments, what should responsible dog owners do differently to better protect their dogs?

The answer depends a bit on where you live and what you've already been doing to prevent heartworm infection.

RESISTANT STRAIN

Reports of dogs developing heartworm disease despite being given preventives year-round were dismissed for years as being due to "owner non-compliance," but the outcry finally became too loud to ignore.

In August 2010, representatives of the American Heartworm Society (AHS), the Companion Animal Parasite Council (CAPC), and experts in the field of nematode resistance met in Atlanta for a "heartworm roundtable." A joint statement released afterward announced, "This meeting was convened to discuss the implications of reports of lack of efficacy of macrocyclic lactones [preventive medications] against *Dirofilaria immitis*,

the canine heartworm. Participants concluded that while we do not have a comprehensive picture of the scope or severity of the problem, we agree that there is a problem. There is evidence in some heartworm populations for genetic variations that are associated with decreased in vitro susceptibility to the macrocyclic lactones."

Translation: investigators have verified that one strain of heartworms shows resistance to heartworm preventives in the lab.

Further, the statement offered a hint

that the resistant strain is not yet present everywhere heartworms are found. "Most credible reports of lack of efficacy (LOE) that are not attributable to compliance failure are geographically limited at this time." The statement did not identify the region, but investigations have centered on the Mississippi Delta.

Useful information has since emerged from a small study conducted by researchers at Auburn University's College of Veterinary Medicine in Alabama. Four commercial heartworm preventive medications (Heartgard Plus, Interceptor, Revolution, and Advantage Multi) were tested on the resistant strain of heartworm. Forty dogs were infected with heartworm larvae. Thirty days later, the dogs were treated with one of the four preventives.

Four months after treatment, an average of 2.3 adult heartworms were found in seven of eight dogs in each of the first three groups; only Advantage Multi was found to be 100 percent effective. There was no significant difference in efficacy against the resistant strain between Heartgard Plus, Interceptor, and Revolution. Based on the number of adult worms found in the untreated control group, the efficacy rate for the other three products was determined to average 95.5 percent.

Say what? How can the efficacy rate be more than 95 percent, when 7 of 8 treated dogs (87.5 percent) were heartworm-positive? One might guess that "95 percent effective" means that 95 percent of dogs remained heartworm-free, but it actually means the treated dogs had 95 percent fewer adult worms than un-

Even dogs who have received preventives year-round can become infected with heartworms. This photo of a drop of canine blood was taken through a microscope. The worm-like thing is a microfilaria or first stage of the offspring resulting from reproducing adult heartworms, a.k.a. *Dirofilaria immitis*.

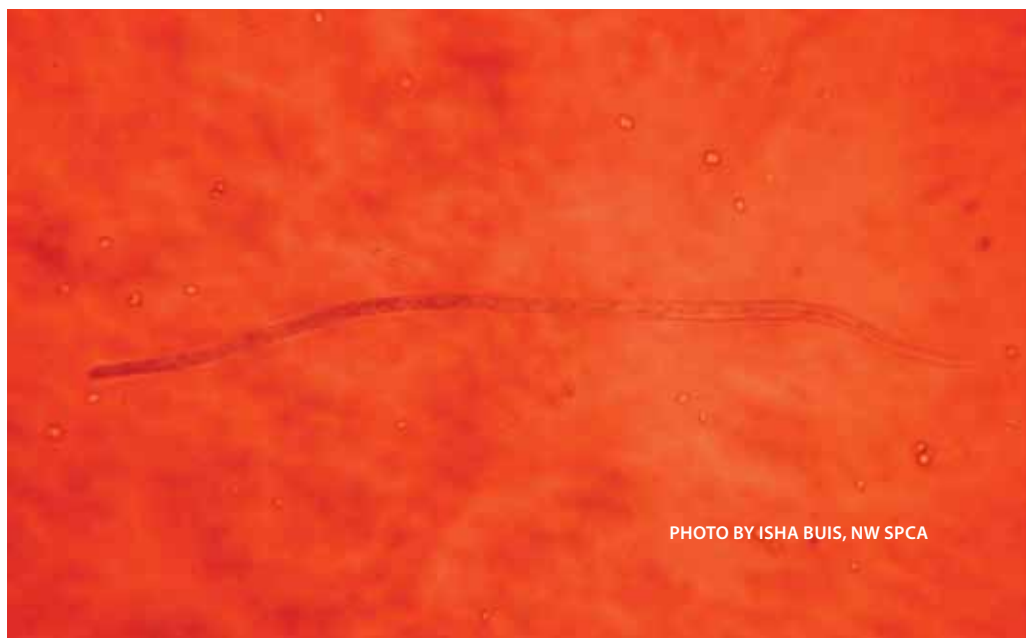


PHOTO BY ISHA BUIS, NW SPCA



Because they administered heartworm preventive to their dogs year-round, some owners may fail to recognize that their dogs' symptoms – such as exercise intolerance, a persistent cough or tendency to pant, and fluid retention in the chest or abdominal cavity – are signs of a heartworm infection; this lack of recognition may delay treatment.

treated dogs – a whole different can of worms!

BEST PREVENTIVE?

Does this mean we should all switch to Advantage Multi, the only heartworm preventive found in this study to be effective against the resistant strain of heartworms? Well, the answer is not that simple.

The active ingredient in Advantage Multi is moxidectin (Advantage Multi also contains imidacloprid, the flea-killing ingredient in Advantage and K9 Advantix).

Moxidectin is the same ingredient used in ProHeart 6, an injectable heartworm preventive that reportedly caused problems for many dogs when it was first introduced. Due to the large number of adverse events reported, including many deaths, it was withdrawn from the market in 2004; it was reintroduced in 2008 with new warnings on the label.

Unlike ProHeart 6, a sustained-release injectable product used every six months, Advantage Multi is applied topically once a month. There's a strong probability that the worst dangers of ProHeart 6 were related to the injectable, sustained-release method of application rather than to the drug itself. If there is an adverse reaction to moxidectin, it's unlikely to be as intense or as long-lasting from a topical application as from an injected form, which continues to be

released into the body for six months.

While every product has *some* adverse side effects, I have not heard any horror stories associated with Advantage Multi since it was introduced in the U.S. in 2007. Note that moxidectin remains in the system much longer than ivermectin (Heartgard), selamectin (Revolution), or milbemycin (Interceptor), so adverse effects can occur up to three weeks after application.

Dr. Byron Blagburn, one of the vets who participated in the Auburn University study, has hypothesized that moxidectin's persistence in the body might account for its increased effectiveness against the resistant strain of heartworms.

What about the other preventives? The study above found no significant differences in effectiveness between Heartgard, Interceptor, and Revolution against the resistant strain of heartworms; their efficacy rate ranged from 95.4 to 95.6 percent.

These findings correspond with anecdotal evidence observed by practitioners in the area where the resistant strain has been reported. Dr. Everett Mobley of Kennett Veterinary Clinic in Kennett, Missouri, is one of the veterinarians who drew attention to increasing failures of heartworm preventives that led to this discovery. He found reports of failure coming from the Mississippi River valley, starting about 100 miles south of St. Lou-

is, and getting worse as one goes south.

"I saw roughly equal rates of lack of efficacy whether the dog was on Revolution, Heartgard, Interceptor, or Sentinel (the four preventives I was using at that time)," comments Dr. Mobley. He emphasizes that "I'm a simple general practitioner, detailing only my own clinical experiences and the impressions of those I have spoken with personally. I am by no means a specialist in parasitology or in pharmacology. My opinions are based on my experience with my cases."

While he has not yet seen any failures with clients using Advantage Multi, he feels that the study referenced above is inconclusive due to its small size. Dr. Mobley says he has also seen a decrease in the number of heartworm-positive dogs taking other medications from 2009 to the present. He says, "while the big switchers to Advantage Multi feel that they see no product failures at all, our non-switchers have also seen a reduced failure rate in the last two years."

This could be due to cooler and drier weather, at least in 2009. The American Heartworm Society's (AHS) triennial survey for 2010 showed that "the pattern of heartworm incidence overall was similar to that of previous years." While heartworm was found in all 50 states, the incidence map does show a decrease from the previous survey done in 2007, when the fallout from Hurricanes Katrina and Rita had far-reaching effects on mosquito vectors and heartworm transmission. The wet winter we've just had may well have a similar effect.

It makes sense for pet owners who live in the Mississippi valley to use Advantage Multi, as long as their dogs have no problems with it. For the rest of us, presumably not yet threatened by the resistant strain of heartworm, other products may be acceptable.

OTHER ALTERNATIVES

Interceptor, another heartworm preventive, may have one advantage over other products: its dosage of active ingredient (milbemycin oxime) is five times the minimum amount that has been determined to prevent heartworms; the higher dose is used to control intestinal parasites as well.

Because the level of medication is higher than was needed in the initial approvals for 100 percent efficacy, it's possible that Interceptor may continue to be more effective against non-resistant

strains of heartworms. Sentinel, which combines Interceptor with Program (lufenuron, a product that prevents fleas from reproducing), is another option with the same dosage of milbemycin oxime.

Revolution, a topical heartworm preventive whose active ingredient, selamectin, is also effective against fleas, ear mites, sarcoptic mange, and one type of tick, offers another alternative. You might use Revolution if you want to take advantage of any of these other properties, or if you prefer a topical treatment but do not want to use Advantage Multi.

HEARTGARD

Heartgard, like Interceptor and Revolution, demonstrated an efficacy rate of only about 95 percent in the Auburn University study on the preventive-resistant strain of heartworms. But there is evidence – some of it in active legal dispute – to suggest that Heartgard may exhibit only about 95 percent efficacy against all heartworms, not just the drug-resistant type.

In a letter sent in 2006 by the Food & Drug Administration (FDA) to Merial, the maker of Heartgard, the FDA warns, “In a letter dated August 24, 2005, we requested that you stop claiming 100% effectiveness for heartworm prevention. As you know, this request was based on the post-approval adverse drug event (ADE) reports we have received for lack of effectiveness for heartworm prevention. In a letter dated September 30, 2005, you agreed to immediately discontinue

promotion and advertising 100% effectiveness for your heartworm prevention products.”

The allegation that Heartgard has only a 95 percent efficacy rate was leveled at Merial recently from another source – a “whistleblower” lawsuit filed by a former Merial employee.

Kari Blaho-Owens, PhD, global head of pharmacovigilance for Merial from 2006 to July 2010, alleged in documents filed in late May of this year that she “discovered that Merial had been aware of serious lack of efficacy adverse events reported regarding ‘Heartgard Plus’ since as early as 2002.” She believes that Merial terminated her employment because she refused to stop her investigation of the loss of efficacy of Heartgard and its related products. Dr. Blaho-Owens also asserts that she found a statistical analysis done by another Merial employee showing that Heartgard Plus was 95 percent effective. (That analysis would apply to all heartworms, not just the resistant strain.)

Merial denies the allegations. (See “Allegations From a Former Merial Insider,” next page.)

Even if the allegations of a 95 percent efficacy rate were true, there are a couple of good reasons to continue to use Merial’s Heartgard, in our opinion. The first is the fact that Heartgard’s active ingredient (ivermectin) has some effect against *adult* heartworms – ones that developed while the dog was unprotected by any preventive or ones that developed despite the use of preventive.

One study we reviewed showed that Heartgard had nearly 100 percent efficacy in killing young adult heartworms when administered continuously for 31 months, and more than 50 percent efficacy after 18 months. Other recent studies on the use of a combination of pulsed doxycycline and weekly ivermectin resulted in a reduction of over 78 percent of adult worms after 36 weeks (see “Links for More Information,” below).

According to studies we’ve reviewed, selamectin (Revolution) has a lesser effect on adult heartworms, while neither milbemycin (Interceptor) nor moxidectin (Advantage Multi) have been found to have a significant effect against them. If your dog is infected with heartworms, it makes sense to use Heartgard prior to and during treatment with Immiticide, as it weakens the adult worms. It also makes sense to continue to use Heartgard for one year following treatment, to kill any heartworms that might mature from older larvae that neither Immiticide nor heartworm preventives can kill.

Iverhart and Tri-Heart Plus are generic equivalents to Heartgard that are manufactured by different companies. Efficacy and safety should be identical to Heartgard. Just be sure to purchase these products from reliable sites, preferably those that carry the Veterinary-Verified Internet Pharmacy Practice Sites seal of approval (Vet-VIPPS) and offer guarantees against product failures, such as 1-800-PetMeds and Drs. Foster & Smith (see “When Buying Veterinary Drugs Online, Look for Accredited Sites,” WDJ June 2011).

USE MORE, OR MORE OFTEN?

If you want to continue to use Heartgard for heartworm prevention, it also may be reasonable to use a higher dosage. The studies done for the initial approval of Heartgard showed that lower doses were less effective at eliminating heartworms than the dosage that was ultimately chosen for the label recommendation, which was the lowest dose found to be 100 percent effective. Increasing that dosage may well increase Heartgard’s effectiveness in preventing heartworm infection from non-resistant strains.

Is an increased dose safe? For most dogs, the answer is yes. Ivermectin is used to treat dogs with demodectic mange (demodex) using a dosage that is 50 times the amount used to prevent heartworms,

LINKS FOR MORE INFORMATION

- ❖ **“REPORTS OF LACK OF EFFICACY OF MACROCYCLIC LACTONES”**
heartwormsociety.org/CAPC-AHS.pdf
- ❖ **“COMPARATIVE EFFICACY OF FOUR COMMERCIALY AVAILABLE HEARTWORM PREVENTIVE PRODUCTS AGAINST THE MP3 LABORATORY STRAIN OF *DIROFILARIA IMMITIS*”**
tinyurl.com/heartwormstudy
- ❖ **ARTICLE ABOUT STUDY ON RESISTANT STRAIN OF HEARTWORMS**
tinyurl.com/3rhy33o
- ❖ **PROTOCOL UTILIZING PULSED DOXYCYCLINE AND WEEKLY IVERMECTIN**
dogaware.com/health/heartworm.html
- ❖ **DR. EVERETT MOBLEY, KENNETT VETERINARY CLINIC, KENNETT, MO**
Link to Dr. Mobley’s blog posts on heartworm: tinyurl.com/3en3qnz

and this dosage is given daily for weeks or even months. Compared to this, doubling the dosage of Heartgard should be safe. Keep in mind that dogs at the low end of the weight range for each Heartgard product are already getting twice the dosage compared to dogs at the high end of the range; smaller dogs weighing 12 pounds or less get even more.

Higher dosages are not safe for dogs with the MDR1 mutation that makes them more susceptible to ivermectin and other drugs. There is an inexpensive genetic test available to find out if your dog has this gene. Most affected dogs are from herding breeds, primarily Australian Shepherds (including Minis) and Collies, but it's also common in Long-Haired Whippets and Silken Windhounds. Mixed-breed dogs can also be affected. See www.vetmed.wsu.edu/depts-vcpl for more information.

Note that dogs with the MDR1 gene are also affected by selamectin, milbemycin, and moxidectin, the active ingredients in Revolution, Interceptor, and Advantage Multi, respectively, though heartworm-preventive dosages are considered safe.

One problem with increasing the dose of Heartgard is that most people use

Heartgard Plus, which also includes pyrantel pamoate, used to kill roundworms, hookworms, and tapeworms. In fact, it's become difficult to find plain Heartgard. Just as with ivermectin, dosage of pyrantel pamoate is twice as high for dogs at the low end of the product's weight range compared to those at the high end. This is not a problem, as the recommended dosage range for pyrantel pamoate is 5 to 10 mg per kg, exactly the amounts used in Heartgard Plus. Increasing dosage further, however, can lead to increased side effects, primarily vomiting.

If your dog is at the high end of the weight range for the Heartgard product you've been using, it should be safe to move to the next level product. For example, if your dog weighs 45 pounds and you've been giving Heartgard Green for dogs weighing 26 to 50 pounds, it may be better to switch to Heartgard Brown, for dogs weighing 51 to 100 pounds. If your dog is at the low end of the weight range (say, 30 pounds), you're already giving a higher amount of ivermectin and so Heartgard may already be more effective.

Another option might be to give heartworm preventives twice a month rather than monthly, particularly if you live in an area with a high incidence of

heartworm disease. There is a window of opportunity in which heartworm larvae are susceptible to the treatments used against them. Once the larvae reach a certain age, preventives will no longer affect them. By giving the preventives twice as often, more larvae may be killed. You could use the same product each time, or use two different products when using this approach.

Keep in mind that none of these changes are likely to work for the resistant strain of heartworms. Dr. Mobley, whose practice is in the Mississippi valley, says that he has seen or heard of heartworm infections occurring despite using higher doses of ivermectin, in one case an extremely high dose. "I have tried changing preventives, giving two different preventives per month (every two weeks), increasing doses, and still had some failures." After seeing the increase in heartworm preventive failures in 2006, he began giving his own dog Heartgard on the first of the month and Revolution on the 15th, and she became infected with heartworms anyway.

FINAL THOUGHTS

It's important that people continue to give their dogs heartworm preventives,

ALLEGATIONS FROM A FORMER MERIAL INSIDER

The lawsuit filed by Kari Blaho-Owens, PhD, against Merial, her former employer, contains a number of serious allegations regarding Heartgard's decreased efficacy and Merial's knowledge of the problem.

Merial denies the allegations, and has released the following statement regarding the lawsuit:

"Merial is aware of the lawsuit filed against the company by former employee, Kari Blaho-Owens. As a matter of company policy, we do not comment on the details of pending litigation or on employee-related issues. However, Merial believes we have acted appropriately and responsibly in all matters related to the allegations. Merial will vigorously defend the case and will assert strong defenses to the claims made. An earlier complaint filed by this former employee has already been dismissed by the United States Department of Labor.

"Merial stands by the effectiveness of our products. We are confident that the Heartgard® (ivermectin) brands are highly effective when used in accordance with their FDA-approved labels. Moreover, Merial strictly adheres to all regulations relating to the reporting of adverse events involving any Merial product."

We may never know whether all the details alleged in the suit are true. It might take years in court – or it might be settled out of court. But the suit makes for fascinating reading. Here are some of the key points in the suit (to read the entire complaint, see tinyurl.com/44c6c44):

- ❖ In November 2004, the FDA's Center for Veterinary Medicine sent Merial a letter, stating "there were numerous reports of ineffectiveness for heartworm prevention despite 'Heartgard Plus' being used according to the label directions." In August 2005, FDA requested that Merial stop claiming 100% effectiveness for Heartgard Plus in preventing heartworm infestation.
- ❖ In 2005, Merial conducted an internal investigation regarding the increase in the number of reported cases of the lack of efficacy of Heartgard.



even if they are not 100 percent effective. A small number of heartworms cause far less damage than a heavier infection would. All of the preventives destroy most heartworm larvae before they can mature into adults and thus continue to offer significant protection.

Dr. Mobley points out that “Merial (and the other manufacturers) have been super great to honor their guarantee and pay for the treatment of these dogs. While they initially felt veterinarians were over-reacting, they took steps to hold meetings and get feedback on the situation.” He also says, “These dogs do not have heartworm disease, per se. They test positive, meaning that they do have some small number of heartworms, but they are not sick. Thus, I (and others) feel that most of the heartworm exposure has been handled by the preventives, even when we have these ‘lack of efficacy’ cases.”

While WDJ has made recommendations in the past that it can be safe and effective to give a dog heartworm preventives less frequently than every 30 days (e.g., every 40 days) or to use slightly lower dosages than the label recommendations, this newer evidence about the decreasing effectiveness of heartworm preventives made us rethink our posi-

tion. We strongly advise against giving heartworm preventives less often than monthly, or giving lower than recommended dosages. While this may have worked in the past, based on the original efficacy studies, it seems clear that it’s not working now.

It’s best to give heartworm preventives year-round as well, not only for better protection against infection, but also to ensure that the manufacturer will pay for treatment should your dog become infected with heartworms. We also recommend annual testing for dogs, especially for those who live in heartworm-endemic areas, even if you give preventives all year round.

You can reduce the risk of heartworm infection by keeping dogs indoors, particularly during peak mosquito times at dawn, dusk, and early evening, and at night; installing screens on windows and doors; reducing outside lights and using yellow bulbs where possible; and eliminating mosquito breeding sites, such as by draining any standing water, changing the water in birdbaths and wading pools at least once a week, and stocking ponds with mosquito fish. None of these measures, including keeping dogs indoors at all times, is 100 percent effec-

What you can do . . .

- **Make sure your dog is tested for heartworm annually.**
- **Give your dog preventives year-round for better protection – and to ensure that you meet the terms of the preventive’s guarantee.**
- **If you live in the Mississippi River Valley, consider switching to Advantage Multi for better protection from the resistant strain of heartworm.**
- **If your dog’s risk is high, talk to your vet about possibly giving your dog a higher dose of Heartgard or using preventives twice a month.**



tive or replaces the need for heartworm preventive medications. 🐾

Mary Straus is the owner of DogAware.com.

❖ When she reviewed the results of the 2005 investigation, Dr. Blaho-Owens asserts that “Merial had been aware of serious lack of efficacy adverse events reported regarding ‘Heartgard Plus’ since as early as 2002.”

❖ Merial claimed that its investigation showed that the increase in lack of effectiveness claims was the direct result of increases in sales, lack of owner compliance, and other factors – not a failure of the active ingredients in Heartgard products. Dr. Blaho-Owens claims she found numerous problems with the review, including “using ‘cherry-picked’ data, so as the persons evaluating the data would be led to support the conclusion sought by Merial.”

❖ In 2007, Dr. Blaho-Owens conducted further investigation in an effort to determine why “global monthly reports and the quarterly pharmacovigilance meetings demonstrated an obvious trend toward the increase in lack of effectiveness reports.” She was unable to find any reasonable explanation other than loss of efficacy of the Heartgard products.

❖ In 2008, Dr. Blaho-Owens’ supervisor “instructed her to stop her investigation.” One of the reasons given was that Merial had conducted a laboratory study showing “that heartworms had developed resistance to the ‘Heartgard Plus’ active ingredients, ivermectin and/or pyrantel; and that Merial was actively working

to reformulate ‘Heartgard Plus’ to make it more effective by adding additional drugs to the combination product.”

❖ In September 2009, Dr. Blaho-Owens was notified that Merial was named in a class-action lawsuit regarding ‘Heartgard.’

❖ Dr. Blaho-Owens claims that on September 11, 2009, she was instructed to destroy a document that was likely relevant to the pending class-action lawsuit. Dr. Blaho-Owens also claims she was instructed to stop generating any new analysis of data regarding Heartgard despite her ongoing concerns relating to the lack of efficacy of Heartgard.

❖ Dr. Blaho-Owens says she reported her concerns to Merial’s legal counsel. Shortly thereafter, Dr. Blaho-Owens says she learned that the Heartgard class-action suit concerned Merial’s refusal to change its labeling as per FDA order.

❖ In conclusion, Dr. Blaho-Owens’ suit alleges that “Merial fraudulently promoted and sold ‘Heartgard’ as 100% effective despite its knowledge since at least 2002, that ‘Heartgard’ products were substantially less than 100% effective, in violation of FDA regulations.” The suit says, “Merial knew about the LOE (lack of efficacy) problem since at least 2002.”



RECREATION

Strutting Your Stuff

K9 drill and demo teams can increase the fun of training – and socialize dogs and humans!

BY MARDI RICHMOND, MA, CPDT-KA

What brings together heelwork, tricks, music, a little high school nostalgia, and takes it all to a whole new level? K9 drill, display, and demonstration teams are not new, but as more of us are looking for different ways to showcase the rewards of positive training to the larger dog community, the concept of drill and demo teams is gathering steam.

The term “drill team” may evoke images of military marching routines (historically, military drill teams did occasionally include dogs), but today’s K9 drill and demo teams take many forms that involve dog/handler pairs. “I define it as a group of dog/handler teams, moving in unison to create a changing picture of shapes and lines, with or without music,” says Doris Herber, a retired dog trainer and behavior consultant who participated for several years in a drill team with her Basenji, Kodi.

Herber, who has had a lifelong love for dogs and a fascination with the roles dogs play in our lives, says K9 drill team has been one of her favorite activities. Herber is a pioneer in the small community of K9 drill teams, helping others learn about and participate in this activity through her articles and creating the K9 drill team Yahoo group.

While a K9 drill team is about moving together in patterns, Herber says drill work is not bound by the rules and restrictions imposed upon many dog-related activities. She describes it as very “open” and says that the process of developing routines lends itself to creativity.

The choreographed patterns of drill routines are often similar to marching band geometric formations, but they can be more akin to a square dance or line dance as well. Handlers may move through the routines with meticulous precision or with a more footloose style. Dogs move alongside their handlers heeling on the left or right side, but may also perform other movements such as pivots, turns, sits, downs, call to front, or return to heel.

These basic actions may be expanded upon with tricks such as dogs backing up, circling handlers, handlers circling

Members of the Santa Cruz Dog Training Club perform a drill routine with dogs of all sizes and types at the “Fetch a Wave Coastal Dogs Festival” this year. Photo courtesy of Karen Hilker.

dogs, leg weaves, spins – or even theatrics or a little comedy. The great thing about this activity is that it can be anything you and your teammates want it to be.

Participating in a K9 drill and demo team can benefit dogs, handlers, and even the community at large. Drill and demo teams are a great way to:

■ **Showcase the positive.** While positive training is not a requirement for a drill or demo team, the routines lend themselves to a positive approach. The demonstrations can be a wonderful way to showcase positive training techniques or bring attention to clubs and training organizations. At demos, people notice and comment on how focused the dogs are, and how even when the members make mistakes (and mistakes will be made!) the dogs look happy. “The connection that develops between handler and dog is amazing,” says Herber, and people take notice.

■ **Build basic skills.** The behaviors practiced during drill teamwork – moving together, turns, stops, stays, and more – are applicable in everyday life. Dogs learn to work near other people and dogs and to stay focused in the face of distractions. You will have the opportunity to work around crowds and in various locations. Plus, training with and being responsible to a group provides strong motivation to practice!

■ **Be creative!** Coming up with routines, finding music, and working through the

kinks can be a very creative process. “The creative exchange of ideas and the problem solving is addictive,” says Herber. Playing with patterns, movements, and putting it all together is as rewarding as participating and showing off during demonstrations.

■ **Build relationships.** Working with a group demands that you spend time with your dog. “Drill team work became one of my favorite activities because it involved much one-on-one time with Kodi,” says Herber. “This one-on-one connection is one of the best benefits of the drill team activity.” Participating in a drill and demo team can be a great way to help socialize your dog and help him or her to build successful relationships with others too. The camaraderie of training and working with other like-minded people and their dogs is an added bonus.

■ **Have fun with your dog!** “Kodi seemed to enjoy the drill team work as much as I did,” says Herber. “If I started the music, he would come running from wherever he was, look me in the eye with a ‘Let’s go!’ expression.”

FORMING A TEAM

If your interest is piqued and you think you might like to participate in a K9 drill or demo team, look around in your community or explore local dog training clubs. You may find a local drill team that you can join. But as likely as not, participating in a drill and demo team will mean starting one of your own; there just are not that many out there yet.

To get a team started, look for like-minded people – those who love dog training and who want to put in the time and effort it will take to form and perform with a team. The members of the demo team I belong to are all part of a small local positive reinforcement-based training club. You may also find interested team members in training classes, or through friends or neighbors. A drill or demo team can have as few as 2 or as many as 40 dog and handler pairs, but we’ve found that 8 to 10 pairs works especially well.

Once you’ve found a few others to start a team with, set your team goals. Think about the types of routines you’d like to do. Your team may want to experiment as a group to find where your interests and abilities lie. Are you a formal team who would enjoy clean, crisp

WORK AS A TEAM: A SOCIAL SKILL-BUILDING SIDE EFFECT

When I began working on this article, I asked the members from the Santa Cruz Dog Training Club (the team I participate with) what they valued about being part of a demo team. Their answers varied, but one universal theme rose from the group as a whole: Being part of the team was an incredible socialization opportunity for all of our dogs.

One important note: Not all of our dogs are the easygoing sort! Some have had trouble with other dogs, some with new people, and some with new environments. Working together has helped all of them relax and enjoy each other’s company, and it has also helped their social skills in other areas. A big element in this is simply the trust that developed from working with the group (or the “pack” as my teammates call it).

Cathy Leavitt says the best part for her Dutch Shepherd Lacey is socializing with her “pack.” “Seeing her expression when she arrives and sees the same dogs each week and gets to work with them tells it all,” says Leavitt.

Another member echoes her sentiment. “It has been great for Chloe to have a pack,” says Debra Seltzer of her American Eskimo Dog. “She is so much more comfortable around most dogs now out in the world.”

While a big part of the social-skill benefit is simply working around their teammates, the overall structure of the routines can help too. To help further the dogs’ comfort with each other and the bigger world, we have done some of the following:

- ✓ Paired dogs who are most comfortable with each other.
- ✓ Early on, we kept the same dogs next to each other throughout the routines.
- ✓ Gave a little extra space between teams (even a foot or two can make a big difference).
- ✓ Kept some very consistent elements in our routines and our movements to help build confidence.
- ✓ Plus, we celebrate when our dogs anticipated the next part of the routine or did other things that showed their confidence was growing.

As time has gone on, and the dogs have grown more accustomed to working together, even our least confident dogs have blossomed and will now work comfortably with any of the other dogs in the group. In addition, when new dogs come into the group, the “core dogs” seem to show them the ropes and help them relax much more quickly. The confidence-building element of working as a team is evident.



Often, dogs who regularly take part in a drill team learn to recognize and trust each other enough for one to jump over the other! Photo courtesy of Karen Hilker.

marching style routines? Or are you more inclined toward musical freestyle or tricks? Or a combination of both?

Your team will also need a place to practice. We meet at a local park, but you might also find space at a training facility or even through a community center. Figure that you will need a minimum of 40 x 60 feet of space, and for a larger group, you may need a little more.

You can start practicing, even before you have developed a routine. Practice basic skills such as:

- Attention. Your dog will need to be able to work with you and stay focused for the length of your routine.
- Heeling or walking together with pace changes, in straight lines and curved lines (perhaps on both sides).
- Transitions from sit to down to stand.
- Clean stops (usually in a standing position).
- Turns – at minimum a right, left, and about turn, but you may want to include flashier turns as well.
- Stay – especially with you walking purposefully away.
- Return to heel or dog circling the handler.
- Handler circling the dog.

These practices will build your skills for routines, and practicing in your group will also help the dogs get to know and trust each other before you work together on routines.

Expect the usual group dynamics in your drill and demo team – with the humans *and* dogs. For the humans, think about how you communicate with each other and make decisions, and who will lead your practices. Having some struc-



The Santa Cruz Dog Club practices for a performance, displaying a common configuration used in drill teams and more importantly, showing happy-looking dogs, with relaxed body language, tails up, and open mouths. Photo by Laura Nicole Johnson.

ture in place can help when it comes to group work, but plan to be flexible, too. For example, some team members will be able to learn routines in a few sessions; others may need a little more time and help from their teammates.

Consider the dogs' group dynamics, too. Some of the dogs may immediately work well as part of the group, while others may see their canine teammates as playmates. Some dogs may be comfortable working near certain dogs, but less comfortable with others. Give the dogs time and space, and gently help them learn to trust each other. Even dogs who get along well with other dogs can be uncertain when it comes to "working" within a group of other dogs.

DEVELOPING A ROUTINE

Developing a routine is a many step process and may be done by one or more of the team members, or the group as a whole. You might want to spend some

time looking at videos of other teams and their routines for ideas.

Herber says that the most important thing to do when working on a routine is to keep it simple. You might be tempted to add in a lot of fancy tricks, but a simple routine that is well done will show better than a more complicated routine that doesn't quite hold together. Consider using basic formations and transitions for most of the routine, and then pick just one or two flashier moments as focal points.

The formations are really the main structure of a routine. They are basically the geometric shapes (like a circle, rectangle, triangle, or diamond) that your team members create. The formations can be made up of single or double lines, crossed lines, arrows, or curved lines. When your team is in a formation, you can move together as a unit, keeping the shape, for example walking in a circle. Or you can remain stationary while having the dogs perform a behavior such as circling the handler or while having the handler

A uniform as simple as matching T-shirts can help visually unify a team. Here, members of the Paul Bunyan Dog Training Association (PBDTA), of Bemidji, Minnesota, put their dogs through their paces. Photo courtesy of PBDTA.



perform a behavior such as circling the dogs.

The transitions are what you do to get from one formation to another. These are essential to the flow of the routine. Imagine your team is in a circle formation facing the center, and you want to move into a straight line with everyone facing the audience. You could move by “following the leader” around the circle and into a line, or with half of the team moving in one direction and half in the opposite direction, meeting in the middle. How you put this all together is part of the creative challenge and fun.

When planning a routine, be aware of the skill set and abilities of your handlers and dogs. If your group has varied levels of experience, you will need to consider what all of the team members can reasonably accomplish. Herber says, “We had two greyhounds on our first team. They could not sit well.” They decided to have the greyhounds at each end of the line in a standing position while the other dogs sat. The dogs’ limitations became a design decision!

Build in some flexibility to your routines too. You might end up performing a routine in a smaller space than you expected, or you may have a team member not be able to make a performance because of an illness. “Once we got to a location to perform for a Boy Scout troop and found a large support pole in the middle of the space,” says Herber. “We had to quickly alter our routine to accommodate the pole.”

Your group will also need to decide if you want to use music. Music is not essential, but it can give you a rhythm to work with and it can add polish to a performance. When you choose music, know that it will be something that you will listen to a lot while practicing! Choose something that you and your teammates will enjoy, but that will also be a crowd pleaser. Pick something with a good beat and look for the right tempo for your group. Consider copyright issues too. If you are doing small performances and you are not charging money, you will not likely have an issue, but it’s something to keep in mind.

Once you have thought about the types of patterns, transitions, and movements you’d like to include and you’ve chosen your music, you’re ready to start putting your moves to the music. It can help to listen to the music and walk through different moves to make sure

they work together (this might be best done without the dogs!). You may want to diagram your routine (think football diagrams) to help you visualize. Once you get an idea of what you want to do, try it out and adjust as needed.

PRACTICE, PRACTICE . . .

For a polished routine, you will need more practice than you might imagine. You (the human partners) will need to learn your part – where you need to be and when; it’s very much like learning a series of dance steps. Then you’ll need to learn to do it in coordination with your teammates. Spacing, timing, and straight lines will make all the difference in how your routine looks to an audience. It is a great idea to practice this without your dogs first; your learning mistakes could cause confusion for your dogs.

While you’re learning your part, practice individual elements with the dogs, such as moving together in a straight line or a circle. Even a simple routine can be much harder for the dogs than it may seem, so laying a good foundation can really help keep it fun for them.

Once you and the dogs have got your parts down, and your team is working well together, take your practice to new locations. Don’t be surprised if your dogs work differently on grass than they do on pavement, and moving from outdoors to indoors can be a whole new experience. All of you may have a harder time when there is another activity going on right next to where you are practicing

or performing, too. At a recent performance, the announcer in the ring next to ours was so loud, that we (the people) had a really hard time with our timing and cuing off of the music. In addition, dogs running lure coursing across the field from our ring gave our dogs an extra distraction. You never know what challenges you might run into, so practicing around all kinds of distractions will help.

THE SHOW ON THE ROAD

When you and your teammates are comfortable with your routine, look for places to perform. “Our nameless K9 drill team did performances for training classes, nursing homes, school groups, Boy Scouts, and anyone who would watch,” says Herber. Local dog events, shelter fundraisers, and other community activities are also good venues.

For some members, the performance will be the highlight. It can be fun to show off your dog and entertain a crowd. For others, the actual performance might be a little nerve-wracking. But the payoff at the end can be worth it.

“When everything falls into place and someone comes up to you afterward and says, ‘You gave me goose-bumps and brought tears to my eyes,’ it makes it all worthwhile,” says Herber. 🐾

Mardi Richmond is a writer, trainer and a member of the Santa Cruz Dog Training Club’s un-named heelwork and drill demo team. Being part of the demo team is by far her dog Chance’s favorite activity!

MORE RESOURCES

You can learn more about K9 drill, display and demo teams by:

- ❖ **JOINING THE YAHOO! K9 DRILL TEAM GROUP:** pets.groups.yahoo.com/group/k9drillteam/
- ❖ **SEARCHING YOUTUBE FOR: “K9 DRILL TEAMS,” “DISPLAY TEAMS,” OR “GROUP FREESTYLE.”**
- ❖ **WATCHING TWO FUN (AND VERY DIFFERENT FROM EACH OTHER) EXAMPLES OF DISPLAY TEAMS:**

The Golden Retriever Display Team at Crufts 2008
tinyurl.com/3j5f7uf

Népszigeti Kutyaiskola Bemutatója at Euro Dog Show 2008
tinyurl.com/3bgqjyz



Due Diligence

***Never trust the front of that dog food label!
As always, it's the ingredients list and GA
that tell you what's special about a food.***

BY NANCY KERNS

A special, perfect food for every dog? That's what the pet food industry would like you to believe; that's the direction taken by most of the large pet food makers – foods for tall dogs, small dogs, fat dogs, old dogs . . . you get the picture. The tactic must work, because all the biggest companies do it, and they wouldn't make so many foods if they weren't selling well.

Dog owners should be aware, though, that there are actually only two types of products that provide legally defined “complete and balanced nutrition” for dogs. These are “adult maintenance” products formulated for adult dogs, and “growth and reproduction” (also known as “all life stages”) products formulated to meet the increased nutritional requirements of pregnant and nursing females and puppies.

As we explained in “Special Education” (in the May 2011 issue), only these two sets of “nutrient profiles” have been established as the basis for regulation of dog food in the U.S. There are *no* other dog food descriptions with legal mandates for certain nutrient levels.

We'll say it another way: There are no legal nutritional guidelines or standards for foods that are identified by their makers as intended for senior dogs, weight loss, toy breeds, indoor dogs, Chihuahuas, or joint health. If they have a “complete and balanced” statement on the label, they meet the requirements for either adult dog maintenance or “growth and reproduction.”

Most of the giant pet food companies continually conduct research and tinker with their formulas, looking for anything that “performs” better in the dog. They want to be free to innovate and incorporate anything that gives their products a market advantage, including trendy food

ingredients and higher (or lower) than average amounts of certain nutrients. No one in the industry wants another set of nutritional standards they'd have to meet for a certain type of food.

DEVIL IS IN THE DETAILS

Now that you understand that there are absolutely no regulations or standards that ensure that a “senior” dog food has anything unique to offer senior dogs, or that a food for “indoor” dogs is in any way different from foods for outdoor dogs, you're ready to look at these sorts of products with a justifiably cynical eye.

If you're considering one of these specialized foods, try to determine what,

exactly, are the features that are supposed to be unique to that product and so allegedly perfect for dogs like yours. In many cases, the differences in formulation between the “special” food and the plain old adult variety are negligible – but you won't necessarily be able to ascertain that from the description of the product on the front of the bag, the company website, or the product's literature.

As always, your best clues for a reasonable analysis of a dog food are found on its list of ingredients and guaranteed analysis (GA). By law, only the minimum amounts of protein and fat and the maximum amounts of fiber and moisture in the food are required to appear on the GA. However, when it comes to specialized foods (with attendant claims of special benefits) the makers should, in our opinion, include those nutrients on the GA.

For example, “joint health” foods generally contain glycosaminoglycan (GAG) supplements, such as glucosamine and/or chondroitin. If we were paying a premium for a product that contained a GAG supplement in a supposedly therapeutic or beneficial dose, we'd want to see the type of supplement used, and in what amount, guaranteed by its inclusion on the GA. (The GA is subject to testing and enforcement by state feed control officials.) And we'd be fairly suspect of a “joint health” product that did not have its “joint health” ingredients quantified on the GA. (We'll discuss GAGs more in just a minute.)

The next thing we'd do is compare the ingredients list and GA of the “special” food with a regular, adult version of the food from the same company. If there are only minor differences between the

PREVIOUSLY ON “SPECIAL FOODS”

“Special Education,” in the May issue, discussed the difference between “puppy food” and adult food, and explored the troubling lack of consistency in so-called “senior” and “weight control” diets for dogs.

The most important take-away point of the article: No matter what type of food you buy for your dog, you need to check the amount of protein and fat on the guaranteed analysis. The amounts can vary widely, so if you don't pay attention, your dog can experience unexpected weight gain or serious weight loss after you switch foods.



PRODUCT	DESCRIPTION /CLAIM FOR GAG SUPPLEMENTS	GLUCOSAMINE HYDROCHLORIDE	CHONDROITIN SULFATE
IAMS Premium Protection Adult Dog	"Natural sources of glucosamine and chondroitin sulfate for healthy joints and mobility."	400 mg/kg	40 mg/kg
IAMS Veterinary Formula Joint/Canine	"...contains a blend of ingredients to help support joint health, including glucosamine and chondroitin sulfate (naturally occurring compounds that aid in the nourishment and maintenance of healthy joint cartilage)..."	475 mg/kg	45 mg/kg
INNOVA Senior Plus	"...includes glucosamine and chondroitin"	600 mg/kg	500 mg/kg
PURINA ONE SmartBlend Vibrant Maturity 7+ Senior	"Natural sources of glucosamine help maintain healthy joints."	400 ppm	0 mg/kg
PURINA Veterinary Diets Joint Mobility Canine	"Natural source of glucosamine."	1,000 mg/kg	0 mg/kg
ROYAL CANIN Labrador Retriever 30	"We include supplemental glucosamine and chondroitin to help support healthy joints and reduce inflammation in the aging dog."	1,100 mg/kg	100 mg/kg
ROYAL CANIN Maxi Joint and Coat Care 28	"Supplemental levels of glucosamine and chondroitin may help to protect your large breed dogs joints..."	780 mg/kg	220 mg/kg
WELLNESS Super5Mix Just for Seniors	"...supports hip and joint health"	800 mg/kg	700 mg/kg

ingredients of the two foods (say, the fifth and sixth ingredients are reversed), or only a small difference in the amount of fat or protein, you're probably paying for marketing, not a genuinely novel food for your special dog.

Some pet food makers are fiddling with the physical form of the food to customize it for certain dogs. "Large bites" and "small bites" have been around for ages, but today some companies are going farther. For example, Royal Canin has a food intended for Golden Retrievers, with a kibble shape the company describes as "specifically designed to prevent gulping, help your dog to feel fuller more quickly, and reduce the amount of calories consumed." Hmmmm . . . if they say so . . .

GAGS FOR JOINT HEALTH

"Joint health" or "mobility" foods are now among the most popular types of "special" dog foods on the market. The ingredients that usually support that claim, as mentioned a moment ago, are glycosaminoglycan (GAG) supplements, although manufacturers will sometimes list other ingredients as contributing to joint health.

Glucosamine is usually derived from the shells of shellfish; the chondroitin used in dog food is usually sourced from poultry cartilage.

GAG supplements are often described as the building blocks of cartilage and joint fluid, and when given independently of the diet, the typical recommended therapeutic dose is about 500 mg glucosamine and 400 mg chondroitin per 25 pounds of the dog's body weight

per day. Dogs often require a therapeutic dose daily for as long as six to eight weeks before any improvement in mobility or a decrease in osteoarthritic pain is seen. If no improvement is seen after 12 weeks of a therapeutic dose of the supplement has been given to the dog daily, it probably will not help the dog to continue its use. We've heard

When GAG supplements first began appearing in dog foods, the amounts used were very low – too low, in our opinion, to provide any real benefit to the dog (though maybe their presence on the label made the owner feel better). Today, they are present in widely varying amounts in canine "joint care" products (and some senior foods).

To illustrate this point, in the table above, we've listed the amounts of glucosamine and chondroitin in eight joint health or senior dog foods. Notice how the amount of the supplements included in the foods doesn't necessarily correspond with the implied level of commitment to the special purpose of the food? Inova and Wellness both offer regular old senior foods with fairly high amounts of the GAG supplements – and with very low-key descriptions of their GAG content. Contrast these with Iams' Veterinary Formula Joint/Canine food; in our opinion, the serious name and serious description of the GAGs' purpose in the product don't match the amounts included. In fact, Iams' "veterinary" product contains not much more of the supplements than one of its adult foods.

We included the Purina ONE SmartBlend food just so that you could wonder along with us: How on earth does one

translate parts per million into a standard dosage of milligrams per kilogram?

The levels of glucosamine and chondroitin seem to be a major factor in how Royal Canin individualizes its many products.

PROBIOTICS & PREBIOTICS

Probiotic organisms are living beings that support the resident microflora of your dog's gut. Many of the ones used

What you can do . . .

- **Don't trust the name of the food or even the description on the front of the bag or can; check the guaranteed analysis and the list of ingredients to see if it really is what it says it is.**
- **When seeking a specific benefit from a food, compare products that offer that benefit with each other. Products may range widely in the amount of the beneficial ingredients.**
- **For the most therapeutic results, don't rely on a special food to supply a beneficial supplement; it's more effective to administer reliable dosages of supplements independently of the dog's food.**



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to supplement canine (and human) diets are beneficial species of bacteria, including *Lactobacillus acidophilus*, *Bifidobacterium bifidum*, and *Lactobacillus bulgaricus*. Probiotics are credited with enhancing digestion and absorption of nutrients, supporting detoxification and elimination processes, and helping to boost the dog's immune system.

For greatest benefit, probiotics need to be delivered to the dog:

- in high amounts
- in live, active form
- in a variety of species (not just one).

Prebiotics are non-digestible food ingredients that selectively stimulate the growth of the beneficial bacterial species in the colon, such as *Bifidobacteria* and *Lactobacilli*.

It's become fairly common to see some sort of prebiotic in top-quality "natural/holistic" foods. Most common are fructooligosaccharides (FOS) – plant sugars that occur in a wide variety of fruits, vegetables, and cereals. They are produced commercially by partial hydrolysis of chicory inulin (an oligosaccharide found in chicory root), or from sucrose (sugar) using an enzymatic process. Only very small amounts of prebiotics are needed for a beneficial affect on the dog's digestion. (Doses that are too high can cause gassiness.)

The amount or dosage of probiotics used is usually expressed in millions or billions of "colony forming units" or "CFUs." For example, the label of the Innova Adult Large Bites food says it contains 90,000,000 CFU/lb "total microorganisms." (The species of the beneficial bacteria used are not divulged.)

Prebiotics are stable substances; living, active probiotics are not. Heat kills them, rendering them inactive (that's why they appear only in dry dog foods, not canned; the high heat of the canning process would kill them and render them useless). Most dog food companies that include beneficial bacteria in

their products say that the probiotics are added to the food after it has cooked and cooled; and some say that live cultures were used in the food. However, none that we are aware of claim that the bacteria is *still alive and active* by the time it's consumed by the dog.

Innova, for example, claims, "Innova products include live, active bacteria called probiotics . . ." We have no doubt the bacteria were alive when *included* in the food; probiotics are generally applied in the final step of food production. After the kibble has been cooked, cooled, and coated with a fat source, it's dusted with the probiotic powder. But we doubt that the bacteria can survive the oxidative activity of the food as it ages and the temperatures that dry food is often subjected to.

Again, if we really wanted our dog to enjoy the benefits of a probiotic supplement, we'd look for a good supplement and administer it separately from our dog's regular diet.

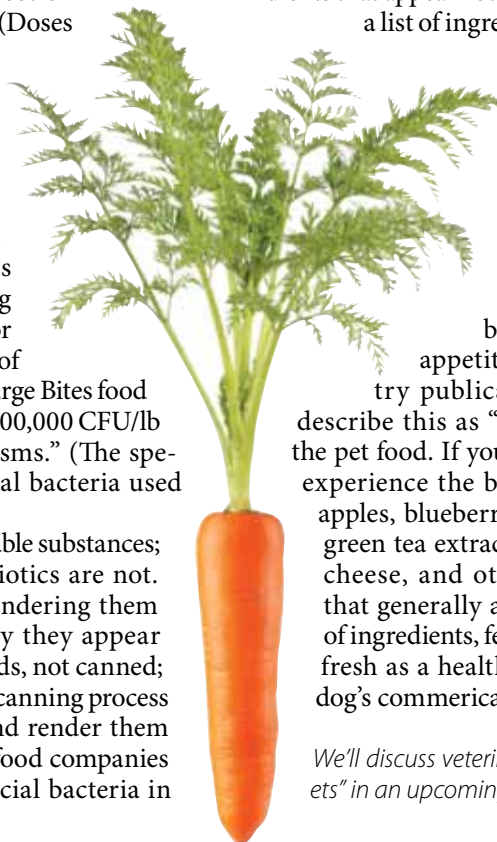
HERBS, BERRIES, AND FRUITS, OH MY

It's gotten very popular in recent years for dog food makers to include a long list of whole, healthy foods on their products' lists of ingredients. Please understand that while it makes a food sound delicious, the actual amount of the ingredients that appear 10th or 15th or 25th on

a list of ingredients that ends up in your dog's tummy is *very* low; we'd characterize it as so low as to be negligible.

The real purpose of many of these ingredients on a pet food label is to whet *your* appetite. Pet food industry publications sometimes describe this as "humanization" of the pet food. If you want your dog to experience the benefits of carrots, apples, blueberries, garlic powder, green tea extract, spinach, cottage cheese, and other terrific foods that generally appear low on lists of ingredients, feed them whole and fresh as a healthy adjunct to your dog's commercial diet. 🐾

We'll discuss veterinary "prescription diets" in an upcoming issue.



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Not long ago, scientists were reluctant to give nonhuman animals credit for having emotions. We're past that now, but there is still lots of debate about and inquiry into their cognition.

mean the animals who display them have emotional *feelings*. (I don't know how anyone can think this, but some scientists really do!) Others, such as the esteemed neurobiologist Dr. Jaak Panskepp of Washington State University, argue that if it walks like a duck and quacks like a duck – it's probably a duck!

Given that most of us now accept that many animals in addition to humans have at least *some* emotional capacity, the last stronghold of science is the vast superiority of human cognition: the ability to think.

There was a time when our species believed that dogs (and other nonhuman animals) possessed very little cognitive potential compared to our own large front-brain ability to ponder the mysteries of the universe. It was believed that the size of the cortex controlled cognitive potential, and since a dog's cortex is relatively smaller than a human's, they must possess very little real ability to "think."

Recent studies, however, have demonstrated that even insects, with their tiny brains, are capable of more complex thought than they've ever been given credit for.

GETTING UP TO DATE

According to a growing number of studies, most notable those done by Lars Chittka, Professor of Sensory and Behavioural Ecology at Queen Mary's Research Centre for Psychology and University of Cambridge colleague Jeremy Niven, some insects can count, categorize objects, even recognize human faces – all with brains the size of pinheads.¹ Instead of contributing to intelligence, big brains might just help support bigger bodies, which have larger muscles to coordinate and more sensory information coming in via the larger body surface.

¹ "Are Bigger Brains Better?" by Lars Chittka and Jeremy Niven. Published in *Current Biology*, Volume 19, Issue 21. Entire text can be read online at tinyurl.com/3fgu5bu.

What Do You Think?

Some thoughts on – and recognition of – canine cognition and emotions.

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

Today, we look back with horror at the time, not so very long ago in historical perspective, that scientists assured us that nonhuman animals didn't feel pain. We know now how cruelly wrong that was. Next we were told that the thing that differentiated us from the other animals was that humans made and used tools, and other animals didn't. Dr. Jane Goodall's work, among others, proved the error of that position. You can find countless examples of various nonhuman animals using (and even creating) tools on Youtube.com! My favorite video clip is of a crow *bending a wire* into a loop so he can reach into a long tube to hook the handle of a small container of food so he can pull it up and eat the food (you can see the clip for yourself at tinyurl.com/cyaeep).

Okay, so other animals can make and use tools, but certainly they don't have "human" emotions. Or maybe they do. In fact, it's pretty species-centric to even call them "human" emotions when they are simply . . . emotions.

Current research has demonstrated that many species, including our beloved canines, share brain circuitry very

similar to the human part of the brain that controls emotion – the amygdala and the periaqueductal grey. While there's no doubt among most dog lovers that dogs have emotions, this concept is still being discussed in the halls of academia. Some insist that even though animals show emotional *behaviors* that we can observe, we can't assume the behaviors

Only in the past decade has the domestic dog begun to be accepted as a study subject for behavioral research. Brian Hare, assistant professor of evolutionary anthropology at Duke University, opened the Duke Canine Cognition Center in the fall of 2009, the same year Marc Hauser, a cognitive psychologist at Harvard University, opened his own such research lab. Similar facilities are now operating across the U.S. and in Europe.

The results are challenging our past beliefs about canine cognitive abilities. Many dog owners have heard of the studies that demonstrate a dog's ability to follow a pointed finger.

More recently, in a study conducted by John W. Pilley and Alliston K. Reid, the accomplishments of Chaser, the Border Collie who learned more than *a thousand names of objects* have generated excitement in the dog world.²

Of even greater interest to cognitive scientists is Chaser's ability to distinguish between the names of objects and cues. She understands that names refer to objects, regardless of the action she is told to perform in relation those objects. She was asked to either "nose," "paw," or "take" one of three toys in an experiment, and could successfully do so.

Even more astounding was the final piece of this study, which concluded that Chaser (and by extrapolation, other dogs) is capable of inferential reasoning by exclusion. That is, she can learn the name of a new object based on the fact that it is the only novel object in a group of objects whose names are all already known by her. Meanwhile, biologist and animal behaviorist Ken Ramirez is currently engaged in eye-opening research that studies a dog's ability to imitate (copy) another dog's behavior.

While growing evidence supports a theory of significant cognitive ability in dogs, the last holdout may be *metacognition* – the "self-awareness" that some tightly hold to be a uniquely human trait. But just like

² "Border Collie Comprehends Object Names as Verbal Referents," by J. W. Pilley and A. K. Reid. *Behavioural Processes*, November 2010.

treasured misbeliefs from prior eras, this, too, may fall.

David Smith, PhD, a comparative psychologist at the University at Buffalo who has conducted extensive studies in animal cognition, says there is growing evidence that animals share functional parallels with human conscious metacognition – that is, they may share humans' ability to reflect upon, monitor or regulate their own states of mind.

We now find it absurd to have ever believed that other animals don't feel pain; there may well come a time when we also find it absurd to believe that dogs and other nonhuman animals aren't self-aware.

LET'S TALK ABOUT IT

Recently, I had the honor of attending (and speaking at!) the 21st conference of the Professional Animal Behavior Associates (PABA), and the theme of the entire conference was "Exploring the Dog's Mind." What a delight!

I walked into the lecture hall at the University of Guelph (Ontario), excited to be speaking among such notables as Dr.



Dr. Andrew Luescher, director of the Animal Behavior Clinic at Purdue University in Indiana, remarked on the unsoundness of today's German Shepherd Dog, among other breeds.

Andrew Luescher of Purdue University; Dr. Alexandra Horowitz, Barnard College at Columbia University; Dr. Meghan Herron, Ohio State University; Karen Pryor, Karen Pryor Clickertraining; Kathy Sdao, Bright Spot Dog Training; and omigosh, Dr. Jaak Panskepp! I was in heady company. Plus, I hadn't attended a conference for some time, and I was eagerly looking forward to this one that

was focused on cutting-edge concepts in canine cognition – how dogs think. I was not to be disappointed.

DR. ANDREW LUESCHER

Board-certified veterinary animal behaviorist and director of the Animal Behavior Clinic at Purdue University, Dr. Andrew Luescher emceed the conference, and spoke on "The Psychological Needs of Dogs," and "Companion Animal Welfare." Dr. Luescher addressed the now well-known importance of early development, and stressed that "Deficiencies or abnormalities in early development can often not be compensated for, and that behavior/temperament issues based on early deficient development have a poor prognosis."

While we all know of success stories from people who have rescued and rehabilitated dogs who were either undersocialized or traumatized during their early developmental periods, the greater likelihood is that pups who don't have the opportunity to develop normally during this period will never be completely normal.

Luescher reminded us that part of proper early development requires puppy-proofing and management. While old-fashioned trainers still assert that a dog has to learn that there are consequences for mistakes in order to be fully trained, Luescher refutes this, saying, "The idea that a puppy has to do the wrong thing to learn what the right thing is, is wrong." His behaviorally scientific explanation for this is, "If a behavior is successful, others are suppressed." In other words, if a pup is reinforced for doing desirable behaviors, the undesirable ones don't happen.

In addressing companion animal welfare, Luescher focused on the unsound practice of always breeding for "more."

We have a tendency in our show ring/breeding culture to always exaggerate characteristics. If a breed is big, make it bigger; if it's small, breed for smaller. If a nose is long, make it longer; if it's short, make it shorter.

The fallacy of this approach is that it breeds unsoundnesses into our dogs, such that Bulldogs can't breathe well; the giant breeds have very short lifespans;

and many toy breeds can't whelp without a Caesarian section.

DR. MEGHAN HERRON

Board Certified Veterinary Animal Behaviorist Meghan Herron, DVM, head clinician at the Behavioral Medicine Clinic at the Ohio State University College of Veterinary Medicine, spoke about her research project on the effects of confrontational training methods on dogs.

Since we are always alert for scientific verification of our assertions that positive training methods are better, and documented statistically significant studies on training methods are rare, Herron's study is important for dogs and the people who love them. Notable conclusions from her study included:

- **Confrontational techniques increase the likelihood of aggression, especially in dogs**
- **Few dogs respond aggressively to reward-based training**

Herron acknowledges that her study had some limitations (as do all studies): it was a "self-selected" sample of dogs presented at the clinic for behavior problems; the study utilized a limited list of potential behavior interventions; it was a self-reporting study, relying on owner-interpretation of behavior; and it did not study the *efficiency* of various behavior interventions, only the uses and outcomes.

Herron is planning a future study that will utilize a larger sample size; assess a more general population and a wider variety of methods; conduct a stricter comparison between positive reinforcement and positive punishment; and design a prospective study that follows the behavior of the study-group dogs into the future.

KATHY SDAO

The dynamic speaking style of well-known and highly respected applied animal behaviorist Kathy Sdao, MA, ACAAB, puts her in great demand as a seminar presenter. Early in her career, Sdao trained marine mammals at a research laboratory at the University of Hawaii for the U.S. Navy. Now based in Tacoma, Washington, she's been training dogs and their people since 1995.

Sdao addressed the often-raised question as to whether old-fashioned coercion

training is *faster* than clicker training. Sdao confirmed that if two trainers were in a contest to see which one could get an untrained dog to place his body flat on the ground faster, the trainer using force would likely win. She also confirmed what any experienced clicker trainer knows: that more valuable long-term goals are without a doubt better served by clicker training than by the use of force and coercion. What sort of goals? Simple and clear communication; motivating the dog to act, interact, and engage with humans; building a relationship of trust between dog and human; and creating an accelerated learning process.

Sdao also presented a session on "Hierarchy Malarkey," refuting the unfortunate "conventional dominance wisdom" that lingers in the minds of the dog-owning public despite the best efforts of positive trainers and behavior consultants worldwide. (In fact, "anti-dominance theory" was an ongoing thread throughout the conference.)

Sdao presented a slightly different perspective by arguing that even the "Nothing In Life Is Free" protocol promoted by many positive trainers – in which a dog has to *earn* all good stuff by offering a good manners behavior (such as a sit) first – is based in outdated "alpha" theory. Life with dogs isn't all about who is trying to overthrow the pack leader. Sdao suggests that this perspective needs to be replaced by an approach that embraces cooperation and affection.

DR. ALEXANDRA HOROWITZ

Alexandra Horowitz, MS, PhD, is an assistant professor at Barnard College in New York. She has specialized in animal cognition, and has conducted more than 10 years of research on dogs. We anticipate that her current research and studies will provide much needed and credible information for those of us who insist that anthropomorphism is no longer a dirty word.

Anthropomorphism is the use of human characteristics to describe nonhuman animals. According to a 2008 survey of 337 dog owners, most

A look of shame or guilt? No, these are appeasement behaviors: squinty eyes, lowered ears and body posture, tucked tail, and raised paw. The dog is showing deference to you and attempting to divert your wrath.

owners believe that their dogs feel sadness, joy, surprise, and fear. There was less of a consensus on other "secondary" emotions that some attributed to their dogs:

■ Embarrassment	30%
■ Shame	51%
■ Disgust	34%
■ Guilt	74%
■ Empathy	64%
■ Pride	58%
■ Grief	49%
■ Jealousy/fairness	81%

Most dog training and behavior professionals agree that the behavior owners commonly describe as "guilt" is actually simply appeasement behavior offered in response to human body language. Horowitz designed a study to test the guilty look phenomenon, by having the owner leave her dog in the room with a piece of food, after telling the dog not to eat it. Sometimes Horowitz left the food in view, sometimes the dog ate it and sometimes not, and sometimes she removed it and told the owner the dog ate it. If the food was gone, the owner scolded the dog. Horowitz's findings were:

1 Guilt did not change the rate of the guilty look. The rate of measured "guilty" behaviors was similar whether the dog was "guilty" (ate the treat) or "not guilty" (didn't eat the treat).



2 Owner behavior *did* change the rate of the guilty look. The rate of guilty behavior was significantly higher when the dog was scolded than when the dog was greeted, regardless of whether or not it had eaten the treat.

3 Dogs showed the *most* guilty behavior when they were “not guilty” but punished. Scolding led to higher rates of guilty look behavior when the dog *had not* eaten the treat than when the dog *had* eaten it.

It’s always nice when we have science to back up some of our dearly held training and behavior beliefs, like the one that says “dogs are offering appeasement behaviors, not showing guilt, when their owners come home to a soiled carpet or overturned garbage can.” Horowitz’s current and ongoing study on whether dogs perceive “fairness” is likely to have equally interesting results.

Horowitz’s second intriguing presentation was entitled “What Is It Like to Be a Dog?” She reminded us that because of dogs’ incredible sense of smell, their world arrives on the air, and they tell time differently than we do. If the wind is right, they can smell the future – that which is in front of them that they will soon encounter. When they are smelling the ground, or the neighborhood peepost, they are actually smelling the past – that which has come here before.

For more on her perspectives on how dogs perceive the world, you can read Dr. Horowitz’s fascinating book, *Inside of a Dog; What Dogs See, Smell and Know*, published in 2009.

KAREN PRYOR

A behavioral biologist with an international reputation in the fields of marine mammal biology and behavioral psychology – as well as one of the founders of clicker training – Karen Pryor spoke on “creativity and the animal mind.”

According to Pryor, being creative implies novelty: producing something new and different. She referenced Dr. Jaak Panskepp’s work with *the seeking system* – that which motivates an animal to go out and have fun. Seeking behavior is not driven by survival; it happens only when the animal is already comfortable.

In humans, seeking includes things like window-shopping, doing puzzles and playing games, and Web surfing. In nonhuman animals, seeking may include

exploring new terrain and showing curiosity about new objects and other living things.

Pryor suggests dog training can capitalize on seeking and creativity by clicking and treating exploration, chance-taking, persistence, *and* novel behavior. Because your dog can’t be wrong (you’ve not *asked* for a behavior) there’s no association with failure, so the dog has fun. The more behaviors you capture or shape, the more innovations your dog is capable of inventing. The well-known “101 things to do with a prop” is a great example of asking your dog to innovate.

DR. JAAK PANSKEPP

Jaak Panskepp, PhD, is the Baily Endowed Chair of Animal Well-Being Science for the department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology at Washington State University’s College of Veterinary Medicine, and Emeritus Professor of the department of Psychology at Bowling Green State University.

Dr. Panskepp has been described as being 20 years ahead of his time. His work on animal emotions and the brain’s “seeking system” – fueled by the neurotransmitter dopamine, which promotes states of eagerness and directed purpose – takes behavior science to the cutting edge. Panskepp describes the seeking system as, “the mammalian motivational engine that each day gets us out of the bed, or den, or hole to venture forth into the world.”

Panskepp argues convincingly that not only do nonhuman animals possess emotions, but they also possess what behavioral science calls “mind.” In refuting the “lack of proof” argument in the “do dogs have emotions?” discussion, he asserts that scientists deal with “weight of evidence,” not “proof.” The weight of evidence overwhelmingly indicates that animals have feelings. In fact, the evidence is so strong that animals have emotional feelings (not just emotional behaviors), that he says it’s a done deal, case closed (although the argument still rages in academic circles).

The question of “mind,” or metacognition, may be more open to debate. Mind has three fundamental properties:

■ **Subjectivity** – Experiences “self” in the real world.

■ **Volition** – Deliberate behavior;

intentionality, seeking, desire, interest, and expectancy.

■ **Consciousness** – The capacity for self-consciousness, includes questions about “theory of mind” in nonhuman animals; whether animals are capable of attributing mental states to others.

Hard scientific evidence of canine mind is harder to come by than canine emotion. The same brain circuits exist in humans and many other animals, suggesting that mind may exist for them. Panskepp argues that animals *do* possess at least some degree of mind, and that the answer to this question will become clearer with continued neurobiological and cognitive study. Indeed, some aspects of canine mind seem inarguable. Does anyone doubt that dogs have volition? If it walks like a duck . . .

PAT MILLER

I also spoke at the conference, on two topics dear to my heart: shelter assessments and modifying dog-dog reactivity. I presented video and an applied science discussion from my work in these areas (citing Kelley Bollen’s 2007 study on shelter assessments³).

Mostly I watched, listened, and marveled at the depth and breadth of information offered at the conference, and at the evidence of how far we have come in the world of dog training and behavior. Not so long ago, few, if *any*, dog trainers had a clue about the science of behavior and learning, nor a working knowledge of operant and classical conditioning, theory of mind, metacognition, creativity, shaping, or any of the other concepts presented at this conference.

We may still have much to learn about what our dogs are thinking, but we have come a long, long way from those dark days when animals supposedly didn’t feel pain. 🐾

Pat Miller, CBCC-KA, CPDT-KA, CDBC, is WDJ’s Training Editor. She lives in Fairplay, Maryland, site of her Peaceable Paws training center, where she offers dog training classes and courses for trainers. See “Resources,” page 24, for more information.

³ “Behavioral evaluation and demographic information in the assessment of aggressiveness in shelter dogs,” by Kelley Bollen and Joseph Horowitz. *Applied Animal Behaviour Science*, July 2008.

WDJ's readers improve their dog's lives, help each other

The article on homeowners' and renters' insurance ("No Insurance," WDJ June 2010) listed Amica as one of the "good guys." We had Amica insurance for 22 years for our home and car. We rescued a Pit Bull a year ago and we live in Ohio, so we needed the added dog liability insurance. When we called Amica, they asked about the dog. He (Dillon) has no bite history, goes to the vet, lives with two other dogs, and completed his Canine Good Citizen (CGC). Our yard is fenced and Dillon stays in the house. Amica would not insure us. Farmer's Insurance did, however.

Judy Butler
Wickliffe, OH

Thanks for the feedback. The more that dog owners share their especially good and especially bad experiences with insurance companies, the better we can identify the ones to recommend to our dog-owning friends – and warn them away from the ones that discriminate against certain types of dogs.

When I saw the article in the June issue about noise fear ("Can't Avoid Noise"), I read it immediately. My dog Lucy is terribly afraid of thunderstorms. She barks, runs back and forth, and gets almost hysterical. I should say, she *used to* do those things. We tried counter-conditioning and desensitization, drugs, etc. Nothing worked.

Then our vet asked if we had ever heard of the Thunder-shirt. We had not. I checked the website (thundershirt.com) and

decided to give it a try. It should be renamed! I call it the miracle shirt. The very first time we had a bad storm, I put the shirt on Lucy and she showed *zero anxiety*. She slept like a baby. I thought it was too good to be true. The next time, same reaction. Please look at the website and believe what it says. It has made a huge difference in our lives during noise events.

This product is truly remarkable. I hope that you will consider check-

Sandra Henry
via email

Lucy models her Thundershirt. Her owner is so impressed, she's ordering a second one in pink, so Lucy can be fashionable and calm!

ing it out yourself and mentioning it in a future issue. It is so much better than using a drug.

Regarding "Diet Upgrade" in the May issue: I add warm water to my dog's dry food. I tried it when Leo was hungry on his smaller, weight-loss portion of food. He was so hungry right after he ate that he would swat the bag of kibble with his paw as if I had short-changed him!

I had considered switching Leo to the canned version of his food because it was more volume and weight for the calories, but it was almost four times the price. I just could not afford it. The main ingredient difference was that the canned food had chicken broth, and the dry food's bag suggested adding warm water to release the aromas. I decided to try it.

I use a large flat-bottom bowl divided into seven "pie" wedges (to make my dog eat slower), so his kibble is all in one layer. I cover that layer with warm (not hot) water and let it sit on the counter for two minutes. Most of the water is absorbed by the kibble, making each piece swollen to roughly twice its dry size. My dog is happy and spends a lot more time eating his food. No more swatting the bag with his paw. What is interesting to me is that he is better hydrated, too. His urine is a lighter color and he produces a larger volume, too. Despite my offer of fresh water at all times, he must not have been drinking enough. Hydration is necessary for humans to burn fat, and maybe it's true for dogs. For that reason, I will continue adding water to his food even after he loses weight.

Jenny Rellick
Via email

Adding water to dry food does really increase its palatability for many dogs, and the increased hydration is beneficial. Plus, as you learned, it helps a hungry dog on a weight-reduction diet to feel full. Our only concern would be for dogs who don't finish their food in a short period of time. Adding water sets up the perfect condition for bacterial growth, so this wouldn't be suggested for a dog who picks at his food for hours at a time.

I've been considering asking for a titer test in lieu of giving annual shots. I asked my vet about it and he said I'm the first person to ask him about it! (We live in a small town in a rural area). He said he would find out the costs and get back to me. Unfortunately, in our area folks are more concerned with costs than care. He called today to tell me he'd be glad to do it, and that the only thing to test for is distemper since the rabies is required by law.

Is the distemper all he should check? Also, he recommended a three-year rabies vaccination instead of a one-year booster. Do I want this? My dogs are 1 and 9 years old.

Jeana Swift
Via email

Hi Jeana! Great job for questioning the status quo and helping bring your vet up to date! Please refer to "Overvaccination: Dog Owners Beware" in WDJ's August 2010 issue; it should answer your questions completely. (You know that current subscribers have free online access to all back issues, right?) In brief: The best titer test to order checks the dog's antibody levels for distemper and parvovirus; any positive result suggests your dog's immune system responded properly to his previous vaccinations and has sufficient immune memory needed to combat the diseases if he encounters them. Rabies vaccination is required by state law, and we do suggest the three-year vaccine after the dog's first year. 🐾

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- ❖ Pat Miller, CBCC-KA, CPDT-KA, CDBC, Peaceable Paws Dog and Puppy Training, Fairplay, MD. Train with modern, dog-friendly positive methods. Group and private training, rally, behavior modification, workshops, intern and apprentice programs. Trainers can become "Pat Miller Certified Trainers" (PMCT) by successfully completing Pat's Level 1 (Basic Dog Training and Behavior) and both Level 2 Academies (Behavior Modification and Instructors Course). (301) 582-9420; peaceablepaws.com
- ❖ Sarah Richardson, CPDT-KA, CDBC, The Canine Connection, Chico, CA. Training, puppy classes, social sessions, daycare. Force-free, fun, positive training. (530) 345-1912; thecanineconnection.com

HOLISTIC VETERINARIANS

- ❖ American Holistic Veterinary Medical Association (AHVMA). PO Box 630, Abingdon, MD 21009. (410) 569-0795. Send a self-addressed, stamped envelope for a list of holistic veterinarians in your area, or search ahvma.org

BOOKS

- ❖ WDJ Training Editor Pat Miller is author of *Positive Perspectives: Love Your Dog, Train Your Dog*; *Positive Perspectives 2: Know Your Dog, Train Your Dog*; *Power of Positive Dog Training*; *Play With Your Dog*; and *Do Over Dogs: Give Your Dog a Second Chance at a First Class Life*. Available from Dogwise, (800) 776-2665 or dogwise.com

"WHAT DO YOU THINK?" (PAGE 18)

A few of the information-filled conferences about canine behavior that we recommend:

- ❖ Clicker Expo
(800) 472-5425
clickertraining.com/clickerexpo
- ❖ Association of Pet Dog Trainers Conference
(800) 738-3647
apdt.com/conf
- ❖ Professional Animal Behavior Associates
(800) 666-3647
gentleleadercanada.com/events

WHAT'S AHEAD ...

- ❖ **SAY WHAT?**
Canine communication.
- ❖ **NO WIGS NEEDED**
What chemo is like for dogs; what to expect, how to prepare.
- ❖ **NOSE TO TOES**
Conditions that cause problems with dogs' noses and feet.
- ❖ **IT'S IN THE CAN**
WDJ's 2011 wet food review.
- ❖ **FRUSTRATED?**
How to cope with training plateaus and setbacks.
- ❖ **DON'T DRINK THE WATER**
Giardia, Coccidia, and Cryptosporidium, oh my.

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