

## ("Knowledge-Based Breeding" cont.)

breeder has sufficient skill and knowledge to recognize it. In this sense breeders are the producers of a product. Thus it makes no difference what product you produce, the goal is quality. Take, for example, the baker of cakes. We expect that a baker knows what a good cake looks like and can recognize a cake that has faults or shortcomings. A good baker is expected to be able to make a cake that is tall, flat or round. To do so requires knowing what ingredients are required, the bake time, and how the cake must be treated after it arrives.

Bakers and breeders both have the same objective, which is to produce something of perfection. If the producer of a puppy is only interested in the commercial aspect of breeding and intends to sell dogs only to make money or because they want some cute pups for their children, they will have no interest in this article. For those whose interest focuses on producing quality dogs that are close to the breed standard, sound in temperament with good health, read on.

## KNOWLEDGE-BASED

In the past, before new technologies such as DNA tests and health databases were available, breeders did the best they could with what they had to work with. Today things are different. Knowl-edge-based breeding has emerged. This means that when quality information is collected and then coupled with the advancements of science, progress is more certain. Even with this kind of knowledge the time and effort required to fix a problem or produce litters of consistent quality is not always short and it cannot be quantified. For these reasons careful thinking is expected. For example, more is now known about how to analyze pedigrees and use new breeding methods. Take, for instance, the breeder who intends to produce a specific trait such as a dog with a body that is longer than tall, a wedge-shaped head, a strong and level back or a tail that curls up or hangs down. In order to accomplish these things breeders must pay close attention to the traits of the ancestors and what they have produced. For breeders interested in improving the front assembly they must work to produce offspring that do not have forequarters with scapulars (shoulder blades) that are short and steep which give the appearance of a short neck. To avoid these pitfalls, information must be collected about the fourteen ancestors in the first three generations and, if possible, their littermates. In the simplest of terms, each breeding is a mix of genes from the sire and dam (5050). The breeder who is serious about producing quality must study and evaluate these ancestors and then develop a strategy based on the information collected.

In order to shift the odds in favor of the breeder, knowledgebased breeding helps move the needle. It requires the collection of the right kinds of information and then the willingness to use it properly. It begins with the fourteen direct ancestors of the sire and dam (three generations). They are central to managing risk and making improvements.

Knowledge-based breeding translates into more than just knowing if a dog has produced a defect or is known to be a good producer. It is more than saving a few pups as replacements for older dogs. The example that follows explores how information which is $\nearrow$

## ("Knowledge-Based Breeding" cont.)

gathered about the relatives in the first three generations can be used to make specific improvements. In practice, knowledgebased breeding begins with the reminder that there are two known ways to evaluate pedigrees. The first is called depth of pedigree which is the study of the 14 ancestors in the first three generations. Analysis of these relatives is important even though they only represent a small sample of a dog's ancestors. The second is called breadth of pedigree. This approach includes the study of the littermates of the 14 direct ancestors. They significantly expand the number of relatives and the amount of information collected. As the number of relatives studied increases so do the chances for making improvements (Hovan, 2005). Of all the relatives that could be studied, those appearing in the first three generations are more likely to have the most impact on a litter.

To better illustrate this point hip dysplasia (HD) will be used as our example. This is a disease that results in an abnormality of the hip joint. The hip assembly is made up of a ball and socket joint in which the head of the femur (the "ball" at the top of the thigh bone fits into the socket of the pelvis-the acetabulum). In dysplastic dogs the joint fits loosely in a shallow acetabulum. HD occurs most commonly in rapidly growing large breeds, but it can also occur in small breeds. It affects the young (less than ryear old) and older (skeletally mature) dogs. Lameness is a common symptom which is attributed to joint laxity. Other clinical signs include a bunny-hopping gait. Symptoms include difficulty rising and exercise intolerance. HD affects both genders and is diagnosed via x-ray evidence.

To better illustrate the importance of expanding information, we will take two dogs. Call them "A" and "B". In the first three generations both have 14 ancestors. If dog " $A$ " has 9 of 14 ancestors that are known to have normal hips but little or nothing is known about the hips of the littermates of these ancestors, "A" would be considered a good candidate for producing sound hips until another dog is found with a better pedigree. If Dog "B" has 10 of 14 ancestors with normal hips and several other ancestors that have littermates with normal hips, "B" would be considered a better candidate than " A " for producing normal hips. Dogs that are known to have ancestors and littermates (depth and breadth) with a desired trait are considered the better breeding candidates. This example demonstrates the principle of knowledgebased breeding using depth and breadth of a pedigree to make improvements and manage risk.

## BREEDER TOOLS

- My AKC - Free, offered by AKC (tracks dogs and offspring ) - Pedigree software, speeds up coding and tracking traits - Continuing education - See breeder site: www.breedingbetterdogs.com
- DNA Tests - Diagnostic tests, posted at: www.breedingbetterdogs.com - Orthopedic Foundation for Animals (OFA) - This paper - Canine Health Information Center (CHIC) - This paper - Mating Probability Table - This paper (Keller, 2006)


## ("Knowledge-Based Breeding" cont.)

- Desirability Check List - This paper (Keller, 2006)
- Three pedigrees - Traditional, Stick Dog Color Chart, Symbol (Battaglia 2009)
- AKC registrations and microchips - Positive ID, tracking and recovery
- Knowledge-based breeding also includes using tools some of which are listed in Figure I.
One tool that has a practical use for improving hips is called the Mating Probability Table. It was developed by the OFA and is based on 444,45I progeny with known sire and dam scores (See Table I).

This table provides a practical approach to risk management. For example, if a breeder had a sire with an "excellent" hip rating (upper left corner of Table I) and if this dog were bred to a female that has a "fair" rating for hips, Table i shows that $90 \%$ of their offspring would be expected to be normal and $10 \%$ would be expected to be dysplastic. These data represent breeding expectations and not guarantees. Hip evaluations are based on phenotypic information based on radiographs not DNA. Therefore, these evaluations are an analysis of the phenotype and are not genetic predictions of what a dog might produce. This means there is always a risk when breeding regardless how good the radiographic evaluations. Table i serves to illustrate the level of risk one will take just by knowing the status of the sire and dam's hips. In addition to the Mating Probability Table, the OFA suggests that practical guidelines be used when making decisions about sires and dams. The guidelines are called the Desirability Check List (Keller, 2006). It requires the collection of information to answer four questions.

FIGURE i. DESIRABILITY CHECK LIST

| TABLE 1. |  | MATING PROBABILITY |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Excellent | Good | Fair | Dysplastic |
| Excellent | $\mathrm{T}=$ | 13,694 | 43,240 | 8,077 | 2,255 |
|  | $\mathrm{N}=$ | 13,177 (96\%) | 40,420 (93\%) | 7,288 (90\%) | 1,940 (86\%) |
|  | $\mathrm{D}=$ | 517 (4\%) | 2,820 (7\%) | 789 (10\%) | 315 (14\%) |
| Good | $\mathrm{T}=$ | 42,045 | 195,696 | 45,847 | 12,724 |
|  | $\mathrm{N}=$ | 39,465 (94\%) | 175,840 (90\%) | 39,766 (87\%) | 10,159 (80\%) |
|  | $\mathrm{D}=$ | 2,580 (6\%) | 19,856 (10\%) | 7,108 (15\%) | 2,565 (20\%) |
| Fair |  | $6,214$ |  |  |  |
|  | $\mathrm{N}=$ | 5,611 (90\%) | 35,407 (86\%) | $10,772(80 \%)$ | 2,985 (73\%) |
|  | $\mathrm{D}=$ | 603 (10\%) | 5,895 ( 14\%) | 2,703 (20\%) | 1,129 (27\%) |
| Dysplastic | $\mathrm{T}=$ | 1,569 | 9,465 | 3,123 | 1,582 |
|  | $\mathrm{N}=$ | 1,341 (85\%) | 7,651 (81\%) | 2,249 (72\%) | 1,018 (64\%) |
|  | $\mathrm{D}=$ | 228 (15\%) | 1,814(19\%) | 874 (28\%) | 654 (36\%) |

- Frequency of the desired trait occurring among the 14 direct ancestors (3 generations) - Depth of Pedigree
- Frequency of desired trait occurring among the littermates of the direct ancestors (3 generations) - Breadth of Pedigree
- Number of carriers or affected littermates and ancestors (3 generations)
- Number of offspring produced with the desirable and undesirable traits.

These two breeder tools, when used, expand the quality of information and shift the odds in favor of the breeder. $\nearrow$
("Knowledge-Based Breeding" cont.)
A third tool that has broad use is the Canine Health Information Center or CHIC (found at www.caninehealthinfo.org). It was established by the American Kennel Club, Canine Health Foundation (CHF) and the Orthopedic Foundation for Animals. CHIC is an online registry that works with parent clubs to establish a panel of testable genetic disorders that each club believes should be screened for in their breed. The strategy underlying CHIC is that dogs achieve CHIC certification by completing the health-checks. Passing each health test is not a requirement for certification. The CHIC program emphasizes health consciousness, not about being faultless. Each Parent Club decides whether to enroll in the CHIC program and determine the testable genetic disorders for their breed. For example, one club might select hip evaluation, CERF examination, and cardiac testing. Another might choose hips, elbows and thyroid testing. Owners, breeders, and prospective owners can search online for dogs in the OFA/CHIC database, and view their test results. If a dog completes the recommended testing panel, it receives a CHIC number regardless of whether it passes all of the tests. CHIC is about health consciousness, not health perfection. As more testable disorders are identified, few dogs will be normal for all tests. Another breed tool is the Orthopedic Foundation for Animals (OFA: www.offa.org). It has semi-open registries for hip dysplasia, elbow dysplasia, autoimmune thyroiditis, congenital cardiac disease, and patella luxation. From the OFA web portal you can look up individual dogs and their health testing status.

Both OFA and CHIC are health registries that allow for open disclosure of all health-test results or semi-open disclosure listing only normal results. In the United States, several genetic registries have been established to assist breeders with genetic disease control. The Canine Eye Registry Foundation or CERF (http:// www.vmdb.org/cerf.html) is a closed database showing only normal eye examination results by ACVO boarded veterinarians.

## SUMMARY

Knowledge-based breeding has changed the landscape for breeding better dogs. Those who use this approach have begun to think in terms of breeding by direction rather than by chance. By using technology and information the number of errors can be reduced. Given the advances that are now available via knowledgebased breeding more can be expected of today's breeders than those in the past. Thus knowledge coupled with quality breeding stock moves the needle forward.

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For human travelers, the logistics of traveling from A to B can make for a stressful situation. This is even more true when the trip includes pets, who are less thrilled than you to be leaving the safety and comfort of home.

Now it seems it's becoming even more complicated to fly with our furry friends. Recent reports of pets being lost, mishandled, or even killed has surely done little to inspire confidence among pet owners. United's latest series of incidents came only weeks after Delta tightened restrictions on therapy and service animals.

## Earn Super Cheap Travel

Find the right travel credit card for you-apply and earn up to 40,000 points or $\$ 400$ worth of travel.

## Compare Credit Cards

As airlines rethink current pet policies, it's more important than ever to be thorough when preparing your pet for travel. Refer to our downloadable Pet Travel Checklist as you plan for your trip, and familiarize yourself with what is required by the airlines.

## For In-Cabin and Therapy Pets

The number of pets allowed to fly in-cabin is limited and will vary by flight. If your travel plans allow it, make arrangements with your carrier as early as possible to reserve a spot for you and your pet.

Make sure your pet's kennel meets the requirements of your airline. Animals must have enough room to stand up and turn around inside.

For pets traveling in the cabin, the maximum size for hard-sided kennels is 17.5 inches long $\times 12$ inches wide $\times 7.5$ inches high, or 18 inches long $\mathrm{x}_{\text {II }}$ inches wide $\mathrm{x}_{\text {II }}$ inches high for a soft-sided kennel.

Emotional support and service animals will require a letter from your physician and must usually be received by the airline no later than 48 hours before takeoff. In these letters, the doctor typically states the mental or emotional disability, the need for traveling with the pet, and proof of medical license. Animals are required to sit at the feet or on the lap of the passenger but are not permitted to sit in the aisle or on exit rows.

## Pets Traveling Cargo

For larger pets traveling in cargo, attach bowls for water and food to the inside of the crate door where airline crew can easily refill both. Additional dry food can be placed in a freezer bag and duct taped to the crate exterior.

While heavy crates can be difficult to lug around, especially for larger dogs, never opt for one with wheels. The last thing you want is for your dog to accidentally roll off an inclined conveyor belt in transit.

It's important that your pet has adequate time to acclimate to its kennel prior to traveling. In the weeks leading up to your departure, leave the kennel open for your pet to explore. You may even want to slip a few treats inside, along with a blanket, towel, or old $t$-shirt with your familiar scent.

## Health and Safety Concerns

Have vaccination records ready to submit to the airline. Not all airlines will require a health certificate from a veterinarian, though $\pi$
("Flying With Pets..." cont.)
some will. As carriers rethink the rules on pet transport after recent events, it's better to have these types of health documents at the ready just in case.

Entrance requirements for pets will vary by destination, with some being more strict than others. In the U.S., Hawaii quarantines pets for five days or less, and that's in addition to providing proof of vaccinations, rabies blood test, and microchip implant. You'll find similar restrictions for international travel, particularly in rabies-free countries. If you're unsure of what's required for your destination, the USDA's Animal and Plant Health Inspection Service can provide specifics for both international and domestic travel.

Allow enough time for vaccinations and follow up testing, which can sometimes take several weeks. The sooner you can coordinate with your vet, the better off you'll be.

If your pet suffers from anxiety or nervous behavior, your vet may suggest a mild sedative. This may be fine if your pet is traveling in the cabin, but could be risky for cargo pets where there is no one to monitor their reaction to the medication. DAP collars (calming collars) are a much safer alternative to calming your stressed out pets.

It's worth the extra expense to splurge on a nonstop flight if one is available. If there's no avoiding a connection, keep connection times to a minimum. Choose your route wisely and consider the weather. You don't want your dog stuck outside Atlanta Hartsfield in a heat wave, or in Detroit during the next polar vortex. And if a smaller, less hectic airport is available to you-such as Burbank instead of LAX-always go with the smaller.

If you don't already have your pet chipped, include your contact info on your pet's collar. The odds of your pet escaping its crate are slim, but it has been known to happen.

As an added precaution, tape a photo of your pet to its crate along with the name and breed in Sharpie below. These types of details may already be included on the label printed by the airline, but it adds a secondary way for staff to quickly identify your pet.

No matter if your pet is traveling in the cabin or as cargo, make time for a long walk before the flight. You don't want your dog to suddenly relieve itself at 30,000 feet, which happened not too long ago when a service dog caused an emergency landing after pooping in the aisle.

If at any point during the trip a gate agent or crew member demands that you do something that you feel endangers the safety of your pet, ask to speak to a supervisor or even the captain. If the situation isn't resolved, ask to be put on another flight if possible.

## Prepare and Pack

Download our Pet Travel Checklist as you plan and pack for your trip.

Research animal hospitals in your arrival city and find one that's well-reviewed nearby to your hotel or rental property.


Home should be the safest place in the world for your pets. If you take the right precautions, it can be.

Many common household items can pose a threat to our animal companions-even some items specifically meant for pets could cause health problems.

To protect your pet, simply use common sense and take the same precautions you would with a child.

Although rodent poisons and insecticides are the most common sources of companion animal poisoning, the following list of less common, but potentially toxic, agents should be avoided if at all possible.

## Dangers just OUTSIDE your door

Antifreeze that contains ethylene glycol has a sweet taste that attracts animals but is deadly if consumed in even small quantities; one teaspoon can kill a seven-pound cat. The HSUS recommends pet owners use a safe antifreeze in their vehicles. Look for antifreeze that contains propylene glycol, which is safe for animals if ingested in small amounts. Ethylene glycol can also be found in common household products like snow globes, so be sure to keep these things out the reach of animals. Read more about antifreeze hazards.

Cocoa mulch contains ingredients that can be deadly to pets if ingested. The mulch, sold in garden supply stores, has a chocolate scent that is appetizing to some animals.

Chemicals used on lawns and gardens, such as fertilizer and plant food, can be easily accessible and fatal to a pet allowed in the yard unsupervised.

De-icing salts used to melt snow and ice are paw irritants that can be poisonous if licked off. Paws should be washed and dried as soon as the animal comes in from the snow. Other options include doggie boots with Velcro straps to protect Fido's feet, and making cats indoor pets.

Cans and garbage cans pose a danger when cats or smaller dogs attempt to lick food from a disposed can, sometimes getting their head caught inside the can. To be sure this doesn't happen, squeeze the open end of the can closed before disposing.

Traps and poisons pest control companies frequently use glue traps, live traps and poisons to kill rodents. Even if you would never use such methods to eliminate rodents, your neighbor might. Dogs and cats can be poisoned if they eat a rodent who has been killed by poison (called secondary poisoning).

## Threats INSIDE the house

Cedar and other soft wood shavings, including pine, emit fumes that may be dangerous to small mammals like hamsters and gerbils.
("Common Household Dangers for Pets" cont.)
Insect control products, such as the insecticides used in many over-the-counter flea and tick remedies, may be toxic to companion animals. Prescription flea and tick control products are much safer and more effective. Pet owners should never use any product without first consulting a veterinarian. Read more about potential poisoning from flea and tick products.

Human medications, such as pain killers (including aspirin, acetaminophen and ibuprofen), cold medicines, anti-cancer drugs, anti-depressants, vitamins and diet pills can all be toxic to animals. Keep medicine containers and tubes of ointments and creams away from pets who could chew through them, and be vigilant about finding and disposing of any dropped pills.

Poisonous household plants, including azalea, dieffenbachia (dumb cane), lilies, mistletoe and philodendron.
String, yarn, rubber bands and even dental floss are easy to swallow and can cause intestinal blockages or strangulation.

Toys with movable parts-like squeaky toys or stuffed animals with plastic eyes-can pose a choking hazard to animals. Take the same precautions with pets as you would with a small child.

Rawhide dog chews may be contaminated with Salmonella, which can infect pets and humans who come in contact with the chews. This kind of treat should be offered to a pet only with supervision, as they can pose a choking hazard as well.

Holiday decorations and lights pose a risk to cats and dogs. Keep these items out of the reach of animals, and, if possible, confine your pet to an undecorated area while you are out of the home.

Chocolate is poisonous to dogs, cats and ferrets.
Fumes from nonstick cooking surfaces and self-cleaning ovens can be deadly to birds. Always be cautious when using any pump or aerosol spray around birds.

Leftovers, such as chicken bones, might shatter and choke a cat or dog. Human foods to keep away from pets include onions and onion powder; alcoholic beverages; yeast dough; coffee grounds and beans; salt; macadamia nuts; tomato, potato and rhubarb leaves and stems; avocados (toxic to birds, mice, rabbits, horses, cattle and dairy goats); grapes; and anything with mold growing on it.

## Tools for keeping your pet safe

The HSUS recommends that pet owners use all household products with caution. We also recommend that you put together a pet first aid kit (for dogs and cats) and have a manual readily available. If all of your precautions fail, and you believe that your pet has been poisoned, contact your veterinarian or emergency veterinary service immediately.

Signs of poisoning include listlessness, abdominal pain, vomiting, diarrhea, muscle tremors, lack of coordination and fever.

You can also call the ASPCA Animal Poison Control Center hotline 24 hours a day, seven days a week at 888-426-4435 for a fee of $\$ 65$ per case. If you call the hotline, be prepared to provide the name of the poison your animal was exposed to; the amount and how long ago; the species, breed, age, sex and weight of your pet; and the symptoms your pet is displaying. You'll also be asked to provide your name, address, phone number and credit card information. $\square$

Is your cat acting up, defending her territory, or otherwise being aggressive? Here are some of the reasons why this happens, and what you can do to help.

## Territorial Cat Behavior

Territorial behavior in cats can present itself in a number of ways, for a number of reasons. Cats are more territorial than dogs by nature, and they can also be more solitary. Territorial behavior in cats usually involves urine marking (spraying), hissing, stalking, or attacking another cat.

Territorial behavior can be more serious in cats than in dogs because cats see their territory differently, often viewing newcomers as invaders or intruders, whether it's a new cat in the household or neighborhood cats outside. Cats are also a little pickier. Your cat may tolerate one cat but not another. Intact male cats can be particularly territorial, so it's important to spay and neuter pet cats.

Even friendly, social kittens may become territorial when they mature. To avoid this, it's best to socialize your kitten from 3-12 weeks of age by getting her used to a variety of situations, even those outside the home, such as going to the vet or groomer.

If your cat displays sudden signs of territorial aggression, especially out-of-box elimination, consider a visit to your veterinarian to rule out any health issues which may be causing the behavior. Spay or neuter any intact pets in your home. This alone can go a long way toward eliminating aggression. One intact pet can end up affecting all the pets in your household.

Definitely don't let your cat fight other cats. Unlike dogs who are sometimes able to work things out, the more cats fight, the worse the problem can become. Squirt fighting cats with water or use a whistle to distract them. Never try to pull them apart or you may get hurt, and never punish them for territorial behavior or they may become more aggressive. If the problem is ongoing, you may need to separate the cats while you work out the problem with professional help.

Adding a new cat to a household can take a lot more time than adding a new dog. The cats need to be kept separate for a period. You can switch the new and resident cats' bedding so they can smell each other, and let them sniff under doorways or with the new cat in a carrier.

Friendly social cats will probably be more accepting of each other while more independent cats or those who have been the only cat in the household may take quite a while. Sometimes it just doesn't work out and the cats have to live separately, but it's often worth the effort to try.

## Getting Professional Help

Effectively helping a territorial cat become calmer and more social depends on the owner, the cat, and the situation. Early socialization and positive reinforcement to reward desirable behavior can go a long way toward developing a well behaved cat.

Adult cats with territorial issues should be taken seriously as these behaviors can turn to aggression. If you have trouble resolving your cat's issues on your own, seek advice from a professional trainer or behaviorist. They can often help get things back on track for you and your cat so you can both live together in a happier home. $\square$

## McNasty Stops Dogs Chewing

by Becki Homan
Frostfire Shetland Sheepdogs
I have found the complete solution to a husband who doesn't listen when you are talking and for a dog who likes to chew the coats of other dogs. Sounds incredible, but the solution is cheap and priceless! It is called McNasty. Originally it was formulated for horses to keep them from cribbing (chewing on wood in their stalls-sometimes they do it from boredom). However, it has now entered the dog world and the world of husbands who do not listen.

I had put Frontline on my puppies, and they had started to try to lick each other where I had put the medication. Being the "wonder woman" that I think that I am, I told my husband to watch them while I went to get the McNasty, which I think that he did. But being the "typical" husband, he was more interested in watching the television than listening to me.

I told him to turn his head while he held the puppy and that I would just give each one a short spray on his or her back. I thought that he heard me (he admitted much later that he had sort of heard me). He lifted each puppy and I didn't watch his head. I was watching the puppy and where I needed the short burst of spray.

I sprayed all three puppies, then I went into the kitchen to wash up. I hadn't even walked three steps when he started to gag, cough, choke and make the most pitiful noises that a human being could make. (Now I must interject here that I was somewhat skeptical of the real validity of McNasty as I had smelled it but didn't taste it.) I had not found it to be too offensive, I mean goodness, I wash my husband's dirty socks and what could be more offensive? I am no longer the skeptic.

I am thinking of marketing McNasty as the ultimate party crasher exterminator, in-law alleviation and general get-rid-of-any-human-being-that-you-don't-want-around. (Where was I during the election? Well, that is a whole different story-timing is everything!)

So if you are in the mood for playing a dirty trick, eliminating dogs chewing on each other, husbands who need to pay attention and just want to completely make someone gag-get McNasty made by Eqyss. $\square$


Catification is the art of creating an enriched home environment that is acceptable to both you and your cat. Catification teaches us that every square inch of the home can be shared in a positive way. Allowing our cats to own spaces through scent distribution and finding confidence in the vertical world can be accomplished-all while respecting and adhering to our own personal aesthetics. Catifying is simply the process of implementing all of the various catification ideas.

But before we can catify the home, we have to get to know where in the vertical world our cat finds his or her mojo: the specific place or places in the home where they feel their greatest sense of territorial ownership. And we call this magical place..

## The Confident Where

Cats see territory in a three-dimensional way that other species (including humans) don't. They walk into a room and take in every square inch from floor to ceiling, assessing possible rest spots, advantageous perches where they can survey the comings and goings of other beings who share their turf, and spots where they can camouflage themselves to prey/play or just disappear from the world. So our first order of business here is to figure out exactly where on the vertical axis they find their greatest mojo. And the first thing we'll want to do in figuring this out, is to assess which of the following classifications best describes your cat so we can catify accordingly:

Bush Dwellers are the cats waiting under the coffee table or behind a plant. They are often waiting to hunt or to pounce and prefer to have all four feet on the ground.

Tree Dwellers can be found anywhere off of the ground. These cats get their confidence from being up high and seeing what's going on, preferring to be on a chair or on top of the couch.

Beach Dwellers also prefer having all four feet on the ground. But rather than waiting under a coffee table, they like being out in the open, as they send a message to you and everyone else in the home: "You have to walk around me."

Once we have a sense of who our cat is, the next step is to embrace the idea of...

## Territorial Signposts

Cats largely define that sense of belonging by finding things they can soak their scent into. So by definition, a signpost is something your cat has left a visual sign or scent on, thereby signifying territorial ownership for them.

Popular signposts include: beds, towels, blankets, scratching postssince cats leave scent and visual markers through their claws-and, of course, the king of scent soakers, and the mother of all signposts... litter boxes. This is why the locations you choose for your litter boxes are key. Having one box hidden behind a washing machine, another tucked away in the garage, and a third secluded in a guest room closet will not help our cause here. Instead, I would like for you to consider the idea that litter boxes should go in socially significant areas of your home: in or near the heart of the action. (I realize this is not an especially popular idea to most humans, but I wouldn't ask this of you if I didn't think it was absolutely paramount.) $\nearrow$
("Catifying Your Home For Harmony" cont.)
Once we have some of these "base camp" signposts in place, our next step in catifying your home for harmony is checking out a little mind-stimulating entertainment for your cat in the form of...

## Cat TV

Did you know that cats spend an inordinate part of the day not sleeping (as is typically presumed), but looking out the window? Cat TV takes the most important story line for cats-hunting-and puts it in a "box," so that they can experience the same relaxed sensation: an exercise I call "passive engagement."

Just as you might design your living room with the TV as the focal point, look around your home for prime windows for creating Cat TV, and add things outside those windows to attract natural prey such as birds and insects. Think: a bird in a birdbath, bees visiting flowers, squirrels at a feeder. Make the window a destination location with a cat tree, perch, or cat bed that invites your cat to sit and bingewatch Cat TV to his heart's content. (A bird-feeder is an excellent starting point.)

For extra variety-or if windows are at a premium in your home-consider an aquarium. I'm not a fan of them, but they do provide quality TV time without the benefit of an actual window (just take really good care of those fish!). A better alternative would be one of these "plastic fish" aquariums, which basically achieves the same goal: it gives your cat something to do with their mind, as they remain passively engaged in their hunter way without actually having to hunt.
A final idea to consider in our catification efforts here is...
The Catio
As you probably know by now, I'm not a big proponent of cats going indoors and outdoors at will. Catios are an amazing compromise...and a real game changer. A catio is a space you can make for cats (which of course you can share with them) by enclosing your existing patio or creating an enclosure. There, you can offer great vertical spaces, wooden objects that they can scratch on, different grasses including catnip that you can plant and they can enjoy-even hunting that can happen when critters make their way inside. They can also get some vitamin D from the sun and essentially enjoy much of the upside from being outdoors without risking the downside inherent to roaming beyond the safety of home base.

As for more specifics, I have written in great detail about catios in two of my books: Catificationand Catify to Satisfy. In the meantime, I know you and your cat (or cats!) will find these suggestions helpful. Try implementing some of these ideas into your home environment and watch the harmony expand...
-https://www.jacksongalaxy.com/

("Flying With Pets..." continued from page 4)
Check online for dog parks within walking distance of where you'll be staying.

Ask your concierge or host for local dogfriendly restaurants or cafes with suitable outdoor spaces.

Pack a bag small enough to easily store in your carry on, and include everything your pet needs for the trip. Create a check-list. Do take the following:

- All medications your pet currently takes or may need on the trip (clearly labeled).
- A small container of dry food, a bottle for water and small dishes for both.
- Pet treats, toys and catnip.
- A small towel to cover rental car seats or rental furniture to prevent pet hair from sticking to upholstery.
- Lint and pet hair rollers.
- Dog waste bags.
- Wee-Wee pads.
- A portable litter tray for cats with a small sealed bag of litter.
- Leash, harness and collar.
- Grooming supplies
- Pet bed.
- Vaccination records and health documentation.

The reason we're born with two hands is so we may pet two dogs at once.

A Poem from the $\Rightarrow$ (2) Cat

## I thank you for the food

 you bring, and for my little squeaky thing. I thank you for your friendly talks, and when you change my litter box.
## I thank you for the naps we share, and putting up with tufts of hair.

## You’re Petting Your Cat All Wrong

Remember, cats aren't dogs. From your first approach to the actual mannerism in which one pets a cat, we want to make sure you're doing it right verse misconstruing an aggressive reaction or unwarranted behavior based on the fact that you're just not petting your cat properly. Jackson Galaxy will show us the correct way to pet your cat (in the video below).



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